



THE UNIVERSITY OF ARIZONA

Mel & Enid Zuckerman
College of Public Health

2024-2025

Biostatistics MS/PhD Program

Student Handbook

Table of Contents

INTRODUCTION	1
LAND ACKNOWLEDGEMENT	1
MEZCOPH MISSION STATEMENT	1
MEZCOPH VALUES STATEMENT	1
SECTION I GENERAL INFORMATION FOR COLLEGE OF PUBLIC HEALTH GRADUATE STUDENTS	2
PURPOSE OF THIS HANDBOOK	2
PHYSICAL RESOURCES AND FACILITIES	3
TUCSON CAMPUS	3
DRACHMAN HALL	3
Student Intranet (Hub)	3
Website	3
MEZCOPH and U of A Information Technology Resources	3
MEZCOPH Computer Lab	4
Other Computer Labs Around Campus	4
Software via University Licensing	4
VCAT (Virtual Computing Access Technology)	4
VPN (Virtual Private Network)	5
Lactation Room	5
Lockers	5
Lost and Found	5
Policy for Posting Advertisements in Drachman Hall	5
Student Cubicle Space	6
Student Group Meeting Space	6
Wireless Internet Access	6
ARIZONA HEALTH SCIENCES CAMPUS RESOURCES	7
Health Sciences Bookstore	7
Health Sciences Innovation Building (HSIB)	7
Arizona Health Sciences Library	7
Safety	8
PHOENIX BIOSCIENCE CORE	8

Computers.....	9
Phoenix Student Space	9
Wireless Internet Access in Phoenix.....	9
Eats and Treats.....	9
COMMUNICATING WITH STUDENTS	9
Email Accounts.....	10
Listservs.....	10
College of Public Health Social Media Guidelines.....	10
STUDENT SERVICES, RESOURCES & OPPORTUNITIES	11
Office of Student Affairs	11
Career Advising	11
Student Problem Resolution.....	11
Disability Resource Center	12
Campus Health and Student Health Insurance.....	12
Helpful Student Resources.....	13
Student Input into MEZCOPH Operations	13
Student Participation on MEZCOPH Committees.....	13
Student Affairs Committee	14
Student Suggestion Box	14
STUDENT AMBASSADORS	14
STUDENT ORGANIZATIONS.....	15
Public Health Student Alliance (PHSA) – Phoenix.....	15
American Indian and Indigenous Health Alliance (AIHA).....	15
Environmental and Occupational Health/Industrial Hygiene Club.....	15
LUCHA	15
Global Health Alliance (GHA)	16
Graduate and Professional Student Council (GPSC)	16
University of Arizona Student Organizations.....	16
STUDENT MANAGED EVENTS	16
MEZCOPH Poster Forum	16
Social Justice Symposium.....	17

THE UNIVERSITY OF ARIZONA OFFICE OF SCHOLARSHIPS & FINANCIAL AID	17
Federal Financial Aid	17
Educational Assistance Program	17
STUDENT FUNDING MANAGED BY MEZCOPH.....	17
MEZCOPH SCHOLARSHIPS	18
Graduate College Dissertation/Thesis Tuition Scholarship.....	18
Graduate College Fellowship Funding	18
MEZCOPH RESEARCH AWARDS.....	18
TRAVEL AWARDS/POSTER PRINTING	19
MEZCOPH GRADUATE, RESEARCH, & TEACHING ASSISTANTSHIPS	19
Graduate Research Assistantships.....	19
Graduate Teaching Assistantships	19
DEGREE COMPLETION INFORMATION	20
MEZCOPH Exit Survey	20
MEZCOPH Convocation.....	21
University of Arizona Commencement.....	21
UNIVERSITY OF ARIZONA POLICIES	22
Academic Policies.....	22
Residency Classification	22
UA Smoking and Tobacco Policy:.....	22
Weapons Policy.....	22
UNIVERSITY POLICIES GOVERNING ACADEMIC INTEGRITY, CONDUCT & NON-DISCRIMINATION.....	22
Academic Integrity Code.....	22
Student Code of Conduct.....	23
Disruptive Behavior in an Instructional Setting Policy	23
Non-Discrimination and Anti-Harassment Policy	23
Threatening Behavior by Students Policy	24
COLLEGE OF PUBLIC HEALTH MATRICULATION STANDARDS	24
GRADUATE COLLEGE & MEZCOPH POLICIES	24
Academic Deficiencies Noted at Admission.....	24
Academic Probation at the Graduate Level	24

GradPath	25
Incomplete Grades.....	25
Leaves of Absence.....	25
Responsible Conduct of Research Statement.....	26
Exceptions to Policy (Petitions) and Grievance Processes.....	26
SATISFACTORY ACADEMIC PROGRESS.....	27
Continuous Enrollment	27
Deferment/Forbearance of Student Loans.....	29
Minimum GPA.....	29
Grades of D, E, or F	30
Program Steps and Milestones to Completion	30
Continued Program Progress and Annual Progress Report.....	30
Failure to Meet Satisfactory Academic Progress – Retention Planning	31
REGISTRATION, ENROLLMENT, & CREDIT REQUIREMENTS.....	31
Registration and Payment Deadlines.....	31
Enrollment in Fieldwork.....	32
UNIVERSITY OF ARIZONA INTERNATIONAL TRAVEL PROCEDURES.....	32
ATTENTION INTERNATIONAL STUDENTS	32
READMISSION POLICY	32
SECTION II – PROGRAM SPECIFIC INFORMATION AND POLICIES	34
INTRODUCTION TO THE BIOSTATISTICS PhD & MS PROGRAMS	34
The Discipline of Biostatistics.....	34
Degree Programs	34
How to Use this Handbook for PhD and MS Students.....	35
GENERAL ACADEMIC AND RESEARCH POLICIES	36
Student Commitment	36
Faculty Commitment.....	36
Advising.....	37
Composition of Graduate Committees for Biostatistics Students	38
Graduate Faculty Status.....	40
Use of Artificial Intelligence (AI)	41

Human Subjects Protection Program Information	41
MEZCOPH Human Subjects Approval Process (Doctoral Dissertation/Master’s Thesis Projects)	42
Human Subjects Training and Certification (CITI)	42
Human Subjects Forms for Doctoral Dissertation/Master’s Thesis Projects	43
When You KNOW the Project is Human Subjects Research:	43
Other Approvals Required	44
When You are UNSURE if the Project is Human Subjects Research:	45
Approvals Required and the Submission Process (Internal and eIRB).....	45
HSP-IRB Submission through the eIRB Portal	46
Notification of Approval.....	46
Notes About Common Types of Projects	46
Committee Chair/Dissertation Director (Advisor) Review & Approval Process:	47
MEZCOPH Review & Approval Process:	47
HSP-IRB Office Review & Approval Process	48
Planning Ahead for Proper Approval	48
Research Project Closure Forms	48
IRB Continuing Review (in eIRB) for Renewal/Closure for Human Research:	48
Student Services Requirements	49
Select Students Engaged in Human Subjects Research	49
THE PhD IN BIostatISTICS PROGRAM	50
New Student Activities.....	50
Competencies	50
Program Steps and Milestones to Degree	50
Degree Requirements	51
Doctoral Plan of Study	51
Transfer of Credits from a Master’s Program to the Doctoral Plan of Study	52
Course Substitutions	53
Independent Study Registration Policy.....	53
Research and Dissertation Registration Policy	53
Minors for the PhD Degree	54
PhD Qualifying Exam.....	54
Residence Requirement.....	55

Teaching Experience	55
Dissertation Research Proposal	56
Comprehensive Examination	56
Time Limitation	59
Dissertation Committee Appointment	59
Dissertation Unit Enrollment	59
Dissertation	59
Final Oral Dissertation Defense Examination	60
Completion of Doctoral Requirements	61
THE PhD MINOR IN BIOSTATISTICS	62
Minor Requirements	62
Declaration of Minor	62
Composition of Committee	62
Transfer of Credits	62
THE MS IN BIOSTATISTICS PROGRAM	63
New Student Activities	63
Competencies	63
Program Steps and Milestones to Degree	63
Degree Requirements	64
Master’s Plan of Study	64
Transfer of Credits	64
Course Substitutions	65
Independent Study Registration Policy	65
Research and Thesis Registration Policy	65
MS Qualifying Exam	66
Culminating Experience	67
MS Committee	67
Master’s Thesis Option	67
Capstone Experience: Master’s Project (either Research or Independent Study Option)	68
Oral Defense of Thesis Research/Oral Presentation of Capstone Experience	68
Professional Portfolio	68

Completion of Thesis Requirements..... 69
Time Limitation 69
MS Degree Completion 69
Admission to the PhD Program..... 70

INTRODUCTION

The University of Arizona's Mel and Enid Zuckerman College of Public Health (MEZCOPH) was established in January 2000 and accredited by the Council on Education for Public Health in 2003. Under its administrative roof are academic programs that lead to seven degrees:

- Two Bachelor Degrees ([BS in Public Health](#) and [BA in Wellness & Health Promotion Practice](#))
- [Master of Public Health](#) with several concentration areas
- Four Master of Science Degrees ([MS in Biostatistics](#), [MS in Environmental Health Science](#), [MS in Epidemiology](#), and an MSPH in Health Behavior Health Promotion)
- Four PhD programs (in [Biostatistics](#), [Environmental Health Science](#), [Epidemiology](#), and [Health Behavior Health Promotion](#))
- And a DrPH with two concentrations in [Maternal and Child Health](#) and [Public Health Policy and Management](#)

The Bachelor of Science, Bachelor of Arts, and the Master of Public Health degree programs are offered through both the Main and Online Campuses.

Comprehensive information about all of the College's academic programs can be found in the [College of Public Health Curriculum Guide](#)

LAND ACKNOWLEDGEMENT

We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.

MEZCOPH MISSION STATEMENT

The Mel and Enid Zuckerman College of Public Health is dedicated to promoting the health and wellness of individuals and communities in the southwest and globally with an emphasis on achieving health equity through excellence in education, research & service.

MEZCOPH VALUES STATEMENT

MEZCOPH acts with respect and integrity to continuously advance health and well-being for all through knowledge, collaboration, empowerment, advocacy, and sustainability. Our core values are: Fairness, Trust, Equity, Social Justice, Excellence, Innovation, Commitment, Collegiality, Diversity, Open Communication, Participation, Consensus, and Enhancement. We strive to foster an educational community that values innovation and excellence in teaching, creation and dissemination of knowledge, practice-based research, and research-based practice to address the health needs and interests of individuals and communities.

SECTION I GENERAL INFORMATION FOR COLLEGE OF PUBLIC HEALTH GRADUATE STUDENTS

PURPOSE OF THIS HANDBOOK

The objective of this handbook is to provide straightforward guidance to MEZCOPH students about how to navigate through the academic programs of the College. The handbook is divided into two sections. The first section of the handbook includes general information for all graduate students about MEZCOPH resources and operations, student organizations, events, and financial assistance. The second section of the handbook outlines information specific to each of the graduate programs (i.e., MPH, MS, DrPH or PhD programs). Students should refer to the handbook often.

While students are held to the program requirements of the Academic Curriculum Guide for the academic year in which they were admitted, University and College of Public Health operational processes and policies do change. These changes in policies and procedures are reflected in the Student Handbook. Please refer to the most recent MEZCOPH Student Handbook (revised annually) for the most current policies. The [University of Arizona General Catalog of policies](#) and [Graduate College website](#) provide comprehensive details on current policies and procedures that pertain to all graduate students at the university. **Much effort goes into communicating changes to students, but it is the student's responsibility to be aware of these policies and to adhere to them.** Additionally, it is intended that faculty refer to this handbook when mentoring and advising students. This handbook works to promote expectations that are shared by students, faculty, and staff.

The staff members of the MEZCOPH Office of Student Affairs (OSA) look forward to helping students work toward their degrees. If, at any time, you have questions or concerns about specific MEZCOPH issues, do not hesitate to contact the staff member assigned to that area (see the [Office of Student Affairs staff page](#)). Although the Office of Student Affairs is here to support student progression through our degree programs, **keep in mind that completion of all degree requirements and paperwork is ultimately the responsibility of the student seeking the degree.**

Again, we welcome you and look forward to working with you during your time at MEZCOPH!

PHYSICAL RESOURCES AND FACILITIES

TUCSON CAMPUS

DRACHMAN HALL

Information related to [College of Public Health Facilities](#) is maintained on our website. MEZCOPH student affair and administrative offices are found on the 1st and 3rd floors. Faculty offices are located primarily on the 2nd floor. MEZCOPH students, faculty and staff are asked to report any incidences of vandalism, theft, or questionable activities to the [Business Manager, Senior, Elizabeth Cordova](#) or via the Student Suggestion Box on the [Hub](#) if the issue is non-emergent. Building security services are not available in the evening or during weekends; therefore, students should not be in the building after regular business hours (8 a.m.-5 p.m.) or weekends unless they are taking a class or working in an assigned cubicle or office space.

Student Intranet (Hub)

A student intranet, the Student Hub, on the College's website, has been developed to assist students in locating information that is relevant to their role in the college. It is important, therefore, to check this site frequently for information regarding events, college developments, and student news. In addition to creating an electronic student community and presenting diverse information, such as student calendars, forms, deadlines, policies, and processes, the MEZCOPH Student Hub serves as the access point to a number of required electronic surveys. MPH students must submit their internship abstracts, deliverables, and final reports through the Student Hub. A UA NetID and password are required to access this site.

<https://hub.coph.arizona.edu/>

Website

The MEZCOPH website, <http://publichealth.arizona.edu/>, is used as the College's primary point of information dissemination to the public, potential applicants, and students. Research interests of faculty members, a college directory, and news items are posted on this site. Curriculum requirements, academic and student policies, and fellowship announcements are posted on the MEZCOPH Student Hub.

MEZCOPH and U of A Information Technology Resources

General Tech Support

- **MEZCOPH IT Resources:** Send a detailed email with your issue to coph-help@arizona.edu, or call 520-626-7417. MEZCOPH IT FAQs can be found at: <https://hub.coph.arizona.edu/it-support>
- **UA IT Resources:** Call 520-626-TECH (8324) or 877-522-7929, or chat with them at <https://support.arizona.edu>. UA IT FAQs can be found at: https://support.arizona.edu/sp?id=kb_view2

MEZCOPH Computer Lab

Location: Drachman Hall Room A319

General availability: Monday through Friday 8 a.m.-5 p.m. unless the lab has been scheduled for other College activities.

MEZCOPH's computer lab is equipped with 21 Windows PCs, a printer, and a projector. Information about courses scheduled in the computer lab for the current week can be viewed via the [UA Health Sciences Scheduling System](#) (search by date for Drachman Hall Room A319).

To use the systems, students must login to the computers with their NetID and request access to the 3rd floor through the Building Manager. **Please make sure to log off from the computer when done.** Stata, SPSS, SAS, ArcGIS, R, EpiInfo, Matlab, Teams, Adobe Acrobat DC, and Microsoft Office are installed on each system. Qualitative data analysis software, MAXQDA, has recently also been added to the computer lab on every other computer. A maximum of 5 people can use the software at once.

Do not save your work on the lab computer. The systems are wiped after each reboot. Use a flash drive or cloud storage (e.g., Google Drive) to save your work. Printing is free, but students must provide their own paper.

Other Computer Labs Around Campus

There are several other computer labs available at the University of Arizona Tucson. They may not have the same software titles as the MEZCOPH computer lab.

[UAHS Library](#) - All computers have the basics (Office Suite, browsers, media players), plus specialty software for graphics, statistics, engineering, and more.

[OSCR](#) - Most labs feature Apple computers that dual boot into your choice of Mac or Windows operating system.

Software via University Licensing

The University Bookstores manages software titles that are available to students for free or at a discount. For a list of these software, please visit: <https://softwarelicense.arizona.edu/students>.

VCAT (Virtual Computing Access Technology)

Use a wide variety of software from home. [VCAT](#) is a virtual computing system for students and faculty that is accessible from anywhere with a broadband internet connection. You will find much of the same software that is installed in OSCR's physical computer labs, as well as any that may be provided by your academic department.

VPN (Virtual Private Network)

The [UA VPN](#) provides a secure connection from your home computer, laptop, or mobile device to the UA's network. It is also a valuable security tool when you are on an unsecured wireless network (e.g., coffee shops, airports).

Lactation Room

For nursing parents, the College of Public Health established a Lactation Room, located in Drachman Hall, Room A107, around the corner from A112. To use the room, obtain the access code from the administrative assistant in the Office of Student Affairs (Room A110), enter the code on the keypad outside of room A107, lock the door using the manual lock while in use and when finished. There are other lactation spaces available across UA Campuses and can be located using the [Family Resource Map](#).

Lockers

Students may reserve a locker for use while pursuing a degree in the Colleges of Public Health or Nursing. Requests for lockers are processed by the administrative associate in the Office of Student Affairs, Room A110 of Drachman Hall. A one-time, non-refundable user fee of \$5 is assessed (payment by cash only). To reserve a locker, a student should identify the range of locker numbers in the first-floor hallway in which the locker is desired and communicate this information to the administrative assistant, who will assign the locker number and provide the padlock combination to the student. Students may not use their own padlocks on Drachman Hall lockers. Drachman Hall is not accessible in the evening or on the weekend, so needed items stored in lockers should be retrieved prior to the conclusion of classes.

Lost and Found

Items found in the east wing or "A" side of Drachman Hall should be brought to the administrative associate in the Office of Student Affairs, Room A110 where the Lost and Found repository is located. Individuals who are attempting to locate lost property should check with the Office of Student Affairs to determine if the item has been turned in. Individuals must provide an adequate description of the item and in some cases, personal identification before being reunited with lost items.

Policy for Posting Advertisements in Drachman Hall

Any paper advertisement, flyer, or announcement to be hung in either of the Drachman Hall buildings shall first be approved by the MEZCOPH Office of Student Affairs, administrative associate in Drachman Hall, Room A110 (for postings hung in Drachman A-side) or the College of Pharmacy's Office of Student Affairs, administrative associate in Drachman Hall, Room B107 (for postings hung in Drachman B-side). To gain approval, bring an original copy to the appropriate Office of Student Affairs. When approval is given, the announcement will be initialed and dated by the administrative assistant in the Office of Student Affairs. Copies of the announcement showing the initials and date can be made at this time.

Announcements may be hung indoors on plastic, metal, or bulletin boards ONLY, not on painted walls or glass/wooden doors unless special permission is granted by the appropriate Student Services Office. Announcements may not be taped, nailed, screwed, or in any way attached to the outside metal or brick siding of the building. Announcements without approval or on restricted surfaces will be removed. Removal of announcements is the responsibility of the organization or individual who hung them. Announcements must be removed no later than two days following the event. Failure to do so may result in denial of future postings.

Student Cubicle Space

Each department has a limited number of dedicated graduate student cubicles on the second floor of Drachman Hall. These spaces are assigned in priority order. Priority for cubicle assignments is for courses with teaching assistants. The cubicle space is assigned to the course and cubicle space must be shared if there are multiple TAs in the course. Doctoral students are the next space assignment priority. Students who are participating in a training grant follow in priority and finally, any graduate student who is employed as a research assistant by a department that has space available may be assigned space. Only those students who have been assigned cubicles will be granted access to the second floor of Drachman Hall after hours.

Teaching assistants may arrange to meet with students in the breakout rooms (the small classrooms on the west side of the first floor). Using these spaces reduces noise on the second floor and provides private space when needed. Teaching assistants may schedule these rooms by accessing the [UA Health Sciences Scheduling System](#). The course number, name and faculty member should be included in the request.

Student Group Meeting Space

Student groups needing meeting space may request it by submitting a room scheduling request through the [UA Health Sciences Scheduling System](#). The group's name and faculty advisor's name should be included in the request. Advisors are expected to be present when student group meetings occur after hours. While individual students may not reserve a breakout room to study or meet with group members outside of course times, they may use unoccupied, unreserved rooms for these activities.

Wireless Internet Access

Wireless access is available throughout and around Drachman Hall via connection to UAWiFi, a secure and fast wireless network that is available across most of our campus. Partially funded by the Student Technology Fee, it brings wireless access for all students, staff, and faculty on campus. Instructions for setting up UAWiFi wireless access can be found [here](#).

How to get help with UAWiFi

Help can be obtained through the [University Information Technology Service \(UITS\)](#). Call 626-TECH (8324) to schedule an appointment or stop by during walk-in hours.

ARIZONA HEALTH SCIENCES CAMPUS RESOURCES

Health Sciences Bookstore

The University of Arizona BookStores at UAHS is located inside the University of Arizona Health Sciences on our north campus, easily accessible to UA law, medical, nursing, public health and pharmacy students as well as faculty, staff, and visitors. Products at this location include clothing, gifts, medical supplies and textbooks. More information can be found [here](#).

Health Sciences Innovation Building (HSIB)

One of the main building's for Public health courses on the Arizona Health Sciences Campus is the [Health Sciences Innovation Building](#). It includes a number of multi-use spaces and several student lounges. Student study space is found on floors 3 through 6. The 7th floor is home to the Simulation Center (ASTECC) and the 8th floor houses Clinical and Professional Skills labs. Arizona Health Sciences administrative offices are found on the 9th floor.

HSIB Student Study Space

HSIB is open from 7:00 a.m. to 7:00 p.m., Monday through Friday. (The Health Science Library will be open on weekends and after 7:00 p.m. so students can always find a place to study.) The student study areas are located along the east side of the HSIB on floors 3 through 6. There is a librarian's office on each of the student study floors. Bookable study rooms include 1-person, 4-6 person, and 8-person sizes. All HSIB and library study rooms are bookable via the library reservation system [libcal](#).

HSIB Day Use Lockers

There are 500 day-use lockers throughout the HSIB building. The locks reset at midnight each night so articles must be removed prior to the building closing at 7:00 p.m.

Arizona Health Sciences Library

The [Arizona Health Sciences Library](#) is located within the College of Medicine Tucson and is available to all students, faculty and staff associated with the four colleges that comprise Arizona Health Sciences (Public Health, Nursing, Pharmacy and Medicine). The AHS Library is available to students at our Phoenix Campus as well.

Students can use the AHS Library for a myriad of services. The computer lab is comprised of desktop computers that are available on a first-come, first-serve basis. These computers have all the basic applications (Office Suite, browsers, and media players), plus statistical software such as SPSS, STATA, and SAS. Students can also utilize the library's scanners, print on the wireless WEPA printers using CatCard or debit card, or use the self-serve printer (cash only). The UAHS Library also rents out technology equipment like laptops, iPads, and cameras. To reserve a designated place to study alone or with a group, students should access the [Online Reservation System](#).

Visit the [library's website](#) to find the current hours of operation. After the doors lock, UA Health Sciences students can enter the library with their CatCards. Learn more about library access on the [website](#). The library is closed on all major holidays. All MEZCOPH enrolled students are provided access to the AHS Library after hours. If you have trouble accessing the library after hours with your CatCard, please email our [Business Manager, Senior, Elizabeth Cordova](#) your first and last name as well as a copy of your CatCard (with the numbers being visible and legible). You may need a CatCard PIN for some card readers on campus, such as the AHSL. If you have not set up a PIN, please go to: <https://www.fm.arizona.edu/dacportal/index.html#/>. You will need your Net ID and password to log in. Once you are at the "DAC Portal" website click on "view personal access". Students also have the capability of accessing the UAHS online resources from off-campus by logging in with your UA NetID and password.

Students can view AHS Library safety resources [here](#).

The Arizona Health Sciences Library Liaison to the College of Public Health is Jean McClelland. She is available to assist students, staff, and faculty with their library research needs, and has developed an [Information Resource Guide](#) specifically for students in the College of Public Health to help you be successful throughout your time in the program. Students may also reach out directly to Jean at jmcc@arizona.edu.

The Arizona Health Sciences Library Liaison to the College of Public Health is Jean McClelland. Ms. McClelland is available to assist students, staff, and faculty library needs. She has developed an [Public Health Information Resources](#) specifically for students in the College of Public Health to help you be successful throughout your time in the program. Students may also reach out directly to Jean at jmcc@arizona.edu.

Safety

The safety and security of our students is of utmost importance. Safety issues of the students, faculty and staff of the University of Arizona Health Sciences campus are handled by the [University of Arizona Police Department \(UAPD\)](#) located just two blocks to the south of the College of Public Health. UAPD can be reached by dialing [520-621-UAPD \(8273\)](#). In an emergency, dial 9-1-1 for assistance. The hospital, Banner University Medical Center has around the clock security patrol. Drachman Hall is monitored with the use of security cameras as well.

A comprehensive list of safety tips for students can be found through the Office of Public Safety's [Safety Guide](#) and the [UAPD website](#).

PHOENIX BIOSCIENCE CORE

The city-owned Phoenix Bioscience Core (PBC) is a 28-acre urban medical and bioscience campus planned for more than six million square feet of biomedical-related research, academic, and clinical facilities. Students have access to the facilities through their CatCards and that identification must always be displayed when on campus. The MEZCOPH offices are located on

the 3rd floor of Building 1 at 550 E. Van Buren Street, Phoenix, AZ 85004. Students are also welcomed and encouraged to utilize the facilities in the Health Sciences Education Building (HSEB), and the [AHSL Library](#) located on the 3rd and 4th floors of the HSEB building. Student access is limited to when Security is on site.

Building 1, 2, and 3 (The Historics): Daily 7:00 a.m. – 7:00 p.m.

HSEB: Weekdays 5:30 a.m. – Midnight / Weekends 7:00 a.m. – 10:00 p.m. / No Holidays

Security is present on campus and the roving security officer can be reached at 602-827-2368.

Computers

Students are encouraged to use the computers available in the AHSL Library located in HSEB. The systems revert to their initial state after a reboot, so a thumb drive is required to save any work. Printing is available in the HSEB Library for 10 cents per black and white page.

Phoenix Student Space

MEZCOPH students at the Phoenix Bioscience Core are encouraged to use the central area on the third floor of Building 1 as a meeting space, along with the student spaces in HSEB. Students may also use the lunchroom located on the 3rd floor of Building 1. This area is equipped with a sink, microwave, and refrigerator. It is expected that students keep the lunch area orderly and clean, and food that is no longer fresh is disposed of in a timely manner.

Wireless Internet Access in Phoenix

Wireless access is available throughout and around the Phoenix Bioscience Core via connection to the UAWiFi and UAPublic networks. Instructions for setting up UAWiFi wireless access can be found [here](#).

Eats and Treats

There are many local spots near the Phoenix Bioscience Core that our students, faculty, and staff like to frequent. Coffee shops are numerous, as are local and chain restaurants. For a list of places to eat and things to do in the Downtown Phoenix Area, visit the following websites: [Visit Phoenix](#) and [Downtown Phoenix](#).

COMMUNICATING WITH STUDENTS

The Office of Student Affairs communicates with students primarily through email, student listservs and the College's student intranet, the MEZCOPH Student Hub. The College hosts Facebook groups for prospective and current graduate students, as well as LinkedIn, Instagram, and Facebook groups for Alumni; however, these groups are not used to communicate official business.

Email Accounts

The University of Arizona requires that all students open email accounts through the University of Arizona. Students are required to use these accounts for all University-related correspondence. In turn, official University and College messages are communicated to students via this account. It is imperative, therefore, that all students keep the Office of Student Affairs notified of any address changes. Failure to read messages sent to the UA email account is not an acceptable excuse for not knowing important information. While forwarding one email account to another may be advantageous, there may be some risk of loss of information, and we do not encourage this.

Listservs

Current information about new policies and procedures, program and college events, and course information is announced via the academic program listservs. Each academic program or concentration within the College maintains a student listserv for communicating program or concentration business from its faculty and staff.

General announcements for all students related to academic business, e.g., speakers of interest, conferences, seminars, new courses, etc., should be sent to the Assistant Dean of Student Affairs for distribution. Graduate Coordinators also make every effort to reduce e-mail redundancy by compiling and sending out digest e-mails over the listservs.

College of Public Health Social Media Guidelines

The College of Public Health strives to support a vibrant, respectful conversation and expects that all users of the College's social media platforms treat each other with respect and abide by the rules and responsibilities of each social media platform.

MEZCOPH reserves the right to block or unsubscribe abusive users, and remove comments that:

- Are hateful, threatening, malicious or discriminatory.
- Are libelous.
- Harass, bully, or intimidate any user.
- Engage in commercial activities not approved by the appropriate authority.
- Contain profanity, nudity, or graphic or gratuitous violence.
- Condone or encourage illegal activity.
- May be considered spam or are irrelevant to the primary contents of the page.
- Are repetitive (multiple identical or substantially similar posts by the same user).
- Cannot be translated into English using free online translation software.
- Could compromise the safety of a member of the public or the individual who created the comment, post, or discussion.

- Reveal information in conflict with the Family Educational Rights and Privacy Act (FERPA), the Health Insurance Portability and Accountability Act (HIPAA), or any other applicable laws or regulations.

STUDENT SERVICES, RESOURCES & OPPORTUNITIES

Office of Student Affairs

The MEZCOPH Office of Student Affairs (OSA) serves as the central point of coordination for student activities/events and provision of services to undergraduate and graduate students in all academic programs of the College. Each OSA professional has significant experience advising students, participates in numerous university wide taskforces and committees, and meets with MEZCOPH students to help them resolve issues related to their academic careers. These issues include but are not limited to admissions questions; course registration; meeting academic paperwork deadlines; college financial aid, scholarships, and fellowship application processes; internship processes; career advising questions; travel requests; and graduation requirements.

Career Advising

An integrated approach to career advising, utilizing the expertise of the university's [Graduate Center](#), the [Student Engagement & Career Development Office](#), other university resources, and professionals within the Office of Student Affairs, is available to our students. The University of Arizona Student Engagement and Career Development Office offers a broad range of programs designed to assist students and alumni in developing and implementing career plans, gaining career-related experience while enrolled in school, and pursuing post graduate career goals, whether that means permanent employment or alternate plans. University career resources include large career fairs, employer info sessions, resume workshops and an online job board and interviewing system, called Handshake. The College hosts alumni panels, provides resume/cover letter workshops tailored for public health students, hosts a public health jobs listserv on which alums and college partners advertise positions and through which timely career guidance is provided. Review the Career Services page on the Hub, found under Career Services, to explore a comprehensive list of resources available to you.

The Office of Student Affairs consistently shares information regarding public health internships, fellowships, career opportunities through its listservs. College of Public Health students may request to join the internship or jobs listserv by contacting the administrative assistant in the Office of Student Affairs. Faculty and OSA professionals provide individual career guidance and résumé review.

Student Problem Resolution

When students encounter problems, it is imperative that resources and solutions are identified to resolve these issues.

The Assistant Dean of Student Affairs is the designated administrator whose role it is to listen to student concerns and determine how these issues should be addressed. Student services professionals within OSA often are the first to hear student concerns. These concerns are discussed with the Assistant Dean, who triages the response to responsible administrators or to the full Dean's Council.

Students who are experiencing difficulties of a sensitive or confidential nature are encouraged to make an appointment with the Assistant Dean who can provide assistance and guidance or will work with the student to find additional resources to solve the problem. The student and Assistant Dean will work together to find a mutually acceptable "next steps" plan of action. Students may also speak with the Graduate College. Please review the Graduate College's [Summary of Grievances](#) webpage for more information.

Disability Resource Center

The UA Disability Resource Center (DRC) is the campus department designated by the university to determine and provide access to university classes, programs, and activities for disabled individuals. Through an interactive process, the DRC will facilitate access either through a reasonable accommodation or by redesigning aspects of a university experience. The DRC's processes are designed to be convenient for students.

Accommodations are available to any pre-qualified student (undergraduate or graduate including masters and doctorate). Disabilities appear in many forms (visible or invisible) and each pre-qualified student can discuss accommodations with an assigned Disability Access Coordinator. Accommodations may involve flexibility with test taking times, test locations, note taking, or course substitutions. For more information, contact the [DRC](#) or visit their website.

Campus Health and Student Health Insurance

[University of Arizona Campus Health](#) is committed to promoting health, wellness, and safety at the University of Arizona and in the surrounding community by providing quality medical and mental health care, outstanding health education, while assisting the institution in health-related policy development. Campus Health is fully accredited by the Accreditation Association for Ambulatory Health Care, Inc.

The University offers one major [medical health insurance policy](#), which meets the Affordable Care Act requirements and is rated as a gold level plan. Coverage extends nationwide and has an emergency benefit worldwide. All three State of Arizona university health centers serve as primary care providers for the main subscriber, and it is available to: UA Students, Graduate Assistant and Associates, Post-Doctoral Fellows, J1 Visiting Scholars, and J1 Student Interns.

Campus Health Service sends out three "Open Enrollment" notices each major semester (fall & spring) through the student's official University of Arizona email address. The Student Health

Insurance is ordered, canceled, or changed through [UAccess Student Center](#) only during an “Open Enrollment” period, unless one qualifies for a prorated through a qualifying life event. When the insurance is ordered, you are ordering for a specific amount of time.

Helpful Student Resources

In addition to the information presented in the *New Student Guide*, the College has developed a list of helpful student resources to assist students in navigating their life and time here at the University. The Helpful Student Resources are found on the [Student Hub](#) on the Graduate Students tab under the heading Additional Resources.

In addition, the College’s [Diversity and Inclusion page](#) has an extensive list of College and University resources for students.

The Graduate College’s [New and Current Students webpage](#) also has a number of resources for graduate students across campus including specific links to Graduate College policies and procedures, professional development, child care subsidies, staying safe on campus, and more! They also have a comprehensive [Frequently Asked Questions](#) page for all new and continuing graduate students.

Student Input into MEZCOPH Operations

The administration of MEZCOPH is keenly interested in understanding the student perspective of the College and its operations. To that end, numerous avenues for students to provide input and share concerns have been developed. First and foremost, student members are sought for all MEZCOPH committees, except for the Promotion & Tenure Committee and the admissions committees. In addition to the university-administered Student Course Surveys, formerly called the Teacher and Course Evaluations, where students are encouraged to fully assess all aspects of a course, the College or individual faculty often administer a mid-semester online course evaluation to determine if there are ongoing course issues. All graduating students are required to complete a comprehensive Exit Survey.

Ongoing student dialogues with faculty and staff provide a venue for proactive resolution of problems. When there are issues within a particular course, students should first speak with the instructor about their concerns. Course concerns involving multiple students that are not resolved through meeting with the instructor may be addressed at the Student Affairs Committee Meeting where a plan of action for resolution of the issues can be developed.

Student Participation on MEZCOPH Committees

Membership on MEZCOPH committees provides students opportunities to participate in much of the college’s decision making and governance processes. Students are encouraged to consider committee membership as a means of familiarizing themselves with college operations, faculty, and staff, and to build their own leadership and collaborative skills.

Student Affairs Committee

The charge of the Student Affairs Committee is to act as a clearinghouse for issues related to students; plan, facilitate, and support student seminars, workshops, etc.; function as lobbying agent/advocate for resolution of student problems; and communicate concerns to college administration. This is an important committee as it supports the role of shared governance in college operations. The Student Affairs Committee meets twice each semester. While student representatives from each program are elected and help lead the committee, all students are welcome to attend and participate in the Student Affairs Committee.

Student Suggestion Box

MEZCOPH students have great ideas, and we want to hear them! A physical Student Suggestion Box and an [Online Student Suggestion Box](#) are available to provide students with an opportunity to share feedback and suggestions. We appreciate the feedback, and we take suggestions seriously. A main objective of the Student Suggestion Boxes is to get the suggestion/feedback in front of the appropriate College colleague, office, or committee for consideration. Please remember, however, that not all suggestions and great ideas are implementable. Sometimes a follow-up dialogue about the suggestion brings greater clarity and understanding to the issue for all concerned parties.

The **Physical Student Suggestion Box** is located on the first floor and second floor of Drachman Hall next to the water fountain. This box is checked by the Office of Student Affairs every week. Students can submit anonymous suggestions to the physical box but must include their contact information if they would like someone to follow-up with them.

STUDENT AMBASSADORS

To aid MEZCOPH with outreach and recruitment of a diverse student body, the Office of Student Affairs coordinates undergraduate and graduate Ambassador Programs. With a competitive application process, ambassadors proudly represent the College's student perspective to prospective students and their families, the University of Arizona, and other groups as called upon. College Ambassadors assist with undergraduate and graduate recruitment, participating in the following activities:

- Communication with prospective and admitted students
- Volunteer for UAHS-sponsored events
- Outreach to campus clubs and organizations
- Assist with the College's social media and student blog accounts
- Develop and support the mentor mentee program
- Staff tabling events on campus, as well as at the American Public Health Association, Arizona Public Health Association, and Graduate School Fairs
- Student panels for visit days
- Lots of other fun outreach/recruitment activities

STUDENT ORGANIZATIONS

Below is a list of some of the student organizations available at the University. Many of the ones that are College specific are student led and may have a variance by year in activity, student engagement, and contacts for getting involved.

Public Health Student Alliance (PHSA) – Phoenix

The Phoenix Public Health Student Alliance (PPHSA) is one of the student organizations designed to involve the Phoenix-based University of Arizona students in the surrounding community. The organization was founded in 2011 to keep all students involved in the public health field who otherwise would not be able to partake in Tucson-based activities. All MEZCOPH students are invited to participate. The primary mission of the group is to promote student connection and outreach in Maricopa County. PHSA-Phx has built bonds with the community to promote not only the Phoenix-based University of Arizona programs, but also to establish connections with community members that will ultimately positively impact their health in all aspects. This group relies on active student participation and recruitment for leadership and membership occurs each fall semester.

American Indian and Indigenous Health Alliance (AIIHA)

The American Indian and Indigenous Health Alliance (AIIHA) is an undergraduate and graduate student organization established in 2012 by a group of MPH and DrPH students. The organization's goals are to enrich and foster the educational and professional experience of Indigenous students at the University by offering diverse avenues of support that are responsive, adaptive, and efficient to meet the needs of Indigenous students. The organization also hopes to increase the representation of Indigenous students in public health disciplines.

Environmental and Occupational Health/Industrial Hygiene Club

The EOH/IH club at the University of Arizona is a student run organization that aims to enhance student knowledge and involvement. Members share a common interest in the promotion of environmental and occupational health, safety, and industrial hygiene through the reduction of biological, chemical, and physical hazards. Activities include professional networking, community engagement, and educational events that work in conjunction with current course objectives within the master's program. Educational and networking opportunities for members of the industrial hygiene and environmental and occupational health communities are provided through seminars, training opportunities, local tours, and roundtable discussions developed by the student group. This club also encompasses the student sections of the nationally recognized AIHA and American Society of Safety Engineers (ASSE) organizations.

LUCHA

Learning, Understanding, and Cultivating Health Advocacy (L.U.C.H.A.) is a group collective in the UA Mel and Enid Zuckerman College of Public Health, which promotes health advocacy through policy education, service, and campus engagement amongst Arizona-local community

and institutional settings. L.U.C.H.A. is composed of faculty, staff, community members, students, and alumni who are interested in supporting the L.U.C.H.A. mission.

Global Health Alliance (GHA)

As a student driven organization, the Global Health Alliance (GHA) aims to enhance students' knowledge of how public health functions in a global context. GHA engages in the following activities: providing opportunities for students and faculty to connect to international organizations and community service projects; facilitating discussion of global health and promoting internships that increase student experience in global health and multicultural interaction.

Graduate and Professional Student Council (GPSC)

The Graduate and Professional Student Council (GPSC) was founded in 1991. In its early years, the GPSC was a branch of the Associated Students of the University of Arizona (ASUA). Now the GPSC is independent from the ASUA and has its own officers, directors, representatives, and budget. The GPSC has played major roles in improving graduate student life by pushing for programs such as health insurance, childcare, TA and RA benefits, travel grants, and national advocacy (the latter primarily via the NAGPS). To find out more about the scope of GPSC activities, visit the [GPSC website](#). Each College elects representatives to serve on GPSC.

University of Arizona Student Organizations

The University of Arizona has over 600 student clubs and organizations, which play a key role in student life on campus. There are numerous undergraduate, graduate, and professional organizations fulfilling all aspects of student interests. For more information and contact information, follow our list of student clubs! The Associate Students of the University of Arizona (ASUA) [website](#) provides information about these student clubs.

STUDENT MANAGED EVENTS

MEZCOPH Poster Forum

The graduate programs of MEZCOPH host an annual research poster forum led by students. This event provides an opportunity for students conducting public health research and community-based work to network with other public health professionals from industry and regional and state governments. The goal is to promote future collaborations such as employment and research partnerships. The student planning group invites keynote speakers, develops promotional literature, maintains a website that provides guidance for poster creation and participant registration, and produces a forum program which includes abstracts. Students throughout the university are encouraged to present public health related posters. Posters are judged, and a cash prize is awarded to the best student posters.

Social Justice Symposium

Students of the Mel and Enid Zuckerman College of Public Health plan and host an Annual Social Justice Symposium in the spring semester. Initiated in 2007 by students in the Center for Health Equity/Project EXPORT Fellows program within the Mel and Enid Zuckerman College of Public Health, objectives of the one-day conference were and continue to be to showcase strategies and encourage activism to effect change in the realm of social justice and public health. Bringing together students, faculty, community activists and health professionals, the Social Justice Symposium aims to expand participants' awareness and abilities to critically analyze how social injustices affect health outcomes worldwide with the goal of inspiring action at a personal level. Since 2007, the planning committee has included both undergraduate and graduate students from diverse corners of public health study. Students should email the [Assistant Dean of Diversity, Equity & Inclusion, Dr. Velia Nuño](#) if they would like to participate.

THE UNIVERSITY OF ARIZONA OFFICE OF SCHOLARSHIPS & FINANCIAL AID

To be eligible for any federal loans or scholarship awards, domestic students must file a FAFSA. To qualify for scholarship awards, International Students must complete a [Financial Aid Calculation for International Students](#).

Federal Financial Aid

Federal financial aid (i.e., loans and grants for MEZCOPH students) is awarded through the University of Arizona's Office of Scholarships and Financial Aid (OFSA). Application requests for financial aid should be made in the semester prior to the anticipated funding needs. Further information can be found on the [OFSA website](#). [The Office of Scholarships and Financial Aid can be reached](#) by telephone at (520) 621-1858, or by email at AskAid@arizona.edu.

Educational Assistance Program

Benefits eligible employees of the three state universities, their spouses and dependent children may be eligible for drastically reduced tuition rates. The qualifying employee must be employed on the first day of the semester or term for which the benefit is to be used and must apply through the employee's hiring department to access this benefit. Detailed information can be found on the [Human Resources website](#).

STUDENT FUNDING MANAGED BY MEZCOPH

A College Scholarship Committee made up of faculty and staff appointed by the Dean manages the award process for the MEZCOPH scholarships. A full listing of the College's scholarships, complete with criteria, application deadlines and forms can be found on the [MEZCOPH Website](#). The College's Scholarship Committee meets annually and on an ad hoc basis to select scholarship awardees. Students apply in the spring semester for financial assistance for the following academic year via the College of Public Health Named Scholarship Application on [Scholarship Universe](#). The process and timing will be announced by the Assistant Dean in the spring semester.

MEZCOPH SCHOLARSHIPS

Monetary awards have been established to assist MEZCOPH students in in-person programs in funding their required coursework or research/internship experiences in specific areas of interest. Many of the MEZCOPH Named Scholarships can be applied for through [Scholarship Universe](#), which is the University's scholarship management system for students and departments. During the spring semester, applications for scholarships for the following academic year will be available. Each student must create a profile on Scholarship Universe and will be matched to scholarships for which they are eligible.

Graduate College Dissertation/Thesis Tuition Scholarship

A limited number of awards that reduce nonresident tuition to Arizona resident tuition for 1 to 6 units are available. The award excludes the mandatory registration fees and differential tuition charges. This tuition scholarship is designed to reduce the tuition for nonresident students who are within 2 years of completing their degree and are only working on their thesis or dissertation research and writing. Students are eligible to apply if they are nonresident graduate (master or doctoral) degree-seeking students who are enrolled for one to six credits of **900-level units ONLY** (no actual courses). This scholarship is not applicable for summer tuition. Students desiring more information about this scholarship should contact the Assistant Dean early in the semester prior to the one in which they will be requesting this scholarship.

Graduate College Fellowship Funding

The University of Arizona Graduate College allots MEZCOPH a limited amount of Graduate College Fellowship funding each academic year. Graduate Fellowships are cash awards that can be applied to tuition, health insurance or any other academic expense, the balance of which is paid directly to the student. MEZCOPH awards Graduate Fellowships to its students based on both financial need and academic merit. Awardees must establish and maintain at least a 3.0 cumulative GPA, be enrolled in six graduate units per semester, and have a current FAFSA on file to be eligible to receive and retain their award.

Additional merit-based scholarships administered through the Graduate College are found on the Graduate College website.

MEZCOPH RESEARCH AWARDS

Graduate students in the MS/PhD Epidemiology and Environmental Health Sciences, PhD Biostatistics, PhD Health Behavior Health Promotion, and DrPH Programs are also eligible for available research funds. No more than one MEZCOPH research award can be awarded to the same student in a given academic year. These awards are designed to assist graduate students in the completion of their thesis or doctoral research and to provide them funds to purchase supplies, equipment, or laboratory tests that are not funded by other resources. Announcement of these award opportunities will be distributed to graduate students via student listservs.

TRAVEL AWARDS/POSTER PRINTING

Students are encouraged to apply for travel funding through the [Graduate and Professional Student Council \(GPSC\)](#).

MEZCOPH GRADUATE, RESEARCH, & TEACHING ASSISTANTSHIPS

Graduate Research Assistantships

Research assistantships are often available through the [research grants of MEZCOPH faculty](#) members or from other departments on the University campus. When the Office of Student Affairs is notified of research assistantship opportunities, information will be shared with students via student listservs. However, these opportunities are best sought by speaking with individual faculty members who are conducting research as not all opportunities are shared with OSA. In general, these positions are awarded based on a competitive application that exhibits excellence in academic and/or professional endeavors and a strong indication that the candidate has the talents or abilities that the assistantship requires. In addition to a salary, these assistantships typically provide the recipient with a waiver of out-of-state tuition, partial remission of in-state tuition, student health insurance, and a 10% discount at the UA bookstores. Students are responsible for university fees and College of Public Health program fees.

Graduate Teaching Assistantships

Based on class size and format, a limited number of MEZCOPH courses utilize teaching assistants (TAs). TAs serve in mentoring, instruction, and administrative roles working with course instructor(s) in the classroom. TA job duties may include taking attendance, grading homework, quizzes, and papers, preparing course materials, developing, and holding study sessions, scheduling guest speakers, monitoring academic integrity, holding office hours and lecturing.

In addition to a salary, these assistantships provide the recipient with a waiver of out-of-state tuition, partial remission of in-state tuition, student health insurance, and a 10% discount at the UA bookstores. Students are responsible for university fees and College of Public Health program fees.

The Office of Academic and Faculty Affairs works with department heads and program directors to manage the TA assignment process. All TAs are required to complete [two mandatory pieces of online training](#), as well as participate in the D2L-based Graduate Assistant Teaching Orientation before they are eligible for employment. International students who serve as TAs must take a speaking assessment test administered by the Graduate College. For detailed information, please see the Graduate College's [English Speaking Proficiency Evaluation](#) webpage.

The course instructor serves as the TA's supervisor, and it is the instructor's responsibility to communicate job expectations to the TA. It is also the instructor's responsibility to hold the TA accountable for meeting these expectations. At the end of the semester, the instructor is expected to evaluate the TA through a university established process.

To be considered for a teaching assistantship, students must have completed the College's Teaching Assistant Application. Successful completion of duties as a TA does not guarantee future assignments. Students are encouraged to seek graduate research and teaching assistantships in other departments and units at the university. The salary and benefits available to graduate assistants are comparable throughout the university campus.

In addition to the requirements of assistantships through the College, all students should familiarize themselves with the [Graduate Assistant Manual](#). It is the student's responsibility to read the GA Manual and abide by all policies outlined through the Graduate College.

The Graduate College also offers resources designed to help students balance family, work and school including [GA Parental Leave](#) and [Temporary Alternative Duty Assignments \(TADA\)](#).

DEGREE COMPLETION INFORMATION

MEZCOPH Exit Survey

The MEZCOPH Graduating Student Exit Survey is a mechanism for student to provide:

- feedback on services and student experiences
- assess skills and competencies gained while enrolled in the college
- a means to contact and network post-graduation

Exit Survey feedback is used to refine curriculum, operations, and provide inspiration for new initiatives. All students are required to complete the Exit Survey as part of their graduation requirements. Final degree paperwork will be processed after the student has responded to the survey. The link to complete the Exit Survey will be sent directly to the student via e-mail in the weeks leading up to their graduation. Responses are aggregated when reported and do not influence your current or future standing with the college.

Please note that the MEZCOPH Graduating Student Exit Survey is in addition to and separate from the Graduate College Exit Survey that is requested of graduating students across the University.

As part of the Exit Survey, students are required to complete a Graduate Information Sheet, which provides the College with the student's forwarding address and future plans, if known. This information is needed by the college to maintain its accreditation by the Council on Education for Public Health and is collected using the same link as the Exit Survey.

MEZCOPH Convocation

Traditional Semester (Fall and Spring) Completion

Students who finish all degree requirements in spring may participate in the May convocation ceremony. Students who finish all degree requirements in the fall semester may participate in the December convocation.

All students must notify the Office of Student Affairs of their intent to participate in the MEZCOPH ceremony by April 1 for the May convocation or November 1 for the December convocation.

Prior to these dates via the college listservs, the Office of Student Affairs communicates with students outlining specific convocation information and the procedure for submitting their RSVP. It is the responsibility of the student to read these emails and follow any directions provided.

Non-Traditional Semester (Summer or Winter) Completion

Master's students and doctoral level candidates who are planning to complete their degree requirements by the summer graduation deadline may participate in the May convocation ceremony if they have no more than 6 outstanding credits at the time of convocation. Students must be enrolled in these outstanding units for summer at the time of convocation.

Additionally, doctoral candidates with outstanding graduation requirements must secure their Chair's approval to participate in Convocation and present documentation of approval to OSA by April 1 for the May ceremony or November 1 for December.

University of Arizona Commencement

The UA university-wide commencement ceremony happens only once each year in May. December graduates are welcome to attend the Commencement ceremony either before or after their graduation date. You cannot participate twice. Names in the printed program are by the semester of degree completion and when the application for degree candidacy was filled out in UAccess Student Center. Spring and Summer graduates have a deadline of February 1st of the intended semester and Fall and Winter graduates have a deadline of September 1st of the intended semester.

Per university rules (<https://commencement.arizona.edu>), August graduates, on the other hand, are welcome to participate only in the preceding May commencement and will have their names listed in that commencement program.

To view the university-wide commencement ceremony schedule, please see the University of Arizona academic calendar page: <http://catalog.arizona.edu/acadcals.html>

UNIVERSITY OF ARIZONA POLICIES

Academic Policies

MEZCOPH students are expected to adhere to all registration, enrollment, grading and academic policies outlined in the [University of Arizona General Catalog](#) and [Graduate College Website](#).

Residency Classification

Residency classification standards and procedures at The University of Arizona are based on the Arizona Board of Regents Policy on Tuition Classification. Each student must be classified as a resident student or a non-resident student for tuition purposes. It is the responsibility of each student to provide the information necessary to obtain a correct residency classification and raise the issue of a disputed classification in a timely manner. For more information, please see the [UA Residency Classification Office website](#).

UA Smoking and Tobacco Policy:

The University's "Smoking and Tobacco Policy" is designed to promote the health and wellness of all members of the University community, including visitors to campus, and it prohibits the use of tobacco and nicotine-containing products on property owned or controlled by the UA. This includes the main campus, the Arizona Health Sciences Center, the Phoenix Bioscience Core, UA South, all satellite campuses, University vehicles, and any property leased by the UA. Smoking cessation aids, such as nicotine gum, patches, and nasal sprays, will be permitted, but all other forms of tobacco or nicotine - including pipes, cigars, cigarettes and e-cigarettes, all types of smokeless tobacco, and water pipes - will be prohibited. The latest version of the policy is available [here](#).

Weapons Policy

Arizona Board of Regents policies 5-303 and 5-308 prohibit the use, possession, display or storage of any Weapons, Dangerous Instruments, Explosive Devices, or Fireworks, among other things, on The University of Arizona campus and on all land and in all buildings owned or under the control of The University of Arizona on behalf of the Arizona Board of Regents, except as provided in Section 12-781 of the Arizona Revised Statutes. No concealed carry permit exempts a person from these policies. These policies apply to all University of Arizona students, employees, visitors, and guests.

UNIVERSITY POLICIES GOVERNING ACADEMIC INTEGRITY, CONDUCT & NON-DISCRIMINATION

Academic Integrity Code

Integrity and ethical behavior are expected of every University of Arizona student in all academic work. This academic integrity principle stands for honesty in all class work, and ethical conduct in all labs and clinical assignments. This principle is furthered by the student Code of Conduct and disciplinary procedures established by ABOR Policies 5-308 through 5-404, all provisions of which apply to all University of Arizona students.

The procedures for reviewing a suspected violation are found in the complete [Code of Academic Integrity](#), administered through the UA Dean of Students Office.

MEZCOPH students are provided with a number of online resources to assist them in understanding the concept of plagiarism and tools to build citation skills and strategies for avoiding plagiarism. University sanctions may be imposed on a student following an academic integrity infraction. In addition, MEZCOPH financial support (scholarships and assistantships) will be withdrawn, and future awards prohibited.

Student Code of Conduct

The University of Arizona Student Code of Conduct sets forth the standards of conduct expected of students who choose to join the university community. Students who violate these standards will be subject to disciplinary sanctions to promote their own personal development, to protect the university community, and to maintain order and stability on campus. [The UA Student Code of Conduct](#) outlines these standards and sanctions.

Disruptive Behavior in an Instructional Setting Policy

The University seeks to promote a teaching and learning environment free from material and substantial classroom disruptions. Faculty members and teaching staff have the authority and responsibility to effectively manage their classroom environments. Instructors may determine the time and manner for student questions and expression of points of view in the instructional setting. Accordingly, instructors should establish, communicate, and enforce reasonable rules of classroom behavior and decorum via the syllabus and classroom discussion. This policy is not intended to discourage appropriate classroom expression, discussion, or disagreement, but to promote respectful interactions. Please review the full description of the [Disruptive Behavior in an Instructional Setting Policy](#).

Non-Discrimination and Anti-Harassment Policy

The University of Arizona is committed to creating and maintaining an environment free of discrimination. In support of this commitment, the University prohibits discrimination, including harassment and retaliation, based on a protected classification, including race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information. The University encourages all who believe themselves to have been the subject of discrimination to report the matter immediately as described in the link below on Reporting Complaints to University Offices. All members of the University community are responsible for participating in creating a campus environment free from all forms of prohibited discrimination and for cooperating with university officials who investigate allegations of policy violations. Please review the full description of the [UA Non-Discrimination and Anti-Harassment Policy](#).

Threatening Behavior by Students Policy

The University seeks to promote a safe environment where students and employees may participate in the educational process without compromising their health, safety, or welfare. The Arizona Board of Regents' Student Code of Conduct, ABOR Policy 5-308, prohibits threats of physical harm to any member of the University community, including to oneself. Threatening behavior can harm and disrupt the University, its community, and its families. Please review the full description of the [UA Policy on Threatening Behavior](#).

COLLEGE OF PUBLIC HEALTH MATRICULATION STANDARDS

The College has developed matriculation standards to identify the skills and behaviors that are expected of students admitted to the MEZCOPH academic or certificate programs. During the period of enrollment, should the student's performance in any of the areas outlined drop below the acceptable standards, the student may be dismissed from the program to which the student has been admitted. A student's performance compared to these standards will be assessed during annual academic progress reporting or at any time during the student's enrollment in the College should unsatisfactory performance be reported. Please review the full description of the College of Public Health Matriculation and Progress Standards, found on the MEZCOPH Student Hub under Student Forms.

GRADUATE COLLEGE & MEZCOPH POLICIES

Academic Deficiencies Noted at Admission

A deficiency is a lack of course work or knowledge in a basic area that may be critical to graduate and professional work. Deficiencies in a student's past academic work may be identified by program faculty during the admissions process. The program faculty has the authority to require completion of additional coursework prior to entry into the program or at the onset of the student's graduate study. The coursework required must be taken at the undergraduate level, can be transferred from another accredited institution, and must be graded "A", "B", or "C". Students should take steps immediately to address any deficiencies noted in communications from the College of Public Health.

Academic Probation at the Graduate Level

Students who have a cumulative grade point average of less than 3.00 will be placed on academic probation. Graduate College policy requires students who are on probation to meet with their Faculty Mentor/Advisor, discuss the steps to be taken to remedy the circumstances that caused the probationary status, and devise a written plan of action. Per College of Public Health policy, students on Academic Probation must complete a [Retention Plan](#). Graduate students who are on probation for two consecutive semesters will be disqualified by the Graduate College. Students can apply for readmission to a degree program as early as the semester after their disqualification if they achieve a cumulative grade point average of at least 3.0 through additional graduate coursework. A re-admission request must be supported by the head of the major department and approved by the Graduate College. There is no guarantee of re-admission. The program can request termination of graduate studies for a student on

academic probation. No student on academic probation may hold a Graduate College scholarship, fellowship, or graduate teaching or research assistantship.

GradPath

GradPath is the Graduate College's electronic degree audit process that makes tracking and monitoring student progress transparent to all involved. Students fill in and submit forms online through their UAccess Student Center. Forms have some automatic checking built in that will prevent common errors (e.g., typos in course numbers, illegible faculty names, etc.). There is also some built-in logic to notify students when there is a problem with their form, such as courses outside our time limit. Such messages include links to policy. The automated workflow engine then routes the electronic forms to the faculty and Graduate College for their approval.

It is the student's responsibility to monitor the faculty members' and Graduate College's approval of all forms submitted through GradPath. Students can monitor the approvals by tracking the approval path at the bottom of any form in GradPath.

Incomplete Grades

The grade of I (for Incomplete) may be awarded with the instructor's agreement only near the end of a term when coursework to date has been satisfactorily completed. These are not to take the place of a failing grade and are only appropriate when a student has all but a minor portion of coursework done. More information about the [Incomplete Grade policy](#) can be found online. Instructor conditions for the Incomplete should be outlined on a [Report of Incomplete Grade form](#), which serves as a contract between the student and the instructor, and should be sent to your Coordinator for your file.

Leaves of Absence

Students who have an interruption in their enrollment of one semester or more in the program and have not been approved for a Leave of Absence will be required to apply for readmission upon resumption of coursework. Students should contact their Graduate Coordinator and the Director of Admissions to determine a plan for readmission. At a minimum, a Graduate College Application must be completed online, and additional application materials may be required. When a student leaves their graduate program and does not take a leave of absence, readmission is not guaranteed.

Graduate students may be granted a Leave of Absence for a maximum of one year throughout the course of their degree program by the Dean of the Graduate College. Under extraordinary circumstances, LOAs may be granted retroactively for up to one year. LOAs are granted on a case-by-case basis for compelling reasons. Only when the LOA is approved prior to the beginning of the semester for which the LOA is being sought will students be exempted from

fees for that semester. Only services or facilities available to the general public can be used during the LOA.

Leaves of Absence (LOAs) may affect the status of a graduate student's financial aid. Students are responsible for determining the requirements of their funding agency and/or academic unit prior to applying for a Leave of Absence. A Leave of Absence does not pause or stop the clock on the allowed time to completion. Master's students have 6 years to complete their degree program starting with the first course that is applied to their degree. Doctoral students have five years from the time they passed the comprehensive exam to complete their degree. Some doctoral programs may have additional maximum time to completion requirements found in the program-specific information of the handbook.

Failure to obtain a Leave of Absence or remain in continuous enrollment will result in penalties, as described in the [Continuous Enrollment](#) policy requirements. The Leave of Absence form is found on the [UAccess Student Center](#) under the GradPath option, petition forms.

Academic Leave of Absence

Academic Leave of Absence (i.e., leaves to take coursework at another university, for research, field work, internships, professional development, etc.) are handled on a case-by-case basis by the student's department and the Graduate College.

Medical Leave of Absence

Graduate students in degree programs may be granted a Medical Leave of Absence by the Dean of the Graduate College. Students are able to upload medical documentation if they so choose but are not required.

Personal Leave of Absence

LOAs can be submitted for compelling reasons including birth or adoption of a child, personal or family reasons, military duty, or financial hardship if they do not fit into the above categories.

Responsible Conduct of Research Statement

Every graduate student must complete the Graduate College's Responsible Conduct of Research Statement. This statement verifies that the student agrees to follow responsible conduct of research compliance regulations and academic integrity requirements and will adhere to them in their research. This statement is electronically signed on the [UAccess Student Center](#) under the GradPath option. Students must sign the statement before they are able to access their Plan of Study and other Graduate College forms.

Exceptions to Policy (Petitions) and Grievance Processes

There are many different types of policies that govern your time with us. When a student experiences an unusual situation, typically outside of their own control, that the student

believes merits an exception to a policy, it is important that the appropriate appeals process is followed. We highly encourage students to discuss and identify the appropriate process in consultation with their Graduate Coordinator. Some examples include:

- Program Specific policies should be addressed initially with the Faculty Mentor/Advisor. If necessary, the Program Director and/or the full Program Faculty may need to be consulted.
- Exceptions to MEZCOPH-specific policies include structured process and form designed for that process that must be completed. The document allows the student to explain the reason for requesting an exception to a MEZCOPH-specific policy and requires the student's request to be reviewed by multiple College administrative channels. Graduate students, please see your Graduate Coordinator. Undergraduates, please see your Academic Advisor.
- [Grade Appeals](#) have specific timelines and processes.
- Graduate College policies have their own [petition process](#).
- Issues related to the Registrar's Office or the Bursar's Office should be directed to those offices.
- For a listing of different grievance categories, please see the Graduate College's [Summary of Grievance Types and Responsible Parties](#).

All appeals require a clear explanation of relevant facts and are strengthened by supporting documentation. In some cases, a letter of support from key faculty or staff may also be requested. Again, your Graduate Coordinator is available to help you identify the most appropriate process for your particular situation.

SATISFACTORY ACADEMIC PROGRESS

To be considered as maintaining Satisfactory Academic Progress, a student must:

- Maintain continuous enrollment
- Maintain a GPA of 3.0 or greater
- Meet Program Milestones in a timely manner
- Complete and receive a satisfactory faculty review of Student Annual Progress Report
- Complete required courses satisfactorily – no grades of D, E, or F

Continuous Enrollment

According to [Graduate College Policy](#), graduate students must be continuously enrolled each fall and spring semesters in a minimum number of graduate units from original matriculation until all degree requirements are met. (See table below.)

Unless excused by an official Leave of Absence (which may not exceed one year throughout the student’s degree program), all graduate students are subject to the Continuous Enrollment Policy and must pay tuition and fees to remain in the program. If the student fails to maintain continuous enrollment or obtain a Leave of Absence, the student will be required to apply for re-admission (including submitting application materials as determined by the program), to pay the Graduate College application fee, and pay all overdue tuition and fees. Tuition or registration waivers cannot be applied retroactively.

See the table below for the minimum number of units required.

	<i>Full-time Status without assistantship</i>	<i>Full-time Status with assistantship</i>	<i>Part-time Status (has implications for financial aid and visa status)</i>
Graduate student	9	6	1*
Graduate student with all course work, unit requirements, steps and milestones completed <u>except</u> applied practice experience (MPH), thesis (MS) or dissertation (doctoral) units.	3*	6	1*
Graduate student with all course work, unit requirements, steps and milestones completed <u>including</u> applied practice experience (MPH), thesis (MS) or dissertation (doctoral) units.	1**	6	1**

**International students need to work with the International Student Office to get special endorsement for this minimum number of units.*

***Doctoral or master’s students who are making good progress toward their degrees and who are not hired as Graduate Assistants/Associates or on student wages may qualify to enroll for only one credit to maintain full-time status to defer/receive educational loans (federal/private), some institutional support (contact unit to verify), or to maintain F or J visa status. For the Office of the Registrar to determine qualification, the graduate student must complete the Application for Advanced Status each semester (for up to four semesters), be registered for the term requested and submit the form three weeks before the term to have full time status reported (the UA only reports enrollment status to the Clearinghouse beginning one week before a term begins).*

Additionally, MPH students planning to complete degree requirements in the summer must be registered in a minimum of 1 unit of graduate credit during the summer term. If not graduating in the summer term, master’s students do not have to register for graduate units during

summer sessions *unless* they plan to make use of faculty time. If they do plan to use faculty time, they must enroll for a minimum of 1 unit of graduate credit in the summer term(s) in which they are using faculty time. If the student is working at the internship site during the summer, the student must be registered in a minimum of 1 unit of 909 in Summer 10-wk or Summer II.

If an MPH student has completed all course requirements and is only finishing the internship or final, the student must be enrolled in at least 1 unit of 909, Master's Report, during their final semester(s) in the program. Similarly, MS students who have completed all course requirements and are only completing the thesis requirement, must enroll in at least 1 unit of 910, Master's Thesis, during their final semester(s).

For doctoral students, if the program degree requirements such as the comprehensive exams or final oral dissertation defense are to be completed in the summer, they do not have to register for graduate units during the summer session. However, they must contact the Manager of MS and Doctoral Programs so that the Graduate College can be notified that the milestones will be occurring.

Part-time students need to be aware that there are implications for financial assistance, loan repayment, and/or visa status. It is the responsibility of the student to verify this with the Office of Financial Aid and Scholarships before requesting/finalizing enrollment with their Graduate Coordinator.

Deferment/Forbearance of Student Loans

Please visit the [Federal Student Aid website](#) to educate yourself on the federal requirements to defer or forebear your student loan payments. The "Continuous Enrollment" section of this handbook defines part-time and full-time status.

Minimum GPA

In accordance with Graduate College standards, all degree program students must take at least 3 credits or more per semester and maintain a B (3.00) cumulative grade point average (GPA). Failure to maintain a 3.0 GPA for two consecutive semesters will result in dismissal from the program, as outlined by the [Graduate College's Academic Probation policy](#). If a student is in danger of falling below a 3.0 GPA, the student should contact the MPH Coordinator or Manager of MS and Doctoral Programs to create a plan of action.

Students can earn a C in a course and still complete the graduate Program. However, to maintain a 3.0 GPA, the student would need to earn an A in another course to balance out the C. Additionally, all courses required for your program (i.e., those on your plan of study), must be passed with a grade of C or better.

Grades of D, E, or F

Only courses in which the student has earned a grade of A, B, C, S or P may be counted on the Graduate Plan of Study. A course may be repeated for inclusion on the Plan of Study or to improve the GPA; however, the original grade will be included in the GPA calculation and remain on the student's transcript. Please be aware that students must have a cumulative GPA of 3.0 to graduate. Students who fail required coursework are at risk of dismissal from the program.

Program Steps and Milestones to Completion

A student's progress toward meeting the Program Steps and Milestones to Degree is assessed at the time of students' Annual Progress Report in conjunction with their Faculty Mentor/Advisor and Program Faculty. When it is determined that a student is not making timely progress, the student and Faculty Mentor/Advisor will meet to create a Retention Plan using the MEZCOPH form, *Graduate Student Retention Plan for Failing to Meet Satisfactory Academic Progress*. Please see the Steps and Milestones for your degree in the second portion of this handbook below.

Continued Program Progress and Annual Progress Report

Of major importance to program faculty and to the College is the student's successful progression toward fulfilling all degree requirements. The process of monitoring student progress is outlined below.

Students are required to complete an Annual Progress Report that describes their progress and accomplishments for the previous academic year. This report is completed early in the spring semester of each year; the Office of Student Affairs notifies students of the process and deadlines related to the Annual Progress Report. In a timely manner, students are responsible for completing the report electronically and making an appointment to review the report with their Faculty Mentor/Advisor. After this meeting, the faculty will put notes and electronically sign the report for it to route to the Graduate Coordinator. The Graduate Coordinator sends these reports to the appropriate Program Director. The student is also asked to attach a résumé and a copy of the current Plan of Study (either draft or final version). Students who do not comply with the requirement for filing the Annual Progress Reports will be notified in writing of their failure to document satisfactory progress with a copy also sent to their Faculty Mentor/Advisor. These students are at risk for potential dismissal from the program.

The program faculty will review the reports, completion of required coursework, course grades, and timeliness of progress. When academic progress issues are identified, the program faculty, in consultation with Student Services, will provide the student with a retention plan.

A copy of the Annual Progress Report with faculty recommendations will be kept in the student's file in the Office of Student Affairs. If issues were identified, the original Annual

Progress Report, with official recommendations, will be returned to the student for review with the recommendation that the student consults with the Faculty Mentor/Advisor.

Failure to Meet Satisfactory Academic Progress – Retention Planning

When a student has been identified as not making progress due to the following bulleted conditions, the student will be notified in writing via the student's official UA email account using the College's Graduate Student Retention Plan Form.

- Failing to complete and receive a satisfactory review of the student's Annual Progress Report
- Received a grade of D, E or F in a required course
- Placement on University Academic Probation for failing to maintain a GPA of 3.0 or greater
- Failure to maintain continuous enrollment
- Failure to meet program milestones in timely fashion
- Failure to meet other Academic Guidelines

The student's Faculty Mentor/Advisor and the appropriate Graduate Coordinator should be copied on that communication, as well. According to [Graduate College guidelines](#), students must be given an opportunity to appeal or rebut items of unsatisfactory progress. The Graduate Student Retention Plan Form will outline how the student is not meeting satisfactory academic progress, provide the student with the opportunity to explain the situation, and allow the student and the Faculty Mentor/Advisor to determine an agreed upon retention plan and timeline of completion. Signatures of agreement from the student, Faculty Mentor/Advisor and Program Director are required.

Students who do not fulfill their retention plan requirements by the agreed upon timeline may be dismissed from the program. In this eventuality, the program may send a formal request to the Associate Dean of the Graduate College requesting the student's dismissal from the program and the Graduate career. The Graduate College then decides whether to dismiss the student.

REGISTRATION, ENROLLMENT, & CREDIT REQUIREMENTS

Only 500 level courses or higher will receive graduate credit, and only 500 level (or higher) courses count toward the minimum enrollment. Graduate students may not apply undergraduate units toward their graduate degree requirements.

Registration and Payment Deadlines

Registration for UA courses can be accomplished using the [UAccess Student Center](#). Please be aware that it is the student's responsibility to be informed of the payment deadlines. The

student must pay in advance of these deadlines to avoid late penalties. The Office of Student Affairs cannot negotiate the removal of late fees. It is advisable that initially, a student should pay for the number of units that the student anticipates taking, even though the [schedule](#) may change later.

Enrollment in Fieldwork

Many students undertake field work in support of independent study, applied practice experience/internship, thesis, or dissertation efforts. While in the field working on any class or research projects for course credit, the student must be registered for appropriate credit hours. When working in the field, students may encounter risk. University of Arizona course enrollment ensures liability coverage by the University. Students may not travel to countries for which the U.S. State Department has issued a Travel Warning to complete academic requirements.

UNIVERSITY OF ARIZONA INTERNATIONAL TRAVEL PROCEDURES

All students planning an internship or research project or completing a course outside of the United States must register their travel with the university via UA Study Abroad Independent Global Experience (IGE) application. Students traveling abroad must also register for GeoBlue Insurance coverage at \$3 per day. Per UA Study Abroad policy, students are also required to provide proof of a medical appointment with a Health Travel Clinic as part of the IGE application. Campus Health Travel Clinic (<https://health.arizona.edu/immunizations-travel-clinic>) or Find a Clinic Near You (<https://wwwnc.cdc.gov/travel/page/find-clinic/>).

The IGE application can be found here:

https://arizona.terradotta.com/index.cfm?FuseAction=Students.Apply&Program_ID=10376

Before planning any international travel for internships or research, always communicate with your Graduate Coordinator to ensure the correct process is being followed.

ATTENTION INTERNATIONAL STUDENTS

The University of Arizona requires that all international students on non-immigrant visas, regardless of classification or number of units, carry the Student Health Insurance unless one qualifies for an [exemption](#). Exemptions must be requested each semester. Enrollment for Post-Doctoral Fellows, J1 Visiting Scholars and J1 Student Interns are handled directly through the Campus Health Service Insurance Office.

READMISSION POLICY

Occasionally, students encounter life events that lead them to discontinue their graduate studies for a number of reasons. In the event that you discontinue your graduate program while in good academic standing and wish to return to complete your degree, you will need to comply with the College of Public Health readmission policy.

Any student who requests readmission to their graduate program must submit an internal application. The readmissions policy and application process are outlined at <https://publichealth.arizona.edu/graduate-students/admissions/how-to-apply>.

SECTION II – PROGRAM SPECIFIC INFORMATION AND POLICIES

INTRODUCTION TO THE BIOSTATISTICS PhD & MS PROGRAMS

The Discipline of Biostatistics

Biostatistics is the application of statistical methods to research in biology, public health, and medicine. Biostatisticians collaborate with scientists and investigators in nearly every area related to health and have made major contributions to our understanding of chronic diseases such as cardiovascular disease, cancer, and AIDS; environmental monitoring and impact; description of human growth and development; and the relationship between genetics and the environment. Biostatisticians also contribute to the design of scientific studies to ensure that the conclusions are appropriate for the scientific hypotheses.

Biostatistics differs from statistics in that it is typically more application oriented, whereas statistics is typically more focused on statistical theory. Epidemiology (another discipline of public health) relies heavily on biostatistics and biostatisticians to aid in the assessment of disease determinants and their distribution in the population. The field of Biostatistics continues to grow as a result of the increasing demand for qualified experts in biostatistical methodology and the increasing capacity of computers.

Degree Programs

Currently, MEZCOPH offers the following degrees with a focus in biostatistics: Doctorate (PhD) in Biostatistics; PhD Minor in Biostatistics (for University of Arizona doctoral students); Master of Science (MS) in Biostatistics; and the Master of Public Health (MPH) with a concentration in Biostatistics. Descriptions are in the MEZCOPH [Academic Curriculum Guide](#).

The PhD and MS programs in Biostatistics are designed for individuals having strong quantitative skills, with background or interest in the biological, medical, or health sciences. Students typically enter the PhD program with a master's degree. The doctoral program develops competency in the theory of statistics and probability, in introductory and advanced biostatistical methods and theory, and in fundamentals of study design. The PhD program will produce graduates who can develop biostatistical methodology that can be utilized to solve problems in public health and the biomedical sciences. In addition, graduates of the PhD program will be prepared to apply biostatistical methodology for the design and analysis of public health and biomedical research investigations. Finally, graduates of the PhD program will be well suited to function as collaborators or team leaders on research projects in the biomedical and public health sciences.

The MS Biostatistics program prepares individuals to work effectively as applied biostatisticians in a variety of public health, epidemiological and clinical research settings. The MS in Biostatistics provides training in applied biostatistical analysis and interpretation. The difference between the MS in Biostatistics and the MPH concentration in Biostatistics is that

the MS provides training in probability and statistical theory with an applied focus, while the MPH provides a broader background in public health.

How to Use this Handbook for PhD and MS Students

The objective of this portion of the handbook is to provide straightforward guidance to our students about how to navigate through the Biostatistics PhD and MS programs. This section is designed to help students create a degree plan with incremental goals (e.g., coursework, comprehensive exams, and culminating experience or dissertation). All the Graduate College and MEZCOPH policies and procedures discussed in the first part of the handbook apply as well. It is the student's responsibility to be aware of the policies and to adhere to them. Keep in mind that operational processes and policies change, and students are subject to the requirements described in the most recent handbook. Additionally, it is intended that faculty refer to the handbook when mentoring and advising students. The handbook works to promote expectations that are shared by students and faculty.

Questions or suggestions regarding the information provided in this handbook should be directed to MEZCOPH's Office of Student Services and Alumni Affairs at 520-626-2112.

Welcome to the Biostatistics program at MEZCOPH!

GENERAL ACADEMIC AND RESEARCH POLICIES

Student Commitment

Upon entering the graduate program in Biostatistics, students are committing themselves to the completion of an applied master's culminating experience or research-based doctoral dissertation that contributes important, original research to the field. This will require the student to become an expert in the subject matter, which takes time. Therefore, students can expect to spend a minimum of 2-3 years working toward the PhD degree (after MS completion). MS students should expect to spend 2 years working toward their degree. This time span varies based on a number of factors, but students should not plan to graduate any sooner.

During graduate studies, students learn to work both independently and with faculty mentors. Good students tend to have the following traits:

1. Excitement for learning,
2. Self-motivation expressed as an effective written plan or timeline to degree,
3. Initiates contact, by making scheduled appointments,
4. Clarifies needs prior to visiting the mentor/comes prepared,
5. Ability to listen to advice and feedback and use these in a positive manner,
6. Respect for the mentor (they have been down this road, too!),
7. Willing to think independently and take responsibility for the learning experience, &
8. Goal-oriented.

One of the hallmarks of a student who is ready to launch their independent research effort is the ability to effectively solve problems and perform independently. A demonstration of initiative and intellectual curiosity is expected and encouraged in graduate students. Students should attempt to find answers independently using all available resources. The faculty will recognize this academic maturity, and the student will have taken another step toward career independence.

Faculty Commitment

Faculty members are dedicated to ensuring that individuals develop from a "student" to a MS or PhD level "investigator" during the course of graduate studies. The faculty have many responsibilities including: teaching classes, guiding (and checking) research, providing collaborative statistical support, serving on local and national review committees, and performing service to MEZCOPH and the University of Arizona. Faculty will treat students with respect and expect the same in return.

A good mentor tends to have the following traits:

1. Time to dedicate to mentoring,
2. Ability to facilitate problem solving without solving the problem for the student,
3. Experience and ability to provide opportunities for the student's career advancement,

4. Encourages the student to identify the student's own professional path,
5. Excellent communication skills,
6. Advertises the student's work with full attribution,
7. Commits to plan work-load management with the student, and
8. Supports the student's academic career.

Advising

Upon admission to the program, a Faculty Advisor is appointed for each incoming student to assist in the initial development of the study plan. We encourage students to recognize the benefit of frequent communication with the Faculty Advisor. As a graduate student, it is the student's responsibility to initiate these meetings. If you cannot meet with this appointed Faculty Advisor, please contact the Biostatistics Program Director; the Director can work with you to identify an eligible advisor that fits your interests and career goals. If the student wishes to change Faculty Advisors, the student should follow the process outlined in the MEZCOPH Notification of Advisor/Mentor Change form, found on the [MEZCOPH Student Hub](#), and submit it to the Manager of MS and Doctoral Programs in the Office of Student Services and Alumni Affairs.

During the first semester in the Biostatistics program, students are encouraged to acquaint themselves with Biostatistics faculty members and their research interests. By doing this, the student will be able to select a faculty person appropriate for each stage of the student's graduate career. As the student advances through the program, and more precisely defines a direction, the student may ask a different faculty member to serve as Committee Chair, Thesis or Dissertation Research Director.

The list of Biostatistics faculty and their research profile can be found on the MEZCOPH website. Students should visit the faculty directory at the beginning of each academic year.

The responsibilities and roles for faculty in the Biostatistics program are listed below:

Faculty Advisor: Serves as the student's initial academic advisor. This person may also become the student's Chair, Thesis or Dissertation Research Director if an appropriate relationship exists between the student's topic and the Faculty Advisor's area of interest. The student and Faculty Advisor plan the course work for the degree program with final approval from the Graduate Committee. A Faculty Advisor must be a primary faculty member within the Biostatistics program.

Graduate Committee Chair: Is a primary or joint Biostatistics faculty member who meets the Graduate College requirements. This person is usually a full or associate professor and must be a Graduate Faculty. This person's responsibility is to assure that the student meets the requirements of the Biostatistics program and the University. For PhD students, the Chair also oversees the comprehensive examination and dissertation defense. Typically, the Thesis or Dissertation Research Director and the Graduate

Committee Chair will be the same person, but this is not required, and sometimes is not allowed. For example, if the Thesis or Dissertation Research Director does not have Graduate Faculty status, then another Biostatistics faculty member must be identified to serve as the Chair of the Graduate Committee.

Thesis or Dissertation Research Director: Is a primary or joint faculty member within the Biostatistics program who has agreed to direct the student in the completion of the thesis/dissertation requirements. This person will work closely with the student during the research and writing of the thesis/dissertation. This person is typically, but not necessarily, the same person as the Committee Chair. For instance, the Dissertation Director may have a primary appointment in Biostatistics but not have the appropriate Graduate Faculty status to serve as Chair.

Mentor(s): Can be any faculty member who mentors the student regarding scientific or professional development. The student is responsible for seeking out mentors and developing those relationships. This person may also be the Faculty Advisor or become a Committee Chair, Thesis or Dissertation Research Director if an appropriate relationship exists between the student's research topic and the faculty's areas of interest.

Additionally, the Manager of MS & Doctoral Programs is the student's point of contact in the Office of Student Services and Alumni Affairs. The manager conveys MEZCOPH and Graduate College policies and procedures to students, receives student paperwork for processing with the College and Graduate College, and coordinates MS and doctoral program activities with the Program Directors and the Assistant Dean of Student and Alumni Affairs.

Keep in mind that completion of all degree requirements and paperwork is ultimately the responsibility of the student seeking the degree.

Composition of Graduate Committees for Biostatistics Students

There are several types of Graduate Committees that serve different advisory and educational functions for the students. Students select these graduate committees to maximize mentoring and practical project-related advice. In certain cases, committee membership can be changed by the student at any time until the committee function is underway. For instance, the Comprehensive Examination Committee can be changed right up until the written exam is started. Once the written exam begins, however, the same committee must be used by that student throughout the entire process of both the written and oral portions of the comprehensive exams. The only exceptions include death of a committee member or departure from the University.

PhD Committees: Most PhD students have at least two committees during the course of their studies:

- (1) An initial advisory Graduate Committee that, with some potential changes, becomes the [Comprehensive Examination Committee](#), and

- (2) The [Dissertation Committee](#) (Note: see the hyperlinks for Graduate College policy regarding committee composition.)

After passing the Qualifying Exam, the student selects Graduate Committee members in consultation with the Faculty Advisor. The roles of this committee are to advise the student, help plan and approve the Plan of Study, and evaluate the student's progress during all phases of the student's training. This Graduate Committee can serve as both the Comprehensive Examination Committee and the Dissertation Committee. The Comprehensive Examination and Dissertation Committees must be approved by the Biostatistics faculty and by the Graduate College.

After consulting with the Faculty Advisor, the student is responsible for inviting faculty members to serve on the Graduate Committee. This Graduate Committee consists of at least three faculty members from the major field of study and at least one faculty member representing each of the minor fields. The number of minor faculty members is determined by the requirements of the selected minor. The Graduate Committee Chair must be a primary or joint Biostatistics program faculty who meets all [Graduate College requirements](#). At least one of the other two committee members representing the major must be from the primary Biostatistics faculty. The third member can be from the primary or joint Biostatistics faculty, or an outside member approved by the Biostatistics program faculty. Briefly:

BIOS PhD Comprehensive Exam Committees:

- Minimum 3 members representing the major, 1 representing the minor (Grad College requirement)
- 3 of 4 members must have Graduate Faculty status*
- Chair is primary or joint BIOS faculty with Graduate Faculty status*
- 1 other major member must be primary BIOS faculty.
- Third major member may be primary or joint BIOS faculty or approved by BIOS faculty.

BIOS PhD Dissertation Committees:

- Minimum 3 members representing the major (Grad College requirement)
- Minor Advisor may or may not serve depending upon policy of minor program.
- 3 members must have Graduate Faculty status*
- Chair is primary or joint BIOS faculty with Graduate Faculty status*
- 1 other major member must be primary BIOS faculty.
- Third major member may be primary or joint BIOS faculty or approved by BIOS faculty.

*Please see the [Graduate Faculty Status](#) section below for a definition.

At least three months before sitting for the written portion of the comprehensive examination, the student must complete the MEZCOPH Declaration of Committee Membership form (found

on the [MEZCOPH Student HUB](#)) with all committee members' signatures and file the form with the Manager of MS and Doctoral Programs. In addition, the student must notify the Graduate College of the committee membership by filing a Comprehensive Exam Committee Appointment Form (found on the [UAccess Student Center](#) under the GradPath option). (Please note that these forms are separate from the Dissertation Committee Appointment Form, which the Graduate College requires after the student has passed comprehensive exams.)

MS Committee: After selection of a topic for the culminating experience, the student selects faculty members for a Master's Committee, in consultation with the Faculty Advisor. The Committee Chair must be a primary or joint Biostatistics program faculty member. There must be at least two other members on the committee who are either primary or joint Biostatistics faculty. If the student and Chair believe an outside member can contribute to the student's project, the person can serve once approved by the Biostatistics Program Director and the Graduate College. Briefly:

BIOS MS Committee:

- Minimum 3 members, two have Graduate Faculty status*
- The Chair must be primary or joint BIOS faculty.
- 2 other members must be primary or joint BIOS faculty.
- Additional, outside members may serve if approved by BIOS faculty and Grad College

*Please see the [Graduate Faculty Status](#) section below for a definition.

Each Master's Committee must be approved by the Biostatistics Program Director and the Graduate College. The student must complete the MEZCOPH Declaration of Committee Membership form (found on the [MEZCOPH Student Hub](#)) with all committee members' signatures and file the form with the Manager of MS and Doctoral Programs. The student then gets electronic approval by completing the MS Committee Appointment Form found on the [UAccess Student Center](#) under the GradPath option. Information about the Graduate College policy can be found [here](#).

Graduate Faculty Status

Per the [Graduate College's policy](#), "Members of the graduate faculty have special privileges and obligations within graduate education, especially related to thesis, dissertation and other culminating capstone project committee roles and membership, as well as graduate student advising and mentorship. Graduate faculty membership is automatically granted to tenured and tenure-track faculty and continuing-status and eligible academic professionals with faculty titles and may be granted selectively to career track faculty or others. The Graduate College, in coordination with the academic colleges and programs, oversees the criteria, processes, and procedures related to the granting, review, and in rare cases of unacceptable performance, the remediation or removal of graduate faculty membership to ensure the quality of graduate programs and delivery of graduate education."

Faculty members who have been granted Graduate Faculty status will be listed as such in the [university's public phonebook](#).

Use of Artificial Intelligence (AI)

The policies within specific course syllabi govern the use of AI in your classes. Students are expected to review and understand the policies contained in all their syllabi. Any questions regarding the use of AI for course work should therefore be directed to the course instructor.

The use of Artificial Intelligence in the development of responses to qualifying exam questions, comprehensive exam questions, or the preparation of a thesis prospectus, dissertation proposal, capstone project, thesis or dissertation is strictly prohibited. The use of AI without proper citation is plagiarism and a violation of the Student Code of Conduct.

Human Subjects Protection Program Information

The Human Subjects Protection Program (**HSPP**), as the administrative and regulatory support program to the University of Arizona's Institutional Review Board (**IRB**), works in collaboration with the research community to maintain an ethical and compliant research program. The IRB committees are the independent review committees charged with the protection of human research subjects. An IRB must review all research and related activities involving human subjects conducted at the University of Arizona (UA) or by in which the University is a responsible participant.

The purpose of IRB review is to assure that appropriate steps are taken to ensure that the rights and welfare of humans participating in the research are protected, that risks to the participants are minimized and are reasonable in relation to anticipated benefits, and that the Principal Investigator (PI) is qualified to conduct the study. IRBs review research protocols and related materials (e.g., informed consent documents). In accordance with federal regulations, an IRB has the authority to approve, require modifications in, or disapprove research.

All studies involving human subjects or creation, or use of Protected Health Information (PHI) must be reviewed and approved in advance by the UA HSPP/IRB Office, in the Office of Research, Innovation & Impact (RII), under the Senior Vice President for Research (VPR), to determine if the research adheres to federal regulations. It is against Federal regulations to conduct research involving human subjects without or prior to IRB approval.

The HSPP has launched a portal submission system, **eIRB**, which is designed to make submitting human research protocols easier and faster. IRB Protocol Application forms should always be downloaded directly from the IRB-[HSPP Forms page](#), as they are in constant revision. The eIRB portal can be accessed through UAccess at the following link: <https://uaccess.arizona.edu/>. The student/(PI) will need their UA NetID and password to gain access to eIRB. There is more information regarding eIRB and the link to access the site at the following IRB link, (which requires a UA NetID and PW) : <https://research.arizona.edu/compliance/human-subjects-protection-program/eirb-information>.

COPH IRB Training on D2L

The MEZCOPH Research Office has created the “**COPH IRB Training**” on D2L, which is a self-paced training and is recommended for all MEZCOPH students and faculty. The purpose of the training is to assist students and their mentors in determining whether a project would be considered human research or not. The training also provides supplemental guidance, documentation on HIPAA and data use agreements, as well as the COPH internal and IRB submission and approval processes. Please log in to: [D2L](#) then select “Discover” in the top bar and then search for “COPH IRB Training.” Then select the “Enroll in Course” button.

MEZCOPH Human Subjects Approval Process (Doctoral Dissertation/Master’s Thesis Projects)

Human Subjects Training and Certification (CITI)

All doctoral students must obtain Human Subjects training and certification, (via the CITI Program), before beginning their dissertation project, regardless of whether they are completing human research.

CITI training and information can be found on the HSPP-IRB website at the following link: <https://research.arizona.edu/compliance/human-subjects-protection-program/training-requirements>. There are several courses to choose from, but the two “main” courses are: Social & Behavioral Research or Biomedical Research. Each student should choose the most appropriate course for their dissertation project, in consultation with their Committee Chair/Dissertation Director. Choose the course based on the type of activities you plan to conduct. (Note that other supplemental courses may be required depending on the project activities.)

MEZCOPH Human Subjects Research – Submission and Approval Process

MEZCOPH students must initially submit their IRB Protocol application, and required supplemental documentation, to their Dissertation Director/Chair (“**Advisor**” for IRB purposes), to allow them to review and approve of the application and supplemental materials (as needed). It’s imperative to work with the Dissertation Director and site preceptor, (if applicable), upon answering the questions on the IRB application, to ensure that enough information has been provided regarding the project protocol. Once approved, the Dissertation Director (Advisor), must then sign and complete the “**Advisor/Co-PI Attestation Form**.” Please note that the Committee Chair/Dissertation Director (Advisor), should also provide the review and approval for the required, “**Scientific/Scholarly Review Attestation for Human Subjects Research**.” The completed *Advisor* and *Scientific Review Attestation* Forms are a part of the IRB required supplemental documentation. (The Attestation forms must be uploaded into eIRB as part of the “Local Site Documents.”)

MEZCOPH **Departmental review** and approval is handled through the **Office of the Associate Dean for Research (ADR)**. In order to obtain the IRB “**Department/Center/Section Review Attestation Form**,” all IRB application forms, supplemental documentation, (as applicable), the *Advisor Attestation*, and *Scientific Review Attestation*, must be submitted to the COPH Research (ADR) Office/(Cc Suzanna Trejo-Robinson), (via email: COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu), for internal pre-review, prior to submitting the IRB application in eIRB. Suzanna will review the submission for completeness. Once the application is complete, she will provide the **Department/Center/Section Review Attestation Form**, on behalf of the Associate Dean for Research (ADR) and will send it back to the PI/student. The **Advisor/Co-PI Attestation Form**, **Scientific Review Attestation** and the **Department Attestation Form** are all required for the eIRB submission. If the required approvals are not uploaded in eIRB, along with the application and other required documents, the submission will not be reviewed.

If clarification is needed on whether the project constitutes human research, (or for internal MEZCOPH procedure questions), Dissertation Directors and/or students should contact the MEZCOPH Research Office (ADR)/Suzanna Trejo-Robinson via: (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu), early in their planning process. Students and Advisors can also contact the UA HSPP-IRB Office directly with their questions, (not related to the COPH internal process), should they choose to do so. In this case, they should email the VPR-IRB Departmental account at: vpr-irb@arizona.edu. Students will also find that the IRB web pages titled, “**Getting Started, FAQs and Top 10 Tips**,” are extremely helpful and informative: <https://research.arizona.edu/compliance/human-subjects-protection-program/getting-started>.

Human Subjects Forms for Doctoral Dissertation/Master’s Thesis Projects

Completion of the Appropriate HSPP-IRB Forms

Each dissertation project must be reviewed by the Dissertation Director to establish whether the project will require HSPP/IRB review or not, and if so, determine which IRB form to submit for approval. If the project requires a full review by one of the IRB Review Committees, additional time must be built into the dissertation project timeline. There are a couple of protocol form options, for seeking IRB approval of the doctoral research project, and these forms are described below and can be found at the following IRB link: <https://research.arizona.edu/compliance/human-subjects-protection-program/HSPP-form/forms-index>

****NOTE:** It is important to begin this process as soon as you have confirmed the project activities with the dissertation committee. This process can take some time and it is the responsibility of the student to complete/submit the document(s) early to meet deadlines. ******

When You KNOW the Project is Human Subjects Research:

Complete the appropriate IRB Protocol/Application Document

IRB Protocol for Human Subjects Research – utilized for a study involving prospective collection of data from or interaction with human subjects.

IRB Protocol for Human Subjects Research Retrospective Data Review – utilized for a retrospective data review study involving existing records review, data abstraction, and analysis.

IRB Protocol for Projects Using External IRBs – utilized for requests that IRB oversight be ceded to a non-University of Arizona IRB, (i.e., an agency or university outside of a UA department – in other words Ceding IRB review to another institution). *Please note that the student/PI must be added to the external institution/agency’s IRB protocol. *

eIRB Modification (for a **UA-IRB Approved Protocol** for Human Research) – If a student will be added to a current UA-IRB approved project, the PI of the approved study will need to create and submit a Modification, (in eIRB: via the eIRB portal Smart Form), to inform the IRB of changes to study team members. A copy of the acknowledgement and Modification approval, from the IRB, that the student has been added, and email confirmation from the study PI, (that the student has been added to the project), **MUST** be included in the final dissertation paperwork submitted to the Manager of MS and Doctoral Programs and to Suzanna Trejo-Robinson in the MEZCOPH Research Office. (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu).

Other Approvals Required

Depending on the research activities, there may be other required approvals that will need to be obtained, prior to submission in eIRB, please see “Step 3: Obtain Additional Approvals” at the following IRB link: <https://research.arizona.edu/compliance/human-subjects-protection-program/getting-started>

Students must work closely with their Dissertation Director and Suzanna Trejo-Robinson in the MEZCOPH Research (ADR) Office to ensure the correct IRB forms and approvals are completed and submitted in eIRB, to begin the project by the intended start date.

As previously stated, submission of the IRB Protocol Application, including supplemental documentation and required approvals, need to be sent to the ADR Office/Suzanna Trejo-Robinson at: (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu). The student should also copy their Dissertation Director and the Manager of MS and Doctoral Programs, on the ADR submission email.

Review/approval time, first by Suzanna and then the UA IRB, will vary but **can sometimes take up to 4 weeks or more to complete**. Use the desired research start date/deadline and plan backwards to submit the IRB application, with enough time to meet the deadline.

UA HSPP-IRB application documents can be found under “IRB Protocol Forms” at: <https://research.arizona.edu/compliance/human-subjects-protection-program/HSPP-form/forms-index>

Submit a Copy of the IRB Approval with Project Paperwork

A copy of the final approval letter, from the UA-IRB, *must* be submitted to the Manager of MS and Doctoral Programs as part of the final paperwork packet. If the Manager of MS and Doctoral Programs does not have proof of UA IRB approval, the student may not start their project.

When You are UNSURE if the Project is Human Subjects Research:

Complete the *IRB Protocol for Determination of Human Research* (DOHR) Form

Students should complete the IRB Protocol for Determination of Human Research (DOHR) form, with the assistance of their Dissertation Director, and site preceptor/PI (if applicable), based on the specifics of the (student's) project activities and projected outcomes. Completing the DOHR form should help assess and clarify whether the (student's) project activities will be considered "human research" or not and if the project will require additional review through the UA IRB. (If a student is assisting/observing/interning as part of a larger agency project, it is imperative that the student only include details of their specific role(s) and intended projected outcomes, when completing the DOHR form.)

Please review the [IRB Guidance](#) titled, "What is Human Research," which provides information on activities that are (usually) deemed to not be human research:

<https://research.arizona.edu/sites/default/files/What%20is%20Human%20Research%20v2023-05.pdf>. Please also review the "Getting Started" IRB page at the following link:

<https://research.arizona.edu/compliance/human-subjects-protection-program/getting-started>.

The DOHR and all IRB Protocol Forms can be found at: [HSPP Forms for Submission](#).

Approvals Required and the Submission Process (Internal and eIRB)

Email the completed IRB form to your Dissertation Director for review and approval.

Once approved, the Committee Chair/Dissertation Director (Advisor), must sign the "Advisor/Co-PI Attestation Form" as well as the "Scientific/Scholarly Review Attestation for Human Subjects Research" form, (for all Human Research Protocols, not for the DOHR form).

*The Dissertation Director can approve for both the "Advisor" and the "Scientific Reviewer," for student protocols. * These forms are required to be uploaded into the eIRB portal, along with the "Department Attestation" Approval, prior to eIRB submission. *Department approval comes from the COPH ADR Office. (*The DOHR form only requires the Advisor Attestation.)

COPH Department Attestation Approval

Once you have received the **Advisor and Scientific Review Attestations**, from the Dissertation Director, **submit the following: (1) the completed protocol/application forms, (2) supplemental documents (as required), (3) signed (Advisor & Scientific Review) Attestation forms and (4) a PDF of the eIRB submission, (as applicable and only IF the student has already started the eIRB process)**, to the MEZCOPH ADR/Research Office and Suzanna Trejo-Robinson: (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu).

Students MUST copy their Dissertation Director and the Manager of MS and Doctoral Programs on this e-mail. Suzanna will inform the student of any needed revisions.

If the project activities are clearly not human research activities, Suzanna can (sometimes) approve the DOHR form internally, (but only when IRB review is not required). If this is the case, Suzanna will send an approval email, confirming the form/project has been internally approved. (This only applies to the Determination of Human Research (DOHR) applications.) If it's not clear, or if the student PI requires an official IRB approval letter, (if requested by journals, sites, sponsors, etc.), the DOHR form should be submitted directly, through eIRB, for UA-IRB review.

*(Students should NOT submit the IRB Protocol in eIRB until all required Attestation form approvals and final revisions are completed.)

Please review the IRB's "Top 10 Tips" page for common pitfalls to avoid when completing study documents: <https://research.arizona.edu/compliance/human-subjects-protection-program/getting-started/top-10-tips>.

HSPP-IRB Submission through the eIRB Portal

Once all required applicable HSPP forms and study documents are completed, and all applicable attestation approvals have been obtained, the student PI will log into the eIRB portal, to begin the submission, by completing the eIRB smart form and uploading all required documentation. Once the form and uploads are complete, the student will submit the study protocol in the eIRB portal.

Notification of Approval

If IRB determines that the protocol/project is NOT human research, and/or they give a final approval, that the human subject's application has been approved, the student must download the letter from the eIRB portal and then send the official approval letter, from the UA IRB, to (1) the Dissertation Director, (2) the Manager of MS and Doctoral Programs, and (3) Suzanna Trejo-Robinson (COPH-Research@arizona.edu). Include a copy of this confirmation with your final project paperwork.

Notes About Common Types of Projects

Program evaluations and/or **quality improvement** projects generally are not considered to be Human Subjects' Research and usually do NOT require a full IRB application, so long as the results are not intended to be generalizable. Please review the IRB Guidance, "[What is Human Research](#)." If they are still unsure, the student/PI, along with their Committee Chair/Dissertation Director (Advisor), can complete the ***IRB Protocol for Determination of Human Research (DOHR)*** form and if necessary, submit to the Research Office, (include the signed Advisor Attestation approval), to assess and evaluate the student's activities. (*Please include in the DOHR form Summary, as part of the project/protocol descriptions: the organization, the program or process being evaluated within the organization, and how the

project activities will bring about prompt improvements.) (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu).

De-identified data, for a secondary data analysis research project, where the PI/advisor/study team does not nor will not have access to the original identifiers, usually will NOT be considered human subjects' research and an additional IRB application generally will NOT be required. Please review the IRB Guidance, "[Record Reviews](#)." If they are still unsure, the student/PI, along with their Committee Chair/Dissertation Director (Advisor), can complete the **DOHR** form and if necessary, submit to the Research Office, (include the signed Advisor Attestation approval), in order to assess the student's activities.

*NOTE: It needs to be clearly stated, (in the DOHR form), from where the data is coming from and who might have access to the identifiers. Please state, in the DOHR **Summary** section descriptions, that the data will be de-identified, (if applicable). **Please include (1)** a confirmation email, from the preceptor and/or PI, that you will only receive de-identified data and **(2)** a list of the data elements will be required to accompany the application.

In general, activities involving **quality improvement/ program evaluations**, case reports and oral histories, to name a few, usually do NOT constitute Human Research (so long as the intent is **not** to generalize the results). The student will have to complete the DOHR form, in consultation with the Committee Chair/Dissertation Director, to make that assessment.

More information and **IRB Guidance** on these types of activities and procedures can be found at: [Guidance for Researchers](#).

For clarification or questions, contact the MEZCOPH Research Office/Suzanna Trejo-Robinson via email at: (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu) early in the planning process. You can also contact the HSPP-IRB office directly using their VPR listserv email address at: vpr-irb@arizona.edu. (*MEZCOPH submission protocol questions should be directed to the MEZCOPH Research Office, not the IRB Office.)

Committee Chair/Dissertation Director (Advisor) Review & Approval Process:

For all IRB Protocol Forms, the student should work with their Committee Chair/Dissertation Director (Advisor), (and research PI and/or preceptor as indicated), to complete the IRB documents, (regarding the student's activities in the project), and then get the advisor's approval via the "*Advisor Attestation Form*." As a reminder, the Dissertation Director can and should approve as both the *Advisor* and as the *Scientific Reviewer* of the project.

MEZCOPH Review & Approval Process:

The IRB protocol/application, (and supplemental documentation as required), is forwarded via email to the MEZCOPH Research Office: (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu), for a **preliminary review**. (**Do not submit in eIRB without MEZCOPH

ADR Department review and approval.) Suzanna Trejo-Robinson will conduct a pre-review of the application and if complete and if necessary, the application will be routed to the:

MEZCOPH Scientific Review Committee (as needed) for review and approval (unless approved by the Committee Chair/Dissertation Director (Advisor). **Please note that these two steps can take 2-4 weeks, depending on projects already in the queue. Once the Scientific Review Attestation form is signed, it is then sent back to the Research Office for Review and approval by the Associate Dean for Research (ADR) for Departmental Review and approval. Finally, the ADR/Research Office, (Suzanna Trejo-Robinson), will provide the student/PI with the signed "Department Attestation" form, to complete the required eIRB submission documents.

HSP-IRB Office Review & Approval Process

The **HSP-IRB Office** will provide the final review and approval. Once the application is submitted in the eIRB portal, the IRB Office will communicate directly with the PI of the project. The IRB Office will send official approval notification directly to the PI, (through the eIRB portal), to activate the research. Please review the "[Submission & Approval Process Overview](#)."

Planning Ahead for Proper Approval

It is the student's responsibility to plan ahead, seek the necessary IRB paperwork approvals, and complete the associated documents. The student must plan far enough in advance, to complete the IRB approval process, prior to the desired research start date. Although there is no set timeframe for IRB approval, the student should plan approximately 2-3 weeks at the MEZCOPH level, (depending on queue), and an additional 2-4 weeks, (depending on queue), once received by the UA HSP-IRB Office. Questions about the internal MEZCOPH process should be discussed with Suzanna Trejo-Robinson in the MEZCOPH Research Office at: (COPH-Research@arizona.edu and please Cc: suzanna@arizona.edu) or via phone: 626-8315. You can also send HSP-IRB inquiries, (about project activities and questions), directly to the IRB listserv at: VPR-IRB@email.arizona.edu.

Research Project Closure Forms

Investigators/students are responsible for concluding all Human Research activities as soon as possible, after the research project is completed or no longer involves human research activities. Please see the IRB Guidance, "[Concluding Human Research](#)." If the project was approved using one of the ***IRB Protocol for Human Subjects Research forms***, the research protocol MUST be officially concluded OR transferred to another eligible PI, (if the study will continue with a different PI). This process is the responsibility of the individual graduate student.

IRB Continuing Review (in eIRB) for Renewal/Closure for Human Research:

The Continuing Review eIRB Smart Form is completed in the eIRB portal, in order to inform the IRB Office that the study is completed, a decision has been made to not conduct the study, or if the study will be renewed for another year. Projects not concluded, after the expiration date of the project, will enter a "**Lapsed**" state and can be re-opened with a Continuing Review

submission in eIRB; however, no human research activities can take place, unless approved by the IRB Office. Please review the IRB Guidance, "[Continuing Review of Human Research](#)."

All IRB Guidance regarding **Continuing Review** of Human Research, **Concluding** Human Research, **Modifying** Approved Research and **PI Eligibility**, etc. can be found at: [Guidance for Researchers](#).

Student Services Requirements

Students should turn in the following documents to the Manager of MS and Doctoral Programs in the Office of Student Services and Alumni Affairs:

All students:

- CITI Training Completion report
- Forwarded electronic copy of the approved **Determination** form (if needed)

Select Students Engaged in Human Subjects Research

Forwarded electronic copy of the approved ***IRB Protocol for Human Subjects Research*** form, (OR one of the three human subjects research protocol forms), supplemental documents and the IRB Approval letter **OR**

Forwarded electronic copy of the approved eIRB **Modification Approval**, which should list the newly added project member (student), and/or an email from the PI or project coordinator, confirming the student was added to the UA IRB-approved project.

All doctoral students are required to obtain an RCR certificate. This can be done in conjunction with an ethics course or independently. <https://research.arizona.edu/research-compliance/rcr/workshops>

THE PhD IN BIOSTATISTICS PROGRAM

The PhD in Biostatistics emphasizes the foundations of statistical reasoning and requires its graduates to complete rigorous training in applied probability, mathematical statistics and biostatistical methodology and analysis. This program prepares students who have demonstrated excellence in mathematics and the sciences to become research biostatisticians in academia, industry, or government. The PhD program in Biostatistics is designed for individuals having strong quantitative skills with background or interest in the biological, medical, or health sciences, and potential to become effective researchers in biostatistics. A competitive applicant to the PhD in Biostatistics will have a strong quantitative background; at least three semesters of college-level calculus through multivariable/vector calculus and one semester of linear algebra are required. In addition, documented experience with a computer programming language (C/C++, Fortran, Java, Python, Matlab, R or equivalent) is strongly recommended. To the extent possible, the curriculum of each student will be tailored to the student's background and interests.

For complete information about University of Arizona Graduate College policies for PhD students, please see the [Graduate College website](#).

New Student Activities

All new students are expected to participate in the Doctoral and MS Student Orientation, scheduled in August prior to the beginning of fall coursework.

All new doctoral students must enroll in the one-unit course HPS 609, Evaluating Public Health Literature in their first semester. This one credit course is team-taught and designed to enhance the student's critical thinking skills, especially as related to public health research.

Competencies

A set of [competencies](#) specific to the PhD Biostatistics degree have been developed which will allow students and the faculty to determine progress. It is recommended that this list be used by students to help assess training needs and progress.

Program Steps and Milestones to Degree

Typical time to completion: 3-5 years (2-3 years for coursework, 1-2 years for dissertation work) for full-time students. 5-8 years for part-time students.

Average time to completion: 7.70 years (including part-time students)

Program Steps to Completion (Full-time student timeline):

- Attend mandatory new student orientation.
- First year is devoted to course work.
- Work with Faculty Advisor to develop a tentative Plan of Study

- Each Spring, complete an Annual Progress Report with Faculty Advisor
- End of first Spring, take and pass the Qualifying Exam
- Second year is devoted to course work and forming Comprehensive Exam Committee
- Formalize Plan of Study by end of second year
- Second/third year formalize Committee Chair and Comprehensive Exam Committee
- Develop a Dissertation Research Proposal and gain Committee approval.
- If necessary, begin the process for Human Subjects approval for dissertation.
- Take and pass Comprehensive Exams (written and oral) within one year of course work completion
- Form and formalize Dissertation Committee
- Third/fourth year, research, develop and write dissertation.
- Fourth/fifth year, successfully defend dissertation and finalize revisions.

Progress of the Program Steps and Milestones to Degree is assessed at the time of students' annual progress report in conjunction with their Faculty Advisor and Program Faculty. When it is determined that a student is not making timely progress, the student and Faculty Advisor will meet to create a Retention Plan using the MEZCOPH form, "Graduate Student Retention Plan for Failing to Make Satisfactory Academic Progress."

Degree Requirements

The PhD course requirements are determined by the Biostatistics program. Please see the Academic Curriculum Guide for the year you were admitted to your current program found on [the MEZCOPH Student Hub](#). The overall course of study will be developed by the student and the Faculty Advisor and approved by the student's Graduate Committee and Biostatistics Program Director.

Doctoral Plan of Study

In collaboration with the Faculty Advisor, each student is responsible for developing a Doctoral Plan of Study during the first year in residence. The Plan of Study should be held in the student's file as an advising tool, until the second to the last semester of coursework, at which point it should be formalized with required electronic approvals. The Plan of Study form is completed on [UAccess Student Center](#), under the GradPath option.

The Plan of Study identifies (1) courses the student intends to transfer from other institutions; (2) courses already completed at the University of Arizona which the student intends to apply toward the graduate degree; and (3) additional coursework to be completed to fulfill degree requirements, including 18 units of dissertation. The Plan of Study must have the approval of the Faculty Advisor, the Biostatistics Program Director, and the Minor Faculty Advisor and Chair of the minor program or department. The Plan of Study is usually the basis for the initial Graduate Committee meeting. A copy of the Plan of Study, either in draft or final form depending on the progress, should also be attached to each Annual Progress Report. Once a student has completed about 85% of the major coursework and all, or almost all, of the minor course work as specified in the Plan of Study, completion of the dissertation research

proposal and comprehensive exam begins. For students who began the program in Fall 2016 or thereafter, comprehensive exams must be successfully completed within one year of the completion of all course requirements.

Prior to scheduling their oral comprehensive examination, the student is required to have an approved Plan of Study on file with the Graduate College. As stated under the GradPath description (see “GradPath” section above), it is the student’s responsibility to monitor the faculty members’ and Graduate College’s approval of all forms submitted through GradPath. Students can monitor the approvals by tracking the approval path at the bottom of any form in GradPath.

Transfer of Credits from a Master’s Program to the Doctoral Plan of Study

Graduate credit earned at other approved institutions may be counted toward the requirements of the PhD degree, if accepted by the student’s Graduate Committee and approved by the Biostatistics program.

Per Graduate College [policy](#), transfer credit must have been earned at the University of Arizona or other accredited institution and may be considered if the grade earned was A or B. Grades of transfer work will not be used in computing the student's UA grade-point average. Per the Biostatistics Program’s policy, the coursework being considered should be less than 10 years old at the time the student starts the program.

Students who enter the Biostatistics PhD program after completion of an MPH/MS/MA may use 23 units of Biostatistics related courses towards the Doctorate in Biostatistics (PhD) major requirements. Thus, students with an MPH/MS/MA must complete a minimum of 22 additional units of course work, 2 units of seminar, 9 units or more in a minor subject, and 18 dissertation units. They will be allowed to substitute more advanced courses for any required courses already completed. A maximum of 30 previously earned units, inclusive of the doctoral minor requirements, may be applied to the official doctoral plan of study.

The student should apply to transfer course credit during the first semester of the PhD program. The student’s first step is to make an appointment with their Faculty Advisor to have the transfer request reviewed. The student should bring a transcript highlighting the classes to be transferred and a syllabus for each class. The student and Faculty Advisor generate a proposal of transfer that will be reviewed by the student’s Graduate Committee for incorporation (or not) in the Plan of Study. This transfer of credits requires approval by the faculty teaching the course to be substituted and the Biostatistics Program Director.

Two forms must be completed in addition to the ultimate incorporation on the Plan of Study: The MEZCOPH Course Substitution form (see below for information about this form) is used to evaluate the course for content and appropriateness within the Plan of Study. For approved transfer coursework taken at an accredited institution outside of the University of Arizona, the student must also complete the Graduate College’s Transfer Credit form (found on the [UAccess](#)

[Student Center](#) under the GradPath option). The purpose of the Graduate College evaluation is to verify that the requested transfer credit is graduate level and is from an approved and accredited institution. The Graduate College defers to the Biostatistics program as to whether the courses are actually suitable for substitution or elective credit.

The final decision for transfer of credits for non-University of Arizona courses, whether used as a substitution for a required course or as an elective, is made when the Plan of Study is submitted to the Graduate College.

Course Substitutions

If a student has already completed a course similar to a program required course, then the student can apply to have the earlier course substituted for the required course. A course substitution can only be approved by the university professor/instructor of the required course. The course professor/instructor will review documentation from the student (i.e., course syllabus) for comparability to the required course and the student's grade. If approved for substitution, the course professor/instructor signs the Course Substitution Form that the student provides (found on the [MEZCOPH Student Hub](#)). The Faculty Advisor must concur, and sign on the appropriate line. The student then submits the form to the Manager of MS and Doctoral Programs. The substituted course fulfills the content requirement, but the student must take another course of equivalent credit-hours toward the degree requirement, unless the course is approved for transfer credits.

Independent Study Registration Policy

A student who wishes to enroll in independent study (BIOS 599/699) must complete the Independent Study Registration form found on the [MEZCOPH Student Hub](#) before being registered for the units. The form serves to establish the scope and focus of the independent, provide a permanent record for the student's academic file, and facilitate the assignment of final grades at the end of each semester. After the student has completed the form and received approval from the faculty member serving as Instructor (person responsible for overseeing the student's work and assigning credit) and Faculty Advisor, the student submits the signed document to the Manager of MS & Doctoral Programs who registers the student for the units.

Research and Dissertation Registration Policy

A student who wishes to enroll in research units (BIOS 900) or dissertation units (BIOS 920) and have met all program requirements to do so (see "Dissertation Unit Enrollment" section below), must complete the 900-Level Course Registration form found on the [MEZCOPH Student Hub](#) before being registered for the units. The form serves to establish the scope and focus of the work to be completed that term, provide a permanent record for the student's academic file, and facilitate the assignment of final grades at the end of each semester. After the student has completed the form and received approval from the faculty member serving as Research Instructor or Dissertation Director (person responsible for overseeing the student's work and

assigning credit), the student submits the signed document to the Manager of MS & Doctoral Programs who registers the student for the units.

Minors for the PhD Degree

According to Graduate College policy, PhD students must choose at least one supporting minor subject, in addition to the major subject. The selection of a minor subject area is the responsibility of the student, in consultation with their Faculty Advisor and Graduate Committee Chair. At least one faculty member from the minor serves on the student's Comprehensive Exam Committee, although this number may be increased by the graduate faculty responsible for the oversight of the minor and by the student's Graduate Committee. Typically, a Minor Advisor also serves on the Dissertation Committee but is not strictly required. Declaration of the minor(s) will be made on the Doctoral Plan of Study.

With Faculty Advisor approval, a minor may be selected from any program of study at the University of Arizona that offers a doctoral degree, and the academic requirements for the minor are determined by the selected academic department. The student is responsible for knowing and meeting the requirements of the chosen minor area of study.

It is possible for students to customize a minor area (with committee approval) when no formal minor exists. These "focus-area minors" will be listed on the Plan of Study as a "Multidisciplinary Minor" and not with the specific focus area name. Students interested in this minor option should discuss it with the Faculty Advisor and Graduate Committee Chair before taking the courses that they hope to include. Furthermore, these focus area minors must meet the following criteria and be approved by the Biostatistics program faculty: the proposed minor is not available at the University of Arizona through an official major program, the minor must contain at least 9 credits that would not be taken by the student as part of the major, courses must be chosen from at least two disciplines, and all coursework must be outside the Biostatistics program. In addition, the student needs to identify a Minor Faculty Advisor who has expertise in the focus area. The student may also need to pass or complete a culminating experience as identified by the Minor Faculty Advisor (i.e., examination, research project, or internship).

PhD Qualifying Exam

All PhD students must pass a written PhD Qualifying Exam (commonly referred to as the "QE") during their MS or PhD programs, preferably after their first year of study. The exam is designed to ensure that students have the necessary background to continue with more advanced doctoral level courses. The Biostatistics QE consists of two portions (Theory and Applications) given over four consecutive days. The exam is offered early in summer at a time announced near the beginning of the preceding spring semester.

The material covered on the exam is based on the following courses:

- Theory of Probability (STAT 564/MATH 564)
- Theory of Statistics (STAT 566/MATH 566)

- Biostatistics in Public Health (BIOS 576A)
- Biostatistics for Research (BIOS 576B)

Students must have completed each of these courses with a grade of A or B to be eligible for the exam. Additionally, students are encouraged to consult the following texts as background for the exam content:

- Ross SA (1994). *A First Course in Probability*. Fourth Edition. MacMillan.
- Casella G and Berger RL (2002). *Statistical Inference*. Second edition. Wadsworth & Brooks/Cole.
- Hogg RV, Craig A and McKean JW (2004). *Introduction to Mathematical Statistics*. Prentice Hall.
- Rosner BR (2016). *Fundamentals of Biostatistics*. Eighth Edition. Brooks/Cole.
- Vittinghoff E, Glidden DV, Shiboski SC, McCulloch CE (2012). *Regression Methods in Biostatistics: Linear, Logistic, Survival, and Repeated Measures Models*. Second Edition. Springer.

The exam is administered in two parts over four consecutive days. The first day typically centers on the Theory portion and is closed book (1-page notes allowed). It is administered in-person, extending eight hours. The second-to-fourth days typically center on the Application portion and is a take-home exam for which students will perform statistical analysis on some given dataset(s). Students are permitted to use a hand calculator for the Theory portion and any statistical software for the Application portion.

Students who do not pass the Qualifying Exam may choose to retake the exam the following January. These students are encouraged to meet with their Faculty Advisor and the Biostatistics Program Director to determine appropriate steps to improve their performance. Students who do not pass the Qualifying Exam after two attempts may not continue in the PhD program.

Incoming students can choose to take the exam during the first week of the Fall semester. The incoming students who do not pass the Qualifying Exam still have two more chances to retake and pass the exam.

Residence Requirement

To meet the minimum Graduate College residence requirement, the student must complete a minimum of 12 units of regular grades (A, B or C) taken in residence at the University of Arizona. "In residence" is defined as taking credits offered by the University of Arizona, whether or not they are offered on campus.

Teaching Experience

All Biostatistics PhD students are encouraged to serve as a Graduate Teaching Assistant for at least one biostatistics course. The student arranges this experience with the Biostatistics Program Director. There are limited teaching assistantship opportunities within MEZCOPH. The

student is encouraged to seek other opportunities to gain experience with teaching biostatistics and related fields.

Students serving as Graduate Teaching Assistants are required to participate in the University's Graduate Assistant and Teaching Assistant Orientations (GATO and TATO) at least once, and in the MEZCOPH Teaching Assistant Orientation, facilitated on D2L.

The UA Office of Instruction and Assessment offers a ['Certificate in College Teaching'](#) program that you may be interested in taking advantage of while completing the teaching assistantship assignment.

See "Graduate Teaching Assistantships" section above for additional information.

Dissertation Research Proposal

The dissertation research proposal requires the student to identify a dissertation topic, provide an initial description of the relevant background and preliminary studies, and summarize potential solutions. It is prepared by the student in consultation with the Dissertation Research Director and submitted for review and approval by the Graduate Committee. The entire document is expected to be at least 10 pages but no more than 20 double spaced pages.

The proposed format is as follows:

- Statement of the problem (1 page)
- Background and preliminary studies (up to 15 pages)
- Potential solutions (up to 3 pages)

Per Graduate College policy, after the proposal is approved by the Graduate Committee, the student should send an email (copying the Dissertation Research Director) to the Manager of MS and Doctoral Programs with an electronic copy of the proposal attached. The Manager of MS and Doctoral Programs notifies the Graduate College that this requirement was met. The student should note that the Graduate College needs to be notified of this milestone concurrently with the student's successful passing of the comprehensive exams.

Comprehensive Examination

The comprehensive examination consists of a written and oral portion. Students must pass the written examination before the oral examination takes place. Students are recommended to take both written and oral comprehensive examinations within two consecutive semesters. The student's Graduate Committee requests the student to prepare for a comprehensive examination when approximately 85% of the major course requirements are met including all, or almost all, of minor course work, the student has written and filed an approved dissertation research proposal, and the student is in good academic standing. It is recommended that the comprehensive examination be taken within 3 years from the date of admission to the Biostatistics doctoral program. However, for students who started in Fall 2016 or thereafter, the exam must be successfully completed within one year of the completion of all course requirements. This milestone will be reviewed by the Student Progress Committee for evidence

of academic progress. Students who do not make this deadline will meet with their Faculty Advisor to create a Retention Plan using the MEZCOPH form, “Graduate Student Retention Plan for Failing to Make Satisfactory Academic Progress.”

Written Portion of Comprehensive Examination: The written portion of the comprehensive examination must occur prior to the oral examination. The dissertation research proposal must be written and approved prior to sitting for the written comprehensive exam.

Comprehensive exam questions will be written specifically for the student and will come from Comprehensive Examination Committee members representing the Biostatistics major and the student’s minor, coordinated by the student’s Graduate Committee Chair. In addition to questions related to the dissertation research proposal and student coursework, the student may be expected to perform an appropriate statistical analysis based on a provided data set and scientific questions. The written exam will be graded (pass/fail) as a whole, with responses to all questions reviewed by all members of the Comprehensive Examination Committee. The student will be notified within two weeks of receipt of the examination responses, whether the examination is ‘pass’ or ‘fail’. The written examination can be repeated once if it is failed the first time. It is expected that the exam will be repeated within one academic year if it is failed the first time. If the reexamination is not successfully passed, the program will recommend dismissal of the student to the Graduate College.

Oral Portion of the Comprehensive Examination:

The oral portion of the comprehensive examination (commonly referred to as the “oral comps”) consists of a presentation and defense of the dissertation research proposal, in addition to examination of the student’s breadth of knowledge of the literature and methodology of the field of Biostatistics.

The [Graduate College](#) summarizes the goal of the examination:

“Before admission to candidacy for the doctoral degree, the student must pass a written and an oral Doctoral Comprehensive Examination. This examination is intended to test the student's comprehensive knowledge of the major and minor subjects of study, both in breadth across the general field of study and in depth within the area of specialization... This is the occasion when faculty committee members have both the opportunity and obligation to require the student to display a broad knowledge of the chosen field of study and sufficient depth of understanding in areas of specialization. Discussion of proposed dissertation research may be included. The examining committee must attest that the student has demonstrated the professional level of knowledge expected of a junior academic colleague.”

In addition, MEZCOPH has the following ‘Recommended Best Practices for Oral Examinations’:

- No more than 30 minutes should be spent on the formal presentation by the student, with no more than 30 minutes for questions on the presentation. The remaining period

should be general questions to test whether the student has “a broad knowledge of the chosen field of study.” Students should expect this later portion to last at least an hour.

- Students should be encouraged to meet with each committee member individually before the exam to determine potential topics.
- Students should be encouraged to “practice” both the presentation and answering general questions with other students.
- The student or Chair may request the presence of a senior faculty member who is not on the committee to observe the exam as a neutral third party.

The student or Faculty Chair may request the Biostatistics program assign a faculty member, who is not part of the student’s Comprehensive Examination Committee, to serve as an outside representative at the oral examination. The Biostatistics Program Director will make the assignment and assure that the person is present at the examination.

The student is responsible for scheduling the oral comprehensive examination with the members of the Comprehensive Examination Committee and must inform the Biostatistics Program Director and the Associate Dean for Academic Affairs. Committee members’ schedules must accommodate the entire scheduled exam period. The student also needs to notify the Manager of MS and Doctoral Programs. If needed, the Manager of MS and Doctoral Programs will assist the student in scheduling a room for the examination.

The student is responsible for completing the Announcement of Doctoral Comprehensive Exam form found on the [UAccess Student Center](#) under the GradPath option. This form completion notifies the Graduate College of the date and time of the exam and should be submitted a minimum of two weeks prior to the exam date.

The Comprehensive Examination Committee Chair (aka the Graduate Committee Chair) is responsible for submitting the results of the exam to the Graduate College, via the GradPath form, Results of Comprehensive Exam.

The student may retake the oral portion of the comprehensive examination once if necessary. It is expected that the exam will be repeated within one academic year if it is failed the first time. If the reexamination is not successfully passed, the program will recommend dismissal of the student to the Graduate College.

Once the student has successfully passed their comprehensive exams and completed all coursework listed on their approved plan of study, they transition from a doctoral ‘student’ designation to a doctoral ‘candidate’ designation. In light of this status change, a degree candidacy fee will be added to the student’s Bursar’s account. A copyright fee is optional. Check the [Graduate College website](#) prior to your anticipated completion to determine the charge amount.

Time Limitation

Per Graduate College [policy](#), all requirements for the degree of Doctor of Philosophy must be completed within five years of passing the comprehensive exam. Should a student not finish within that time period, the student may be allowed to retake the comprehensive exam with permission of the program, and then proceed to complete other requirements, e.g., the dissertation.

Dissertation Committee Appointment

After successful completion of all coursework and passing the written and oral portions of the comprehensive examination, the student must complete the Graduate College Dissertation Committee Appointment Form. The completion of this form indicates the candidate has identified committee members for the next stage of their graduate career. The final Dissertation Committee must be composed of at least three faculty members representing the major. The student should check with their Minor Advisor's program to determine whether or not the Minor Advisor is required to be included on this committee. See the "[Composition of the Graduate Committees for Biostatistics Students](#)" section above for more details.

The Dissertation Committee Appointment form is found on the [UAccess Student Center](#) under the GradPath option. The Dissertation Director reviews and approves the electronic form on behalf of the Committee. In addition, the Program Director reviews and approves the form on behalf of the Biostatistics faculty. This form must be submitted and approved by the Graduate College prior to the Final Oral Dissertation Defense.

Dissertation Unit Enrollment

PhD students in Biostatistics need to complete their Doctoral Plan of Study and pass both their written and oral comprehensive exams before they are able to enroll in BIOS 920 dissertation units.

All students who wish to enroll in dissertation units (BIOS 920) must complete a 900- Level Course Registration Form (found on the [MEZCOPH Student Hub](#)) before they can be registered for the units. The form serves to establish the scope and focus of the work to be completed, provides a permanent record for the student's academic file, and facilitates the assignment of final grades at the end of each semester. After the student has completed the form and received approval from the Dissertation Director who serves as the "Instructor", the student turns it in to the Manager of MS & Doctoral Programs who registers the student for the units.

Dissertation

The PhD dissertation should involve original research in biostatistics methodology and should represent a substantial contribution to the field of biostatistics. If the research involves human subjects, even if it involves secondary data analysis, the student must have IRB approval before starting this work. It is the responsibility of the student in consultation with the Dissertation Research Director to obtain the approvals. See the "[Human Subjects Protection Program](#)" section above for more details of the approval process.

The Biostatistics program faculty currently approves two dissertation formats: a standard dissertation or a three-paper format. The Dissertation Committee should approve the format of the dissertation prior to the student beginning the work. Actual preparation of the written dissertation follows the Graduate College [guidelines](#).

It is recommended that the student work with the Dissertation Committee to determine a dissertation format, a communication plan and timetable for reviewing dissertation work. When the student and Dissertation Research Director consider the dissertation sufficiently complete, the student submits a complete copy of the penultimate draft to each Dissertation Committee member and negotiates a date for the oral defense with the Dissertation Committee members. This document should be submitted to the dissertation committee members at least one month prior to the agreed upon date of the final examination.

Many past dissertations may be accessed for review using the [UA Thesis & Dissertation Repository](#).

Final Oral Dissertation Defense Examination

It is recommended that no later than 15 working days before the proposed date of the defense, the student work with the Manager of MS and Doctoral Programs to schedule the examination in a MEZCOPH classroom and to publicize the open portion of the examination. The exact time, date, and place of this examination must also be scheduled with the Graduate College. The Graduate College notification occurs when the student submits the Doctoral Announcement of Final Oral Defense form. This form is found on the [UAccess Student Center](#) under the GradPath option. Be aware that for each semester there are official Graduate College deadlines related to the dissertation defense and eligibility for that same semester graduation. Visit the Graduate College website for [specific semester deadlines](#).

Formal oral defense of the dissertation research constitutes the final examination. This consists of a public seminar by the candidate of no more than one hour, followed by an oral examination by the candidate's Dissertation Committee. The entire exam must be completed within three hours. It is expected that the student will meet with the Dissertation Director to discuss the content of the public seminar prior to the scheduled presentation. The student may take a printed Approval Page downloaded from the Graduate College website to the final defense or may request the Manager of MS & Doctoral Programs initiate an electronic version via Adobe Sign prior to the defense.

The student needs to be sure that all Dissertation Committee members can attend the final examination. The student also must inform the Biostatistics Program Director and the Associate Dean for Academic Affairs. The Graduate Committee Chair presides over the examination. The initial seminar portion is open to the public; the remaining examination portion is closed to the public.

Possible Outcomes:

There are four potential outcomes to the Final Oral Dissertation Defense that are determined by the Dissertation Committee.

- Pass, no revisions of the dissertation required. This option is rarely awarded in the experience of the Biostatistics faculty.
- Pass, with revisions that must be approved by the Graduate Committee Chair and/or Dissertation Research Director. This option is used most often in the experience of the Biostatistics faculty.
- Pass, with revisions that must be approved by all Dissertation Committee members.
- Fail. In this instance, the Dissertation Committee will determine if a request for re-examination will be submitted to the Graduate College. The Graduate College Dean decides whether to approve such a request.

The Graduate Committee Chair is responsible for submitting the results of the defense to the Graduate College. [Faculty instructions](#) for conducting a dissertation defense are provided by the Graduate College.

When revisions are required, the student is responsible for meeting with the Graduate Committee Chair and/or Dissertation Director to work out a timeline for completion and review of the revisions.

Completion of Doctoral Requirements

Following the successful completion of the Final Oral Dissertation Defense Examination and completion of any revisions required by the Dissertation Committee, the final dissertation must be submitted via the [electronic submission site](#) at the Graduate College website and must meet all Graduate College requirements. The Graduate College publishes [deadlines for the completion of all degree requirements](#) on their website. Because of instances of self-plagiarizing, it is highly recommended that the student embargoes the dissertation for an extended period of time or permanently at the time of submission.”

Bound or electronic copies may be requested by the Biostatistics Program Director, Dissertation Director and Dissertation Committee members. Additionally, if the student chooses to embargo the dissertation, the Office of Student Services would appreciate an electronic copy.

The UArizona Dean of the Graduate College certifies that the candidate has fulfilled all requirements for the Doctor of Philosophy and will recommend conferral of the doctoral degree by the Arizona Board of Regents. At that time, the Graduate College will post the degree completion date on the student’s transcript and the diploma will be mailed to the student.

THE PhD MINOR IN BIOSTATISTICS

Minor Requirements

The PhD minor in Biostatistics (for majors outside of Biostatistics) is administered by the Biostatistics program in MEZCOPH. A total of 9 course credits are required, as well as the successful completion of written (at the discretion of the major) and oral questions during the PhD comprehensive exam. See the MEZCOPH [Academic Curriculum Guide](#) found on the College's website for further details of the specific course requirements and schedule.

Declaration of Minor

The student should meet with the Biostatistics Program Director to discuss the minor. After identifying a Biostatistics Minor Faculty Advisor and receiving guidance regarding minor coursework, the student needs to complete the MEZCOPH Declaration of Biostatistics Minor Form (found on the [MEZCOPH Student Hub](#) or by contacting the Manager of MS and Doctoral Programs to request the form). The form is reviewed and approved by the Biostatistics Program Director. The form must be filed with the MEZCOPH Manager of MS and Doctoral Programs in the Office of Student Services and Alumni Affairs (Drachman Hall Room A302). The Minor Faculty Advisor will then also serve as the Chair of the Minor for the student's Graduate Committees (i.e., Comprehensive Exam and Dissertation Committees).

Composition of Committee

The composition of the Biostatistics Minor portion of the student's graduate committee shall consist of at least one primary faculty member from the Biostatistics program. Biostatistics Minor Advisor/Committee Members may formulate questions for the written (at the discretion of the major) and oral comprehensive examinations.

Transfer of Credits

Graduate credit earned at other approved institutions cannot be used towards fulfilling the requirements of the PhD minor in Biostatistics.

THE MS IN BIOSTATISTICS PROGRAM

The Master of Science degree in Biostatistics prepares individuals to work effectively as applied biostatisticians in a variety of public health, epidemiological and clinical research settings. The MS in Biostatistics provides training in statistical theory, study design, computational methods, biostatistical methodology, consulting, analysis and interpretation.

On average, the MS program requires approximately two years for completion. The first year is usually devoted to core coursework. The second year is focused on remaining coursework and development of the master's project and portfolio.

For complete information about the University of Arizona Graduate College policy for MS students please see the [Graduate College website](#).

New Student Activities

All new students are expected to participate in the Doctoral and MS Student Orientation, scheduled in August prior to the beginning of fall coursework. Topics include research and academic ethics, College and University policies and procedures, and an introduction to college faculty and their research. Orientation provides an opportunity to meet the other students.

Competencies

A set of [competencies](#) specific to the MS Biostatistics degree have been developed which will allow students and the faculty to determine progress. It is recommended that this list be used by students to help assess training needs and progress.

Program Steps and Milestones to Degree

Typical time to completion: 2 years full-time students, 3-4 years part-time students.

Average time to completion: 3.4 years (including part-time students)

Program Steps to Completion (Full-time student timeline):

- Attend mandatory new student orientation.
- First year is devoted to course work.
- Each Spring, complete an Annual Progress Report with Faculty Advisor
- Second semester, identify Committee Chair
- End of first Spring, take the Qualifying Exam
- Second year is devoted to course work and capstone project or thesis.
- If necessary, begin the process for Human Subjects approval for thesis.
- Third semester, form committee
- Fourth semester, successfully defend thesis or present capstone project, and then finalize any revisions and portfolio.

Progress of the Program Steps and Milestones to Degree is assessed at the time of students' annual progress report in conjunction with their Faculty Advisor and Program Faculty. When it is determined that a student is not making timely progress, the student and Faculty Advisor will meet to create a Retention Plan using the MEZCOPH form, "Graduate Student Retention Plan for Failing to Make Satisfactory Academic Progress."

Degree Requirements

The MS course requirements are determined by the Biostatistics program. Please see the Academic Curriculum Guide for the year you were admitted to your current program found on [MEZCOPH Student Hub](#). The overall course of study will be developed by the student and the Faculty Advisor and approved by the student's Graduate Committee and Biostatistics Program Director.

Master's Plan of Study

In conjunction with the Faculty Advisor, each student is responsible for developing a master's Plan of Study as early as possible during the first few months in residence, to be submitted to the Graduate College in the second to last semester of the program. The Plan of Study identifies (1) courses the student intends to transfer from other institutions; (2) courses already completed at the University of Arizona which the student intends to apply toward the graduate degree; and (3) additional coursework to be completed to fulfill degree requirements. The Plan of Study form is completed on [UAccess Student Center](#), under the GradPath option. The Plan of Study must have the approval of the Faculty Advisor and the Biostatistics Program Director. As stated under the GradPath description (see "GradPath" section above), it is the student's responsibility to monitor the faculty members' and Graduate College's approval of all forms submitted through GradPath. Students can monitor the approvals by tracking the approval path at the bottom of any form in GradPath.

Transfer of Credits

Per Graduate College policy, transfer of credit toward an advanced degree may be considered if the grade earned was A or B, and if it was awarded graduate credit at an approved and accredited university. Grades of transfer work will not be used in computing the student's UArizona grade-point average.

In the MS program, no more than 20% of the total coursework (7 credits) required for the master's degree can be transferred from another, properly accredited institution. A total of 12 credits earned as an undergraduate senior (if not used toward the undergraduate degree) or while in non-degree status at the University of Arizona, may also be applied to the MS degree.

The student should transfer credit during the first semester of the MS program. Transfer of credit must be approved by the Faculty Advisor. The process starts by making an appointment with the Faculty Advisor. The student brings a transcript highlighting the classes to be transferred and a syllabus for each class.

Two forms must be completed in addition to the ultimate incorporation in the Plan of Study: The MEZCOPH Course Substitution form is used to evaluate the course for content and appropriateness within the Plan of Study. For approved transfer coursework taken at an accredited institution outside of the University of Arizona, the student must also complete the Graduate College's Transfer Credit form.

The final decision for transfer of credits for non-University of Arizona courses, whether used as substitutions for a required course or as electives, is made when the formal Plan of Study is submitted to the Graduate College.

Course Substitutions

If a student has already completed a course similar to a program required course, then the student can apply to have the earlier course substituted for the required course. A course substitution can only be approved by the university professor/instructor of the required course. The course professor/instructor will review documentation from the student (i.e., course syllabus) for comparability to the required course and the student's grade. If approved for substitution, the course professor/instructor signs the Course Substitution Form that the student provides (found on the [MEZCOPH Student Hub](#)). The Faculty Advisor must concur, and sign on the appropriate line. The student then submits the form to the Manager of MS and Doctoral Programs. The substituted course fulfills the content requirement, but the student must take another course of equivalent credit-hours toward the degree requirement, unless the course is approved for transfer credits.

Independent Study Registration Policy

A student who wishes to enroll in independent study (BIOS 599/699) must complete the Independent Study Registration form found on the [MEZCOPH Student Hub](#) before being registered for the units. The form serves to establish the scope and focus of the independent, provide a permanent record for the student's academic file, and facilitate the assignment of final grades at the end of each semester. After the student has completed the form and received approval from the faculty member serving as Instructor (person responsible for overseeing the student's work and assigning credit) and Faculty Advisor, the student submits the signed document to the Manager of MS & Doctoral Programs who registers the student for the units.

Research and Thesis Registration Policy

A student who wishes to enroll in research units (BIOS 900) or thesis units (BIOS 910) must complete the 900-Level Course Registration form found on the [MEZCOPH Student Hub](#) before being registered for the units. The form serves to establish the scope and focus of the work to be completed that term, provide a permanent record for the student's academic file, and facilitate the assignment of final grades at the end of each semester. After the student has completed the form and received approval from the faculty member serving as Research Instructor or Thesis Director (person responsible for overseeing the student's work and

assigning credit), the student submits the signed document to the Manager of MS & Doctoral Programs who registers the student for the units.

MS Qualifying Exam

All MS students must pass a written MS Qualifying Exam (commonly referred to as the “QE”), preferably after their first year of study. The exam is designed to ensure that students have the necessary background to continue with more advanced courses. The exam includes both Theory and Application sections. The exam is offered early in summer at a time announced at the beginning of the preceding spring semester.

Students who earned an A or B grade in the Probability and Theory sequence Math 564 and Math 566 are only required to take and pass the Applied exam as part of their MS degree requirements. Those who did not earn at least a B grade in these two courses are also required to take and pass the Theory exam as part of their MS degree requirements.

However, MS students who plan to apply to the UA PhD program in Biostatistics after completing their MS degree are recommended to take the Theory exam in addition to the Applied exam after their first year of study. Those who wish to be considered for the PhD program without completing an MS degree first are required to take both the Applied and Theory exams.

The material covered on the exam is based on the following courses:

- Theory of Probability (STAT 564/MATH 564)
- Theory of Statistics (STAT 566/MATH 566)
- Biostatistics in Public Health (BIOS 576A)
- Biostatistics for Research (BIOS 576B)

Students must have completed each of these courses to be eligible for the exam. Additionally, students are encouraged to consult the following texts as background for the exam content:

- Ross SA (1994). *A First Course in Probability*. Fourth Edition. MacMillan.
- Casella G and Berger RL (2002). *Statistical Inference*. Second Edition. Wadsworth & Brooks/Cole.
- Hogg RV, Craig A and McKean JW (2004). *Introduction to Mathematical Statistics*. Prentice Hall.
- Rosner BR (2016). *Fundamentals of Biostatistics*. Eighth Edition. Brooks/Cole.
- Vittinghoff E, Glidden DV, Shiboski SC, McCulloch CE (2012). *Regression Methods in Biostatistics: Linear, Logistic, Survival, and Repeated Measures Models*. Second Edition. Springer.

The exam is administered in two parts over four consecutive days. The first day typically centers on the Theory portion and is closed book (1-page notes allowed). It is administered in-person, extending eight hours. The second-to-fourth days typically center on the Application portion

and is a take-home exam for which students will perform statistical analysis on some given dataset(s) to answer a series of questions. Students are permitted to use a hand calculator for the Theory portion and any statistical software for the Application portion.

Students who pass the Biostatistics Qualifying Exam with a high enough score after their first year of coursework in the MS program may apply directly to the PhD program without completing the MS degree. If admitted to the PhD program, all the coursework taken in the first year would then count towards the PhD degree.

Students who do not pass the Qualifying Exam may choose to re-take the exam the following January. These students are encouraged to meet with their Faculty Advisor and the Biostatistics Program Director to determine appropriate steps to improve their performance. Students who do not pass the Qualifying Exam after two attempts may not continue in the MS program.

Culminating Experience

A culminating experience is required for the MS degree and may take the form of a Master's Thesis (6 units), or a capstone experience in the form of a Master's Project (3 units of either Research or Independent Study). Students are advised to work with their Faculty Advisor to determine the type of experience that aligns best with their educational and career goals.

MS Committee

After selection of a topic for the thesis or capstone experience, the student selects faculty members for a master's Committee, in consultation with the Faculty Advisor. See the ["Composition of the Graduate Committees for Biostatistics Students"](#) section above for more information on the composition of the MS Committee.

Master's Thesis Option

The content of the MS thesis is flexible, but it must be more substantial than a standard statistical analysis. Examples of possible topics include: a simulation study to investigate a statistical method; a complex data analysis involving a comparison of different approaches; or an extension or novel use of an existing statistical method. It cannot be an analysis performed for a class, although this might serve as a minor portion of the thesis. Prior to initiating the research for the thesis, the student must submit a "prospectus" to their Thesis Committee, outlining the student's academic progress to date, studies to be completed prior to writing the thesis and an outline of the research to be included in the thesis. The student then meets with the Thesis Committee to discuss the prospectus and to formulate any new plans deemed appropriate.

If the research involves human subjects, even if it involves secondary data analysis, the student must have IRB approval before starting this work. It is the responsibility of the student in consultation with the Thesis Research Director to obtain the approvals. See the ["Human Subjects Approval for Dissertation/Thesis Projects"](#) section above for more information on the Human Subjects approval process.

Preparation of the written thesis follows the Graduate College [guidelines](#).

The student should be working closely with the Thesis Research Director throughout the research and writing of the thesis. When the Thesis Research Director considers the thesis sufficiently completed, the student submits a draft copy to the Thesis Committee at least one month prior to their proposed formal defense date.

Some past theses may be accessed for review using the [UA Thesis & Dissertation Repository](#).

Capstone Experience: Master's Project (either Research or Independent Study Option)

The intent of the master's Project is to provide students with an introduction to biostatistical research. The content of the MS Project is flexible but is meant to be less extensive than the MS Thesis (see above). The MS Project is developed in consultation with a Biostatistics faculty member who will serve as the instructor for the 3 credit Research or Independent Study course. The MS Project option is particularly suited for students who intend to earn a terminal MS degree whereas the MS Thesis option is recommended for students who ultimately wish to continue towards a PhD degree.

If the research involves human subjects, even if it involves secondary data analysis, the student must have IRB approval before starting this work. It is the responsibility of the student in consultation with the Thesis Research Director to obtain the approvals. See the "[Human Subjects Approval for Dissertation/Thesis Projects](#)" section above for more information on the Human Subjects approval process.

Oral Defense of Thesis Research/Oral Presentation of Capstone Experience

The MS student is required to complete a formal public presentation of the culminating experience in a public seminar, followed by an oral examination by the candidate's Committee. The presentation, inclusive of questions from attendees, is a maximum of one hour followed by the committee's examination which can be no more than one additional hour.

At least fifteen working days before the defense, the student should be in touch with the Manager of MS and Doctoral Programs to schedule a MEZCOPH classroom and to publicize the open portion of the presentation. Students completing the Thesis option may take a printed Approval Page downloaded from the Graduate College website to the final defense or may request the Manager of MS and Doctoral Programs initiate an electronic version via Adobe Sign prior to the defense.

[Faculty instructions](#) for conducting a thesis defense, including voting procedures, are provided by the Graduate College.

Professional Portfolio

All students are required to complete a professional portfolio. The student works with the Faculty Advisor to determine appropriate documents to include. At a minimum, the portfolio

consists of a resume, at least two data analysis reports, copy of thesis or MS project report, documentation of computing proficiency, and pdf or PowerPoint of oral presentation.

After the public presentation of the student's culminating experience, the student addresses any comments or concerns regarding the written thesis/project and oral presentation from the MS Committee and obtains final approval.

The student emails the contents of the portfolio to the Manager of MS and Doctoral Programs, copying the faculty advisor. The Manager of MS and Doctoral Programs checks for completeness. The final approval for the portfolio is given by the student's faculty advisor. The Graduate College publishes [deadlines for the completion of all degree requirements](#) on their website and the fully approved and completed portfolio must be received in the Manager of MS and Doctoral Programs' email by the appropriate date. Students who pursue the Thesis option must also fulfill the requirements in the following section.

Completion of Thesis Requirements

After addressing comments on the thesis from the MS Committee and obtaining final approval for the written thesis, the student prepares the final copies of the thesis. The student makes any format corrections required by the program and submits an electronic copy to the Graduate College via the [electronic submission site](#) and must meet all Graduate College requirements. The Graduate College publishes [deadlines for the completion of all degree requirements](#) on their website.

Bound or electronic copies may be requested by the Biostatistics Program Director, Thesis Research Director and Thesis Committee members. Additionally, if the student chooses to embargo the dissertation, the Office of Student Services would appreciate an electronic copy.

Time Limitation

Per Graduate College [policy](#), all requirements for the master's degree must be completed within six years. Time-to-degree begins with the earliest course to be applied toward the degree, including credits transferred from other institutions or credits taken under non-degree seeking/certificate status.

MS Degree Completion

Per Graduate College policy, after all requirements are met by the student and the student has emailed all appropriate documents to the Manager of MS and Doctoral Programs (copying the MS Committee and Faculty Advisor). The Manager of MS and Doctoral Programs will notify the Graduate College that all final requirements have been met. The student should note that the Graduate College needs to be notified of this milestone before the student is considered for degree conferral.

Be aware that for each semester there are official Graduate College deadlines related to completing the MS degree requirements and eligibility for that same semester graduation.

The UA Dean of the Graduate College certifies that the student has fulfilled all requirements for the degree and will recommend conferral of the Master of Science degree by the Arizona Board of Regents. At that time, the Graduate College will post the degree completion date on the student's transcript and the diploma will be mailed to the student.

Admission to the PhD Program

Students who anticipate completing the MS program can apply to the doctoral program by way of an abbreviated process. Successful completion of the MS program, including passing the Qualifying Exam, defending the thesis and submission of the Master's thesis report to the Graduate College, is required for admission to the doctoral program. Applications will be accepted during the student's final semester of the master's degree program.

Such students will not need to re-submit the SOPHAS application. Instead, the MS student will provide a research statement and an updated statement of purpose and objectives. On a case-by-case basis, the program may request additional documents. Likewise, the student is welcome to submit other materials to strengthen their application.

The above materials will be emailed to the Admissions Professional in the Office of Student Affairs. The student's documents will then be forwarded along with the original SOPHAS application, and an unofficial transcript of MS course work completed to date to the Program Director. The Program Director will consult with the Biostatistics faculty to review application materials and reach a decision. The decision will be communicated back to the Admissions Professional who notifies the student of the outcome.

Successful doctoral applicants will work with the Admissions Professional to complete a GradApp for the doctoral program. Per program policy, up to 30 units listed on the student's MS plan of study may be applied to the PhD plan of study, contingent upon applicability, faculty approval, and Graduate College policy.