

# 2014-2015 Biostatistics MS/PhD Program Student Handbook

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#### 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 five degrees - the Bachelor of Science (BS), with a major in public health; the Master of Public Health (MPH), with concentration areas in Biostatistics, Environmental and Occupational Health, Epidemiology, Family and Child Health, Health Behavior Health Promotion, Health Services Administration, Public Health Policy and Management, and Public Health Practice; the Master of Science (MS) degrees in Biostatistics, Environmental Health Sciences, and Epidemiology; Doctor of Philosophy (PhD) degrees in Biostatistics, Environmental Health Sciences, Epidemiology, Health Behavior Health Promotion; and a Doctor of Public Health (DrPH) degree with concentration areas in Maternal and Child Health and Public Health Policy and Management.

Our graduates have established careers locally, nationally, and internationally. Of note, they include the 17th Surgeon General of the United States, Dr. Richard Carmona, as well as a state public health veterinarian, an assistant commissioner of the Chicago Department of Health, a program manager for an intertribal council, a Fellow in the Centers for Disease Control, a research director for violence-prevention program, and a health educator for a local AIDS program, to name just a few. We are proud of the contribution we are making to build and maintain a competent public health workforce!

#### MEZCOPH MISSION STATEMENT

MEZCOPH is dedicated to promoting the health of 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.

#### 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 students about MEZCOPH resources and operations, student organizations, events, and financial assistance. University and Graduate College rules are reiterated when appropriate. The information in this section is applicable to all students in MEZCOPH's graduate programs. The second section of the handbook outlines information specific to the graduate programs (i.e., MPH, MS, or doctoral programs). Students should refer to the handbook often.

While students are held to the program requirements of the academic catalog for the academic year in which they were admitted, operational processes and policies do change. These changes in policies and procedures are reflected in the Student Handbook. Please refer to the most recent Student Handbook (revised annually) for the most current policies. 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 Services and Alumni Affairs 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 "Who Does What in the Office of Student Services and Alumni Affairs" page found in the orientation folder and on the MEZCOPH Student HUB). Although the Office of Student Services and Alumni 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!

#### **DRACHMAN HALL**

Roy P. Drachman Hall, MEZCOPH's home, opened for classes in January of 2006. MEZCOPH administrative offices are found on the 3<sup>rd</sup> floor and faculty offices are located primarily on the 2<sup>nd</sup> floor. Classrooms occupy the 1st floor of both sides of the building and are used primarily by the Colleges of Public Health, Pharmacy and Nursing. The College of Pharmacy occupies the west wing of the building. MEZCOPH students, faculty and staff play a vital role in ensuring that the facilities of Drachman Hall are treated with respect and are asked to report any incidences of vandalism, theft, or questionable activities to the Assistant Dean of Financial Affairs and Physical Resources at 626-4596. Building security services are not available in the evening or weekends; therefore, students should not be in the building after regular business hours (8 am-5 pm or weekends) unless they are taking a class or working in an assigned cubicle or office space.

#### Lost and Found

Items found in the east wing or "A" side of Drachman Hall should be brought to A302, the Office of Student Services and Alumni Affairs, where the Lost and Found repository is located. Likewise, individuals who are attempting to locate lost property should check with the Office of Student Services to determine if the item has been turned in. Individuals must provide adequate description of the item and in some cases, personal identification.

# **Computer Lab**

MEZOPH's computer lab, equipped with 21 personal computers, a printer, and projection equipment, is located on the third floor of Drachman Hall in Room A319. The computer lab is available for general use, Monday through Friday from 8 am-5 pm, unless the lab has been scheduled for a class, study session, or other College activity. Information about courses scheduled in the computer lab will be posted outside the lab door. Stata, SPSS, SAS, ArcGIS, R, EpiInfo, Matlab, Skype (with webcam) and Microsoft Office are installed on each system. nVivo is available on lab computers in the first and half of the second rows. The systems revert to their initial state after a reboot, so a thumb drive or CD/DVD is required to save any work. To use the systems students must login to the computers with their netid. Students must provide their own paper for printing.

#### **Wireless Internet Access**

Wireless access is available throughout and around Drachman Hall via connection to the UAPublic and UAWiFi networks. UAPublic is an open network much like the Starbucks experience. It allows you to surf the web and not much more. UAWiFi, on the other hand, is a secure and fast wireless network that is available across most of our campus. Partially funded by the Student Technology Fee, it brings roaming 802.11a/b/g wireless access for all students, staff and faculty on campus. Connection to UAWiFi requires authentication using your netid and password. The UAWiFi network, when connected, allows students to access on-campus networked resources that are generally unavailable over the public Internet, such as the libraries and UAccess Student Center. Instructions for setting up wireless access can be found here.

# How to get help with UAWiFi

Help can be obtained through the <u>Office of Student Computing Resources (OSCR) Help Desk</u>. Call 626-TECH (8324) to schedule an appointment, or stop by during walk-in hours. Limited support is available at OSCR computer labs and multimedia labs. The <u>UITS FAQ on UAWifi</u> is another source of help for UAWiFi. The MEZCOPH

IT staff can also help with the setup by contacting them online or calling 626-7417.

# Student Space

There are a limited number of graduate student cubicles on the second floor of Drachman Hall. These spaces are assigned in priority order. First priority for cubicle assignments is courses with teaching assistants. The cubicle space is assigned to the course and cubicle space must be shared if there are multiple TA's in the course. Doctoral students are the next space assignment priority. Students who are participating in a training grant follow and finally, any

graduate student who is employed as a research assistant by a Division that has space available may be assigned space. Access to the second floor of Drachman Hall after hours is only granted to students who have been assigned a cubicle.

Teaching assistants may arrange to meet with students in the breakout rooms (the small classrooms on the west side of the first floor). This reduces noise on the second floor and provides private space when needed. Teaching assistants may schedule these rooms by accessing the <a href="AHS Room Scheduling System">AHS Room Scheduling System</a>. The course number, name and faculty member should be included in the request.

Student groups needing meeting space may request it by submitting a room schedule request through the <u>AHS Room Scheduling System</u>. The group's name and faculty advisor name should be included in the request. Advisors are expected to be present when student group meetings occur after hours.

# **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 Services and Alumni Affairs in Drachman A302 (for postings hung in Drachman A) or the College of Pharmacy's Office of Student Services in Drachman B107 (for postings hung in Drachman B). To gain approval, bring *an original copy* to the appropriate Student Services office. When approval is given, the announcement will be initialed and dated by the office. 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 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.

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 Lounge**

The MEZCOPH Student Lounge is located on the first floor of Drachman Hall in Room A102. Equipped with comfortable furniture, several study tables, a microwave oven, a computer and printer, MEZCOPH students are encouraged to use the Student Lounge on a regular and frequent basis to study or meet with peers. The room may not be reserved. Students from other colleges should use the lounge facilities in their respective colleges. Access to the Student Lounge is via CatCard. Students desiring to use the Student Lounge must complete a Drachman Hall Access Application, which outlines the guidelines for use. This form is found on the student HUB.

#### **Wellness Room**

A Wellness/Activity Room is located in Drachman Hall A110. The room provides a safe and attractive space for faculty, appointed professionals, staff, and students to participate in a variety of physical activities for the enhancement and promotion of individual wellness. The room is equipped with exercise mats, small exercise equipment, a refrigerator, and sink. The Canyon Ranch Center for Prevention & Health Promotion, within the College of Public Health, is responsible for programming activities in the Wellness Room. These activities are advertised and promoted on the College's listservs. Those wishing to access the facility are required to sign a waiver (medical release form) and complete a Drachman Hall Access Application. These forms are found on the student HUB.

#### Lockers

Students may reserve a locker for use while a student at MEZCOPH. Requests for lockers are processed by the Administrative Associate in the Office of Student Services and Alumni Affairs, Room A302 of Drachman Hall. A one-time, non-refundable user fee of \$5 is assessed. 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 Associate, 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.

# **Bicycles and Bicycle Parking**

UA students, faculty, and staff who ride their bicycles to school are encouraged to register their bicycles with the University of Arizona Parking and Transportation Services. Bike registration provides the owner with discounts on selected bicycle supplies and services from participating bike shops, free lock cutting service for UA-registered bikes on campus, and a record of ownership and documentation for insurance carriers. Registration facilitates the return of stolen bikes to their owners.

For parking convenience, bicycle racks are located on the south side of both wings of Drachman Hall. Bicycles brought into the building or locked to stairwells or other architectural features will be impounded.

# **Third Floor Patio**

Students are welcome to use the third floor patio adjacent to the south staircase, outside the Office of Student Services and Alumni Affairs.

#### **ANALYTICAL LABORATORY FACILITIES**

The College has research laboratory space in the Medical Research Building (MRB, first floor west) and teaching/research laboratory space in the Biological Research Laboratories (BRL) at the north end of the Arizona Health Sciences Center campus. Some environmental health sciences courses will use laboratories in these buildings and students will receive specific

information regarding time and place from the course instructor. Student research efforts will be assigned appropriate space by the student's Research Director depending on the nature and funding of the project. Students employed on faculty projects may be assigned to work in these laboratories.

#### PHOENIX BIOMEDICAL CAMPUS

The city-owned Phoenix Biomedical Campus (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 PBC Access Cards and cards must be displayed at all times when on campus. The MEZCOPH offices are located in Suite 119 of the UA Phoenix Plaza (Building 4) at 714 E Van Buren Street, Phoenix, AZ 85006. Students are also welcomed and encouraged to utilize the facilities in Building 1, 2, 3, and the Health Sciences Education Building (HSEB). Student access is limited to when Security is on site.

- Building 1,2,3, and 4: Weekdays 8:00 AM 5:00 PM / No Weekends / No Holidays
- HSEB: Weekdays 6:30 AM Midnight / Weekends 9:00AM 9:00PM / No Holidays

# **Phoenix Computers**

The MEZCOPH Suite in Phoenix has four computers available for student activities. Two are located in Building 4 cubicles 150Q and 150N, labeled College of Public Health, on the south side of the building, and two others are located inside the COPH suite space. STATA and Microsoft Office are installed on each of these computers. Black and white printing is also available in the COPH Suite but students must provide their own paper. Students may also use the computers available in the Library located in HSEB. The systems revert to their initial state after a reboot, so a thumb drive or CD/DVD is required to save any work. Printing is available in the HSEB Library for 10 cents per black and white page.

#### **Wireless Internet Access in Phoenix**

Wireless access is available throughout and around the Phoenix Biomedical Campus via connection to the UAWiFi and UAPublic networks. See the section above about the Wireless Internet Access to connect to the internet.

# **Student Space in Phoenix**

MEZCOPH students at the Phoenix Biomedical Campus are encouraged to use the central area in Building 4, Suite 119 as a meeting space, along with the student spaces in HSEB. Students may also use the lunch room located in Building 4. This area is equipped with a sink, microwave, and refrigerators. 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.

# **COMMUNICATING WITH STUDENTS**

The Office of Student Services and Alumni Affairs communicates with students primarily through email, student listservs and the College's student intranet, the MEZCOPH Student HUB.

#### **Email Accounts**

The University of Arizona requires that all students open email accounts through the University of Arizona. Official University and College messages are communicated to students via this account. It is imperative, therefore, that all students keep the Office of Student Services and Alumni Affairs notified of any address changes. Failure to read 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.

#### Listservs

Current information about new policies and procedures, program and college events, and course information is announced via the academic program listservs and then is posted on the MEZCOPH Student HUB. Job and internship openings are announced via separate listservs that students must request subscription to and these openings are posted to the HUB. New scholarship and fellowship information, if received, is announced once a week on the listserv and placed on our website. Each academic section within the College maintains a student listserv, as well, for communicating section 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 for Student and Alumni Affairs for distribution. All attempts are made to eliminate email redundancy.

MEZCOPH undergraduate and graduate students have a listserv, PHAlliance, on which they may communicate information regarding student groups, events, community service activities, public health news, furniture for sale, etc. Simply type in <a href="mailto:phalliance@list.arizona.edu">phalliance@list.arizona.edu</a> into the email address bar to send a message to all MEZCOPH students.

#### **MEZCOPH Website**

The MEZCOPH website, <a href="http://publichealth.arizona.edu/">http://publichealth.arizona.edu/</a>, 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, internship and job postings, and scholarship and fellowship announcements are posted on the MEZCOPH Student HUB.

# **MEZCOPH Student 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. Currently, these include the Midcourse Evaluation, the Student Annual Progress Report, and the Graduating Student Exit Survey. MPH students must submit their internship abstracts through the Student HUB. A UA net ID and password are required to access this site.

#### STUDENT SERVICES & OPPORTUNITIES

# Office of Student Services and Alumni Affairs

The MEZCOPH Office of Student Services and Alumni Affairs (frequently referred to as OSSAA) serves as the central point of coordination for student activities and provision of services to undergraduate and graduate students in all academic programs of the College. Each OSSAA student services professional has significant experience advising students, participates in numerous university wide taskforces and committees, and meets with MEZCOPH students on a daily basis 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 placement questions; travel requests; and graduation requirements.

# **Career Advising**

An integrated approach to career advising continues to provide appropriate career exploration services and support related to finding a public health career position. These services utilize the expertise of the University of Arizona Career Services Office, professionals within the MEZCOPH Office of Student Services and Alumni Affairs, and public health faculty and practitioners. University of Arizona Career Services 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.

Various events and services occur on an ongoing basis. Most recently, these events have included résumé writing workshops at both the undergraduate and graduate levels, and the establishment of an Alumni Panel each semester that introduces students to alumni working in various areas of public health. The Office of Student Services and Alumni Affairs consistently shares information regarding public health internships, fellowships, career opportunities through its listservs. The Assistant Dean of Student and Alumni Affairs, the Doctoral/MS Coordinator, and the Phoenix Coordinator provide individual career guidance and résumé review.

# **Student Participation on MEZCOPH Committees**

Membership on MEZCOPH committees provides students opportunities to participate in much of the college's decision making and governance process. Students are expected and encouraged to consider committee membership as a means of familiarizing themselves with college operations, faculty, and staff, and as a way to build their own leadership and collaborative skills. Students are invited to complete a Committee Membership Interest Form, on it indicating the committee(s) that they may wish to join. All attempts are made to accommodate as many committee membership requests from interested students as are received.

The Student Affairs Committee meets twice each semester. While student representatives from each Section and student services personnel comprise the Student Affairs Committee, *all* students are encouraged and invited to participate in the Student Affairs Committee.

# **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, with the exception of the Promotion & Tenure Committee and the admissions committees. In addition to the university-administered Teacher and Course Evaluations, where students are encouraged to fully access all aspects of a course, the College also administers 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.

Once each semester, the Dean hosts a "Dean's Dialogue" session for the purpose of hearing issues from the student perspective.

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

#### **Confidential Problem Resolution**

Students who are experiencing difficulties of a sensitive nature are encouraged to make an appointment with the Assistant Dean of Student and Alumni Affairs who can provide assistance and guidance or can help the student find additional resources to solve the problem. Issues discussed with the Assistant Dean are held in confidence.

#### STUDENT ORGANIZATIONS

# Public Health Student Alliance (PHSA) - Tucson

The Public Health Student Alliance (PHSA) is the primary student organization of the college. All MEZCOPH students are members of PHSA. Established in 1997 by a group of committed MPH students, the initial charge of the group was to advocate for public health issues and to promote networking of students who work or wish to work in the field of public health. Since that time, the organization has matured and has expanded its scope of interest and activities to include participation in civic health promotion events, social events, intramural sports, and service projects. In addition to fundraisers, students have organized technical assistance workshops, advocacy trainings, and a student-to-student mentorship program. Although officers are elected each year, the group has chosen to govern itself in a nonhierarchical fashion, giving each officer a programmatic area to oversee and sharing the task of meeting management. PHSA is open to all University of Arizona students who are interested in public health.

# Public Health Student Alliance (PHSA) – Phoenix

The Phoenix Public Health Student Alliance of Phoenix (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 in order to keep all students involved in the public health field who otherwise would not be able to partake in Tucson-based activities. All members in the MPH programs that are Phoenix-based are members of PPHSA, and other MPH students have the option of joining as well. The primary mission of the group is to promote student outreach in Maricopa County. Being a new organization, PPHSA is in the process of building 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.

# 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 local organizations and community service projects; facilitating discussion of global health and social justice issues and their relevance to the Southwest, and promoting internships that increase student experience in global health and multicultural interaction.

# American Industrial Hygiene Association (AIHA)

The American Industrial Hygiene Association (AIHA) at the University of Arizona is the local student section of the nationally recognized AIHA. As a member of the University of Arizona community, this club strives to promote interest in the profession of Industrial Hygiene, as well as create professional development opportunities for student members. The club provides networking opportunities for members of the Industrial Hygiene community through seminars, training opportunities, local tours, and roundtable discussions developed by the student group. Each year, AIHA at UA makes a strong effort to raise money and send as many members as possible to the American Industrial Hygiene Conference and Exposition held in early summer.

The club has a strong focus in forging solid relationships with local and national employers with an interest in developing internships, building careers, and securing donations of equipment and money for the club. In addition to professional development, the UA AIHA chapter collaborates with UA Risk Management as a service to the university and participates in student recruitment for the Environmental Health Sciences programs.

#### Student Environmental Health Sciences Association (SEHSA)

The Student Environmental Health Sciences Association (SEHSA) was formed locally in 2011. Members of SEHSA share a common interest in promoting human health by reducing exposures to biological, chemical and physical hazards present in the environment. SEHSA's mission is to engage members in discovery through environmental health research and scholarship, encourage leadership in solving complex environmental health problems, and actively promote the field of environmental health to the campus and community. Membership is open to all members of the academic community. Activities include participating in community events

(with the Pima County Department of Environmental Quality, such as "Launch the Loop" and Pima County Earth Day) and involvement with the Arizona Environmental Health Association (AZEHA) annual conference. SEHSA promotes networking opportunities for members, continues educating the public on preventing environmental exposures, and increases campus and community awareness about the field of environmental health sciences.

# Learning, Understanding and Cultivating Health Advocacy (LUCHA)

Learning, Understanding and Cultivating Health Advocacy (LUCHA) is a graduate student organization at MEZCOPH that connects students to community service opportunities in order to cultivate awareness of border health and human rights issues in the U.S.-Mexico border region.

# 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. By doing so, the organization also hopes to increase the representation of Indigenous students in public health disciplines.

#### Student Ambassadors

To aid MEZCOPH with outreach and recruitment of a diverse student body, the Office of Student Services and Alumni 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, the Tucson community, 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 AHSC-sponsored middle school and high school events
- Outreach to campus clubs and organizations
- 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 Aid for Field Epidemiology Response (SAFER)

Developed as part of an MPH internship in Fall 2004 and Spring 2005, the Student Aid for Field Epidemiology Response (SAFER) team has become a well-established organization/course within the College. The organization's goal is to provide training and infrastructure for graduate students to work with state and county public health practitioners on short-term outbreak investigations or short-term, high need problems. Training is provided through a class that covers the basics of outbreak investigations and brings in speakers who share their real world

experiences with the students. Students also attend training sessions at the state and two major county health departments. Students have assisted various agencies on multiple outbreaks since the team's creation. SAFER is now offered as a 1-3 unit credit course, EPID/CPH 596D, but must be taken for 2 units for the first semester enrolled. The course can be taken for credit up to three times.

# **University Student Organizations**

The University of Arizona has over 600 students 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.

# **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, child care, 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 their website. Each College elects a representative to serve on GPSC.

# STUDENT MANAGED EVENTS MPH Internship Conference

With minimal faculty and administrator guidance, MPH program student volunteers are responsible for planning and facilitating the college's MPH Internship Conference, held in the spring and fall semesters. This conference, to which public health professionals, university administrators, undergraduate students and the public are invited, showcases the outstanding accomplishments of MPH students in their internships and functions as an outreach event. The format of the Internship Conference is similar to that of a scientific meeting, with multiple sessions occurring at the same time. A good deal of event coordination and collaboration skills on the part of the student planning committee ensures that all details are effectively managed. In addition to selecting and inviting a keynote speaker (often a program alumnus or public health leader in the community), the students design a promotional poster, coordinate presentations, collect presentation abstracts from their peers, and format and print a conference program containing presentation abstracts. A larger group of student volunteers serves as session rehearsal coordinators, moderators, greeters and facilitators on the day of the conference.

#### **Graduate Research Poster Forum**

The MS, PhD, and DrPH programs of MEZCOPH host an annual research poster forum led by students. This event provides an opportunity for students conducting research within MEZCOPH to network with 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. Both students and faculty are encouraged to present posters. Posters are judged, and a cash prize is awarded to the best student poster.

# **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. The Social Justice Symposium engages students, faculty, health professionals, and community members in dialogue to cultivate awareness and encourage action in the pursuit of equal justice for all people in every aspect of our society. The event is entirely student-driven with support from the Zuckerman College of Public Health and numerous other sponsors.

# THE UNIVERSITY OF ARIZONA OFFICE OF SCHOLARSHIPS & FINANCIAL AID 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. Application requests for financial aid should be made in the semester prior to the anticipated funding needs. Further information can be found on the <a href="website">website</a>. The Office of Scholarships and Financial Aid can be reached by telephone at (520) 621-1858, or by email at <a href="mailto:AskAid@email.arizona.edu">AskAid@email.arizona.edu</a>.

# STUDENT FUNDING MANAGED BY MEZCOPH

The Assistant Dean of Student and Alumni Affairs manages the award process for the MEZCOPH scholarships and avenues of financial assistance listed below. A full listing of the College's scholarships, complete with criteria, application deadlines and forms can be found on the MEZCOPH Student HUB. The College's Scholarship Committee meets annually and on an ad hoc basis to select scholarship awardees. Students apply in spring semester for financial assistance for the following academic year via a Scholarship and Teaching Assistant Application. The process and timing will be announced by the Assistant Dean early in the spring semester.]

# **Graduate College Fellowship Funding**

The University of Arizona Graduate College allots MEZOCPH 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 have established and maintain at least a 3.0 cumulative GPA and be enrolled in six graduate units per semester to be eligible to retain their award.

# **Graduate College Dissertation/Thesis Tuition Scholarship**

A limited number of awards that reduce nonresident tuition to what Arizona residents pay for tuition for 1 to 6 units are available. The award excludes the mandatory registration fees and

the differential tuition. This tuition scholarship is designed to reduce the tuition for nonresident students who are within 2 years of completing their degree and only working on their thesis or dissertation research and writing. Students are eligible 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 to summer tuition. Students desiring more information about this scholarship should contact the Assistant Dean.

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

#### **MEZCOPH SCHOLARSHIPS**

The following monetary awards have been established to assist MEZCOPH students in funding their required coursework or research/internship experiences in specific areas of interest. Application materials and further information can be found on the MEZCOPH Student HUB.

# **Public Health General Scholarship Fund**

MEZCOPH has a limited, but growing, General Scholarship Fund. Students are welcome to apply for funding through the Office of Student Services and Alumni Affairs during the spring semester for the following academic year. Scholarship funds are awarded based on a variety of criteria, including financial need and academic achievement. Students apply for General Scholarship Funding on the Scholarship and Teaching Assistant Application.

# Hispanic Women's Corporation and Canyon Ranch Student Scholarship

The Hispanic Women's Corporation and Canyon Ranch have partnered to provide scholarship money to students at MEZCOPH who demonstrate an interest and commitment to serving our Hispanic populations, and whose professional goals include continuing service to those populations. Five \$4,000 scholarships are awarded annually.

#### **Russell Swanson Scholarship**

Dr. G. Marie Swanson, Founding Dean of MEZOCPH, provides two \$2,500 scholarships in memory of her late husband, Dr. Russell Swanson. This scholarship is awarded to meritorious MPH students who intend to pursue careers as public health practitioners.

#### **Maureen Mangotich Scholarship**

The family of Maureen Mangotich, MD, MPH, has provided a scholarship for full time MPH students. Generally, two Mangotich awards in the amount of \$1,000 are made each year.

# Helen and Raymond Sarocco Scholarship

The Helen and Raymond Sarocco Scholarship supports MPH students with financial need who have achieved academic excellence. Two scholarship awards of \$1,000 are made each year.

# **Elbridge and Genevieve Morrill Memorial Scholarship**

Mr. and Mrs. Elbridge Morrill established this scholarship to support academic related expenses of students in the Environmental and Occupational Health (EOH) Concentration of the MPH

Program. EOH students who are US citizens and have graduated from Arizona high schools are eligible to receive this award. Morrill Scholarship award amounts vary.

# Joel Meister Scholarship

Dr. Joel S. Meister, a founding faculty member of the University of Arizona College of Public Health, was internationally known for his work with community health workers or *promotores de salud* and the development of comprehensive disease prevention interventions focusing on community mobilization for policy change. A scholarship honoring Dr. Meister's memory was established for MPH students. The initial award of this scholarship, in the amount of \$4,000, will be made to an MPH student who demonstrates merit, significant financial need, and a commitment to public health, public service and leadership.

# Jane and Bruce Ash Scholarship

Jane and Bruce Ash of Tucson fund a \$5,000 annual scholarship for exceptional Native American students in MEZCOPH who have demonstrated a desire to work in underserved communities in Arizona after graduation. As lifelong Arizonans, the Ash family is committed to rural health care and assistance to underserved local communities. It is their hope that the students they assist at the University of Arizona will be the future leaders in health care who reach out across the state to enhance healthy living and the prevention of disease.

#### **MEZCOPH INTERNSHIP AWARDS**

# Kent and Liz Campbell International Public Health Internship Endowment

Dr. Carlos C. (Kent) Campbell, former Interim Dean of the College of Public Health and his wife, Liz, have provided an endowment that supports international (preference is Africa) internship of a fulltime MPH student who has demonstrated a commitment to public health and global health.

# **Drachman Prevention Fellowship**

The Drachman Prevention Fund was established to honor Mr. Roy P. Drachman, the founding Chairman of the College of Public Health Advisory Board and for whom the College of Public Health building is named. Mr. Drachman was involved in all aspects of community life and community building, and had a particular passion for healthy children and schools. The Drachman Fund provides fellowships to support students of public health who will further this work. A competitive award of \$1,500 is made three times a year to MEZCOPH interns and student researchers who best outline an internship or research experience designed to promote healthy behaviors, sound nutrition, and physical activity in children and/or to mentor at-risk children and youth.

#### **Nichols Initiative Scholars Fund Awards**

The Andrew W. Nichols Initiative provides funding to support internships, research experiences, and preceptorships for MPH students currently enrolled in MEZCOPH. Andrew Nichols, MD, MPH, sponsored and inspired significant positive changes to health care programs and public health policy. As a physician working in public health and as a teacher and as a member of the

Arizona Legislature, Dr. Nichols spent his entire career instigating the development of programs to benefit populations living in rural and border areas of the Southwest. This fund helps support students of public health and medicine who will further this work. Two annual awards of \$1,000 are made to MEZCOPH interns, student researchers, or student preceptors whose proposals best outline an internship, research, or preceptorship experience designed to promote policy, advocacy, or innovative service delivery in rural or border health.

#### MEZCOPH RESEARCH AWARDS

Graduate students in the MS/PhD Epidemiology and Environmental Health Sciences, PhD Biostatistics, 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, as well as on the website.

#### **TRAVEL AWARDS**

Limited funding for student travel to scientific and public health meetings is available. Priority is given to applications of students who 1) are presenting their work (e.g., posters, abstracts) at a meeting, 2) have completed a significant portion of core curriculum, and 3) have not received previous travel funding. Travel awards will not exceed \$600. The Application for Student Travel/Conference Funds is found on the MEZCOPH Student HUB. Applications are accepted by the Office of Student Services year round. Students also are encouraged to apply for travel funding through the Graduate and Professional Student Council (GPSC).

# MEZCOPH FELLOWSHIPS, RESEARCH, & TEACHING ASSISTANTSHIPS NIOSH Training Program Graduate Fellowships

MEZCOPH students studying industrial hygiene in the Environmental Health Sciences Section may be eligible for National Institute of Occupational Safety and Health (NIOSH) Training Fellowships or other financial awards. Awardees must have established and maintain at least a 3.0 cumulative GPA and be enrolled in six graduate units per semester to be eligible to retain their award.

# **Graduate Research Assistantships**

Research assistantships are often available through the research grants of MEZCOPH faculty members or from other departments on the University campus. The Office of Student Services and Alumni Affairs posts all opportunities of which it is notified on the HUB and shares this information via student listservs, as well. 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 the registration fee (in-state tuition), student health insurance, and a 10% discount at the UA bookstores.

# **Graduate Teaching Assistantships**

A limited number of MEZCOPH courses utilize teaching assistants who serve in mentoring, instruction, and administrative roles working with course instructor(s) in the classroom. TA job duties may include taking attendance, grading 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 typically provide the recipient with a waiver of outof-state tuition, partial remission of the registration fee (in-state tuition), student health insurance, and a 10% discount at the UA bookstores. For Public Health Practice students who register through the Outreach College, these assistantships typically provide a scholarship for a portion of student tuition as well as a per semester stipend or paid student employment position.

The Assistant Dean for Student and Alumni Affairs manages the TA assignment process, utilizing an equitable process that considers three important factors: 1) instructors' preferences, 2) the placement priorities established by the College, and 3) information regarding students' employment and scholarship status. Graduate students will be considered for placement as teaching assistants in the following order: 1) MEZCOPH doctoral students who are required, as part of the degree curriculum, to TA a course; 2) MEZCOPH doctoral students who have already met the TA requirement or do not have the requirement; 3) MEZCOPH master's level concentration or program students who have taken the course offered by their section that needs a TA; 4) students who have content area expertise in the course subject matter; 5) non concentration or program students who have taken the course. TA's are required to participate in Graduate Assistant and Teaching Assistant Orientations (GATO and TATO) prior to serving as a TA. International students who serve as TA's must take a speaking assessment test. 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 Scholarship and Teaching Assistant Application, speak with the course instructor early in the semester prior to the course offering, *and* notify the Assistant Dean of Student and Alumni Affairs of their interest in a particular assistantship.

Because of the limited number of assistantships and the growing number of graduate students, the demand for teaching assistantships far outweighs the positions available within the College. Efforts to equitably distribute the TA positions to qualified students require a limit to the number of times a student may serve as a teaching assistant in the College. 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.

#### STUDENT HONORS & AWARDS

# **College of Public Health Student Life Award**

The College of Public Health Student Life Award was instituted by the Office of Student Services and Alumni Affairs to acknowledge and recognize a graduating student who has made significant contributions to initiating, promoting and facilitating student activities and events across the entire college. Faculty and staff may nominate students for this award.

# **Outstanding MPH Student Award**

The Outstanding MPH Student Award recognizes a graduating student from the MPH Program who exhibits 1) outstanding academic performance, 2) outstanding internship performance, 3) commitment to MEZCOPH, and/or 4) commitment to community service. Faculty and staff members may nominate students for this award.

# **Graduate Research Poster Forum Prize**

A prize for the best student poster presented at the Graduate Research Poster Forum is awarded at the conclusion of the Forum.

# **Delta Omega**

The Alpha Nu Chapter of Delta Omega, the public health honorary society for graduate students, was established at MEZCOPH in 2002. Since then, 191 members have been inducted into the chapter. Graduating students who are academically in the top 10% of their graduating class are eligible for nomination by Delta Omega members.

#### Graduate and Professional Student Council (GPSC) Achievement Awards

Each year, during Graduate and Professional Student Appreciation Week, the GPSC recognizes graduate and professional students, staff, and faculty that have made outstanding contributions to the campus and, in particular, to graduate education. See the GPSC website for more information.

#### **Accolades Awards**

Accolades is a ceremonial salute to university excellence. The achievements of outstanding members of the UA campus community –Wildcats who have committed themselves to the University of Arizona--are recognized. The Center for Student Involvement and Leadership manages these awards, which are given in late spring semester.

#### **DEGREE COMPLETION INFORMATION**

# **Exit Survey**

The Graduating Student Exit Survey provides a mechanism for obtaining anonymous, continuous student feedback which is used by MEZCOPH to refine and adjust its operations. The perceptions of our graduating students provide valuable feedback to MEZCOPH faculty and administration.

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. Student answers are one-way encrypted, meaning that, while the computer will recognize that a student has responded, the responses will no longer be linked to the student's email address.

#### **Graduate Information Sheet**

As part of the degree completion process, students are required to complete a Graduate Information Sheet, which provides the College with the student's forwarding address and future plans, if known.

#### **MEZCOPH Convocation**

MEZCOPH hosts convocation ceremonies in May and December. Students who finish all degree requirements in spring may participate in the May convocation ceremony. Students who will not finish all degree requirements until fall semester may participate in December convocation. Bachelor's and master's degree candidates who are planning to complete their degree requirements in August may participate in either the May or December convocation ceremony. Doctoral level students may not participate in either convocation ceremony until they have successfully completed their dissertation defense.

The MEZCOPH convocation ceremony is smaller and more intimate than the UA commencement ceremony. Graduates are recognized by name and are called to the stage. Master's and doctoral level students are hooded. Students are given a limited number of tickets and may purchase additional tickets for family and friends if space permits. A reception follows the ceremony.

# **University of Arizona Commencement**

The UA university-wide commencement ceremony will only happen once each year in May. December graduates are welcome to attend the May commencement ceremony following their graduation date. Students may not attend the university-wide commencement prior to the completion of their degree from MEZCOPH. To see a when a university-wide commencement ceremony is scheduled to happen in a given academic year, please see the University of Arizona academic calendar page: <a href="http://catalog.arizona.edu/acadcals.html">http://catalog.arizona.edu/acadcals.html</a>

#### UNIVERSITY OF ARIZONA POLICIES

#### **Academic Policies**

MEZCOPH students are expected to adhere to all registration, enrollment, grading and academic policies outlined in the <u>University of Arizona Catalog</u> and <u>Graduate College Catalog</u> found on the web.

# **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 will prohibit 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 Biomedical Campus, 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 at: <a href="http://policy.arizona.edu/sites/default/files/Tobacco-Free.pdf">http://policy.arizona.edu/sites/default/files/Tobacco-Free.pdf</a>

# POLICIES GOVERNING CONDUCT, ACADEMIC INTEGRITY, & NON-DISCRIMINATION University of Arizona Student Code of Conduct

The 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 in order 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.

# **University of Arizona Code of Academic Integrity**

Integrity and ethical behavior are expected of every 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 <u>Code of Academic Integrity</u>, 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.

# University of Arizona Policy on Disruptive Behavior in an Instructional Setting

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 <u>Disruptive Behavior in an Instructional Setting Policy.</u>

# **University of Arizona Policy on Threatening Behavior by Students**

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 one's self. Threatening behavior can harm and disrupt the University, its community and its families. Please review the full description of the <u>UA Policy on Threatening Behavior</u>.

# University of Arizona 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 anyone who believes he or she has 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 <a href="UA Non-Discrimination">UA Non-Discrimination and Anti-Harassment Policy</a>.

# College of Public Health Matriculation and Progress 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 he or she has been admitted. A student's performance against these standards will be assessed during

annual academic progress reporting or at any time during his or her 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 and included in orientation packets.

#### **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 note that deficiency on the Admission Recommendation Form and 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 on their letter of admission. No student with academic deficiencies may hold a Graduate College 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.

# **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 <a href="UAccess Student Center">UAccess Student Center</a> under the GradPath option. Students must sign the statement before they are able to access their Plan of Study and other Graduate College forms.

# **Satisfactory Academic Progress**

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) grade point average (GPA). Failure to maintain a B average will result in dismissal from the program. If a student is in danger of falling

below a 3.0 GPA, he or she should contact the MPH or Doctoral/MS Programs Coordinator 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. See below for academic probation information.

#### 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 submit a written plan of action to the Graduate College. Graduate students who are on probation for two consecutive semesters will be converted to non-degree status by the Graduate College. Students who have been converted to non-degree status may again apply for admission to the program as early as the semester after their conversion to non-degree status, if they achieve a cumulative grade point average of at least 3.0 through additional graduate coursework. 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.

# **Incomplete Grades**

The grade of I (for Incomplete) may be awarded with the instructor's concurrence only near the end of a term, when all but a minor portion of the course work has been satisfactorily completed. The incomplete grade will not be awarded in place of a failing grade or when the student is expected to repeat the course; in such a case, a grade other than incomplete must be assigned. Students must make arrangements with the instructor to receive an incomplete grade before the end of the term and will not automatically receive an incomplete simply because all course requirements were not met.

The course instructor will determine the conditions of the incomplete grade and set a date for completion of all required assignments at any point within the year following the end of the course. Those conditions will be outlined on a Report of Incomplete Grade form, which serves as a contract between the student and the instructor. The Report of Incomplete Grade form will be kept on file in the Office of Student Services and Alumni Affairs until the conditions for completion have been met. When the instructor notifies the Office of Student Services and Alumni Affairs that the work has been completed, a Change of Grade form will be submitted for the course. If assignments are not completed, incomplete grades convert to "E" (Failure) on the last day of classes of the same semester, one year after the incomplete grade was awarded. Students will not be permitted to graduate until all incomplete grades are cleared.

#### **Academic Leave of Absence**

Academic Leave of Absence (i.e., leaves to take course work 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. Under extraordinary circumstances, LOAs may be granted retroactively for up to one year. Students will be readmitted without reapplying to the department and the Graduate College. 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 academic services or facilities available to the general public can be used during the LOA.

#### **Personal Leave of Absence**

Graduate students in degree programs 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. LOAs may be granted retroactively for up to one year. LOAs are granted on a case-by-case basis for compelling reasons including birth or adoption of a child, personal or family reasons, medical reasons, military duty, or financial hardship. Students will be readmitted without reapplying to the department and the Graduate College at the expiration of the LOA. 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 academic 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.

Failure to obtain a Leave of Absence or remain in continuous enrollment will result in penalties, as described in the <u>Continuous Enrollment</u> policy requirements. The Leave of Absence form is found on the <u>Graduate College Forms page</u>.

# **Lapse in Enrollment**

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. A Graduate College Admissions Application and Domicile Affidavit must be completed online. Note that per Graduate College policy, the student may be required to pay retroactive registration for all missed semesters.

# **Graduate College Petitions**

Students may petition the Graduate College if extenuating circumstances have prevented their compliance with any University or Graduate College policies and procedures. The student must complete the Petition Form and submit it to the Graduate College through MEZCOPH's MPH Coordinator or Doctoral/MS Programs Coordinator. The petition should explain all relevant facts. Such petitions must be accompanied by supporting documents (e.g., medical justification) and a letter of support from the Faculty Mentor/Advisor and/or the Chair of the Section. Petitions concerning a course must have the instructor's signature as well.

# **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.

# **Registration and Payment Deadlines**

Registration for UA courses can be accomplished using the <u>UAccess Student Center</u>. 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 Services and Alumni Affairs cannot negotiate the removal of late fees. It is advisable that initially a student should pay for the number of units that she/he anticipates taking, even though the schedule may change later.

When changing the course schedule following the first registration and payment deadlines, the student must always drop and add at the same time. Failure to do so will result in late registration fees levied by the university.

# Registration and Payment Deadlines for Public Health Practice and Health Services Administration Students

For students enrolled in the MPH in Public Health Practice and Health Services Administration programs, registration occurs by contacting the <u>UA Outreach College</u>. To register for courses, please call 1-800-955-8632 or 520-621-7724. You will need your Student ID number, as well as the course numbers, titles, and sections you would like to register for. Payment for courses will also occur through the Outreach College.

#### Fieldwork and Enrollment

Many students undertake field work in support of independent study, 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.

#### **UA International Travel Procedures**

All students planning an internship or research project or completing a course outside of the United States must register their itinerary and complete the *Travel Description Questionnaire* in the University International Travel Registry – <a href="http://ua-risk.terradotta.com">http://ua-risk.terradotta.com</a>, as soon as your travel is known. At least 30 days prior to travel students must complete the Travel Authorization (TA) and obtain necessary signatures. Submit all original paperwork to FCO-Operations Travel Office, USB 402, P.O. Box 210158. Submit a copy of the Travel Authorization to the MPH Coordinator with the Internship paperwork.

#### **Campus Health and Student Health Insurance**

The University of Arizona offers one major medical health insurance policy designed specifically for eligible University of Arizona students and their dependents. This policy provides coverage

nationwide and has an emergency benefit worldwide. The University of Arizona's <u>Campus</u> Health Service serves as a primary care provider for the enrolled students.

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, cancelled, or changed through <a href="UAccess Student Center">UAccess Student Center</a> only during an "Open Enrollment" period, unless one qualifies for a prorate. When the insurance is ordered you are ordering a specific amount of time.

#### **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 <u>exemption</u>. 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.

#### 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 insure that the conclusions are appropriate for the scientific hypotheses.

Biostatistics differs from statistics in that it is more application oriented, whereas statistics is more focused on mathematical theory. Epidemiology (another discipline of public health) relies heavily on 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 statistical 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.

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 epidemiologic 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 and epidemiology 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 thesis or dissertation). All of 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 thesis 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 to PhD 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 a Thesis or Dissertation Research Director. A good student tends 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 his/her 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 appreciate it, 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, 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. Encourage the student to identify his/her own professional path,
- 5. Excellent communication skills,
- 6. Advertise the student's work with full attribution,

- 7. Commitment to plan work-load management with the student, and
- 8. Support for 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 her/his 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 Section Chair; s/he can work with you to identify an eligible advisor that fits your interests and career goals. If the student changes his/her Faculty Advisor, a MEZCOPH Notification of Advisor/Mentor Change, found on the MEZCOPH Student HUB, needs to be completed and submitted to the Doctoral/MS Programs Coordinator 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 her/his graduate career. As the student advances through the program, and more precisely defines her/his direction, s/he may ask a different faculty member to serve as 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:

<u>Faculty Advisor:</u> Serves as the student's initial academic advisor. This person <u>may</u> also become the student's Thesis or Dissertation Research Director if an appropriate relationship exists between the student's research 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 section.

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 tenured, tenure-equivalent, or tenure-track. This person's responsibility is to assure that the student meets the requirements of the Biostatistics program and the University. For the PhD students, he or she 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 a tenured, tenure-equivalent, or tenure-track position, then another Biostatistics faculty member must be identified to serve as the Chair of the Graduate Committee.

<u>Thesis or Dissertation Research Director:</u> 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.

<u>Doctoral/MS Programs Coordinator:</u> Serves as the student's point of contact in the MEZCOPH Office of Student Services and Alumni Affairs. The Doctoral/MS Programs Coordinator communicates MEZCOPH and Graduate College policies and procedures to students and will receive the students' paperwork for processing within MEZCOPH and the Graduate College. The Doctoral/MS Programs Coordinator also works with the Section Chairs and the Assistant Dean of Student and Alumni Affairs to coordinate the activities and operations of the doctoral and MS programs.

<u>Mentor(s)</u>: 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 <u>may</u> also be the Faculty Advisor or become a Thesis or Dissertation Research Director if an appropriate relationship exists between the student's research topic and the faculty's areas of interest.

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.

<u>PhD Committees:</u> 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 <u>Comprehensive Examination Committee</u>, and
- (2) The <u>Dissertation Committee</u> (Note: see the hyperlinks for Graduate College policy regarding committee composition.)

During their second year in the program, the student selects members for his or her Graduate Committee 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 her/his 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 her or his 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 Biostatistics program faculty who meets all <u>Graduate College</u> 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 section faculty.

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 Doctoral/MS Programs Coordinator. In addition, the student must notify the Graduate College of the committee membership by filing a Comprehensive Exam Committee Appointment Form (found on the <u>UAccess Student Center</u> 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 his/her comprehensive exams. See page 43.)

MS Committee: After selection of a research topic for the thesis, the student selects faculty members for a Master's Thesis Research Director and Committee, in consultation with his/her Faculty Advisor. The Thesis Research Director 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 Thesis Research Director believe an outside member can contribute to the student's thesis, the person can serve once approved by the Biostatistics section faculty and the Graduate College.

Each Thesis Research Committee must be approved by the Biostatistics Section Chair and the Graduate College. Information about the Graduate College policy can be found <a href="here">here</a>. The student gets electronic approval by completing the MS Committee Appointment Form found on the <a href="UAccess Student Center">UAccess Student Center</a> under the GradPath option.

## **Continued Program Progress and Annual Progress Report**

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

Students are required to prepare an Annual Progress Report that describes their progress and accomplishments for the previous academic year. This report is completed on the MEZCOPH Student HUB early in the spring semester of each year; the Office of Student Services and Alumni Affairs notifies students of the process and deadlines related to the Annual Progress Report. In a timely manner, the student is responsible for completing the report, printing a copy, and making an appointment to review the report with their Faculty Advisor (or Chair of their Graduate Committee). After this meeting, the student should take the signed report to the Doctoral/MS Programs Coordinator. The Doctoral/MS Programs Coordinator forwards these reports to the Section Chair with an attached summary report citing cumulative GPA and courses completed to date. 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 Advisor. These students are at risk for potential dismissal from the program.

The section faculty review the reports, completion of required coursework and course grades, and timeliness of progress. When issues are identified, the section faculty will provide recommendations, including whether a student will be allowed to continue for the following year.

A copy of the Annual Progress Report with faculty recommendations will be kept in the student's file in the Office of Student Services and Alumni 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 his or her Faculty Advisor.

## **Human Subjects Approval for Dissertation/Thesis Research Projects**

# **Human Subjects Training and Certification**

All doctoral and master of science students must obtain Human Subjects training and certification during their first semester in the program. This training may be obtained through the UA Internal Review Board (IRB) website. All students must complete the training whether their proposed dissertation or thesis research project involves human subjects or not.

#### Human Subjects Approval of Project

All studies involving human subjects or creation or use of Protected Health Information (PHI) must be reviewed and approved in advance by the UA Human Subjects Protection Program in the Office for the Responsible Conduct of Research to determine if the research plan adheres to regulations of the Health Insurance Portability and Accountability Act (HIPAA), passed by Congress in 1996.

Each research project must be reviewed by the Dissertation or Thesis Director to establish whether the project involves human subjects or Protected Health Information (PHI), and if so, determine which human subjects protection form to submit for approval. If the study involves human subjects, the project must have Institutional Review Board (IRB) approval. If the project

will require a full review, by one of the IRB Review Committees, additional time must be built into the dissertation project timeline.

In coordination with the UA Human Subjects Protection Program, the MEZCOPH Research Office has developed the following three options for seeking IRB approval of the doctoral research project. Each student should review these options in consultation with their Dissertation or Thesis Director to determine the best approach to achieving project approval.

- 1) IRB-F309 Human Research Determination Form: If the project involves human subjects but might not be considered "human research", such as a program evaluation or quality improvement project, the student should complete the IRB (F309) Human Research Determination (HRD) form. It is against Federal regulations to conduct research involving human subjects without prior IRB approval. Projects which do not involve human subjects, such as curriculum development, do not require IRB approval. IRB approval is only required when human subjects are involved and the project is considered "human research." This form (F309) helps you determine whether your project meets the federal definition of research involving human subjects. This form must be completed and must be signed by the student, the student's Dissertation or Thesis Director, and a member of the MEZCOPH Scientific Review Committee and/or Associate Dean for Research. The F309 HRD Form can be found here: http://orcr.arizona.edu/hspp/forms and must be submitted initially to the MEZCOPH Research Office/Suzanna Trejo (suzanna@email.arizona.edu). Once a pre-review is conducted, the form is then submitted to the MEZCOPH Scientific Review Committee for review and approval and once approved there, the student will be informed via email by the MEZCOPH Research Office of the approval.
- 2) Previously IRB Approved Form (MEZCOPH-created form): If the project has been previously approved by the IRB committee, and the student's proposed research will not go beyond the scope of the original approval (in other words, the student will only be conducting activities which were already approved), then, at the discretion of the project's PI, the student may be added to the currently ongoing study via a F109 Amendment of Key Personnel (VOTF) form, which needs to be completed and submitted by the project PI. This form can be found under "Amendments" here: http://orcr.arizona.edu/hspp/forms.

The student will complete the MEZCOPH-created form: "Declaration of Proposed Student Project as Previously IRB-Approved Form," which can be found on the MEZCOPH Hub. Submission of this form must be supported by a signature from the original PI, and documentation of the UA (or other agency's) IRB approval and verification that the student submitting the form has been included as a named participant. This is via approval of the submitted Amendment/Modification form. With this Previously Approved MEZCOPH form, the following attachments should be included:

- 1) A copy of the original IRB approval with original VOTF page OR
- 2) A copy of the newly submitted F109 VOTF Amendment/Modification.
- 3) CITI completion report

Students turn this completed form and attachments to the Doctoral/MS Programs Coordinator in the Office of Student Services and Alumni Affairs.

# 3) IRB-VPR Approval Process:

When a proposed research project includes human subjects or protected health information and has not been previously approved, then the appropriate IRB application must be submitted through the MEZCOPH Research Office. First, all students should complete the F309 Human Research Determination form to see whether or not their project will be considered "human research" or not. If they get a "yes" this is human research answer on the F309, then they should complete the appropriate IRB form, which can be found here http://orcr.arizona.edu/hspp/forms. Most students will complete either the F200 Application for Human Research Form or the F203 Application for Retrospective Records Review. If the Human Research involves only the review of records (e.g. medical, educational, office and/or secondary analysis of identifiable data), then complete the F203. If the student will receive deidentified data/records for a secondary analysis and does not nor will not have access to the original identifiers, then they should complete the F309 Human Research Determination form.

When the student has completed their IRB form for their project and has had it reviewed and approved by their Dissertation or Thesis Director it must initially be sent to (1) the MEZCOPH Research Office for a preliminary review. (Don't pay attention to the instructions at the end of the IRB form, which says the PI should submit directly to the VPR-IRB Office!!) If the form is complete and the appropriate signatures are obtained, then the form is forwarded on by the Research Office to (2) the MEZCOPH Scientific Review Committee for review and approval. Once approved, it is then sent back to the Research Office for official submission to (3) the VPR-IRB Office, who will then give/send the final and official approval to the PI of the project.

# Planning Ahead for Proper Approval

It is the student's responsibility to plan ahead and seek the necessary IRB approval and complete the associated documents. The student must plan far enough in advance to complete the IRB approval process prior to her/his desired research start date. Although there is no set timeframe for IRB approval, the student should plan approximately 2-4 weeks at the MEZCOPH level and then approximately 6-9 weeks (approximately three months) once received by the UA Office for the Responsible Conduct of Research/Human Subjects Protection (HSPP/IRB/VPR Office). Questions about the process should be discussed with Suzanna Trejo-Robinson in the MEZCOPH Research Office. Suzanna can be reached at suzanna@email.arizona.edu.

#### 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 analyses. 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 or equivalent) is strongly recommended. Applicants for the PhD in Biostatistics with a Master's degree in biostatistics, statistics, or applied mathematics will be given preference for admission and financial support. To the extent possible, the curriculum of each student will be tailored to his or her background and interests.

For complete information about University of Arizona Graduate College policies for PhD students, please see the <u>Graduate College website</u>.

#### **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 also provides an opportunity to meet the other students.

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

#### **PhD Course Requirements**

The PhD course requirements are determined by the Biostatistics section. See the MEZCOPH Academic Catalog found on the College's website for further details of the specific course requirements and schedule. 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 Section Chair.

#### **Doctoral Plan of Study**

In collaboration with the Faculty Advisor, each student is responsible for developing a Doctoral Plan of Study during her or his 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 <u>UAccess Student Center</u>, 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 course work to be completed to fulfill degree requirements (excluding dissertation units which are not listed on the Plan of Study). The Plan of Study must have the approval of the Faculty Advisor, the Biostatistics Section Chair, 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 coursework as specified in the Plan of Study, completion of the dissertation research proposal and comprehensive exam begins.

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 page 22), 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 section.

Per Graduate College <u>policy</u>, 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. Credit for correspondence courses or extension work from other institutions will not be accepted for graduate credit. Grades of transfer work will not be used in computing the student's gradepoint average.

The student must apply to transfer credit during the first semester of the PhD program. The student's first step is to make an appointment with his/her 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 of the Biostatistics section.

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 <a href="UAccess Student Center">UAccess</a> 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 section 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 Doctoral/MS Programs Coordinator. 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/Research Units Registration Policy**

All students who wish to enroll in independent study (CPH 599/699) and/or research units (CPH 900) must complete an Independent Study and Research Unit 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 independent study and/or research, 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 (this is the person who is responsible for overseeing the student's work and assigning credit) and Faculty Advisor, s/he turns it in to the Doctoral/MS Programs Coordinator who will register 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. Typically, at least one faculty member from the minor serves on the student's Graduate Committee, although this number may be modified by the graduate faculty responsible for the oversight of the minor and by the student's Graduate Committee. Declaration of the minor(s) will be made on the Doctoral Plan of Study.

With committee 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 her/his 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 Section 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, 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") after their first year of study. The exam is designed to insure that students have the necessary background to continue with more advanced doctoral level 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 fall 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 (CPH/EPID 576A)
Biostatistics for Research (CPH/EPID 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 (1990). Statistical Inference. Wadsworth & Brooks/Cole.

Hogg RV, Craig A and McKean JW (2004). Introduction to Mathematical Statistics. Prentice Hall.

Rosner BR (2011). Fundamentals of Biostatistics. Seventh Edition. Brooks/Cole.

Vittinghoff E, Glidden DV, Shiboski SC, McCulloch CE (2005). Regression Methods in

Biostatistics: Linear, Logistic, Survival, and Repeated Measures Models. Springer.

The exam is administered in two parts over two consecutive days. The first day centers on the Theory section and is closed-book (no notes). The second day centers on the Application section; one page of notes (two-sided) is allowed.

Students who do not pass the Qualifying Exam are allowed to re-take the exam when it is offered the next year. These students are encouraged to meet with their Faculty Advisor and the Biostatistics Section Chair to determine appropriate steps to improve their performance. Students who do not pass the Qualifying Exam after two tries may not continue in the PhD program.

# **Annual Progress Report**

All doctoral students are required to complete an Annual Progress Report. Please see page 32 for further information.

#### **Continuous Enrollment for Doctoral Students**

According to Graduate College <u>policy</u>, doctoral 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.

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, s/he will be required to apply for readmission, to pay the Graduate College application fee, and pay all overdue tuition and fees, including cumulative late penalties. Tuition or registration waivers cannot be applied retroactively.

Table 1. Minimum units required by full- and part-time status.

	Full-time Status without assistantship	Full-time Status with assistantship	Part-time Status (has implications for financial aid and visa status)
Doctoral student	9	6	3*
Doctoral candidate with all degree requirements met except for final defense (completed all coursework listed on plan of study, passed comps, and completed the required 18 dissertation units)	3*	6	1*

<sup>\*</sup>International students should work with the International Student Office to get special endorsement for this minimum number of units.

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

Once a doctoral candidate has completed the minimum 18 dissertation units, they may consider enrolling in 3 units (to remain full-time) or 1 unit (to remain part-time) of CPH 920/Dissertation during their final semester(s) in the program. Part-time students need to be aware that there are implications for financial assistance, loan repayment, and/or visa status.

# **Residence Requirement**

To meet the minimum Graduate College <u>residence requirement</u>, the student must spend two regular semesters of full-time work or complete a minimum of 30 units of graduate credit in residence at the University of Arizona (18 units of dissertation plus 12 units of regular graded coursework taken 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.

## **Required Teaching Experience**

All PhD students are expected to serve as a Graduate Teaching Assistant for at least one biostatistics course. The student arranges this experience with the Biostatistics Section Chair in collaboration with the Assistant Dean for Student and Alumni Affairs. There are limited teaching assistantship opportunities so the student should begin planning early in the program how s/he will fulfill this requirement. 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, held each semester.

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 page 17 for additional information about teaching assistantships.

# **PhD Graduate Committees**

See page 31 for information on the composition of the PhD Graduate Committees.

#### **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 her/his 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 Doctoral/MS Programs Coordinator with an electronic copy of the proposal attached. The Doctoral/MS Programs Coordinator 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 his/her 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. Both written and oral comprehensive examinations must take place within two consecutive semesters. The student's Graduate Committee requests the student to prepare for a comprehensive examination when approximately 85% of the course requirements are met, 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. This milestone will be reviewed by the Student Progress Committee for evidence of academic progress. The student's Graduate Committee can petition the Biostatistics section faculty for extension.

# 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 will 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 student is dismissed from the program and notified of this decision in writing by the Associate Dean for Academic Affairs.

# 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 <u>Graduate College</u> 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.
- Presence of a senior faculty member who is not on the committee to manage the exam.
   Each doctoral program will have a list of faculty members who are available to serve in this role.

The Biostatistics section will 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 Section Chair 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 Section Chair and the Associate Dean for Academic Affairs. Committee members' schedules must accommodate the entire scheduled exam period. The student also needs to notify the Doctoral/MS Programs Coordinator. If needed, the Doctoral/MS Programs Coordinator 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 <u>UAccess Student Center</u> under the GradPath option. This form completion notifies the Graduate College of the date and time of the exam.

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 student is dismissed from the program and notified of this decision in writing by the Associate Dean for Academic Affairs.

Once the student has successfully passed their comprehensive exams, they transition from a doctoral 'student' designation to a doctoral 'candidate' designation. In light of this status change, charges will be added to the student's Bursar's account. These charges are for degree candidacy and dissertation processing and archiving. A copyrighting fee is optional. Check the <a href="Graduate College website">Graduate College website</a> prior to your anticipated completion to determine the charge amount.

#### **Time Limitation**

Per Graduate College <u>policy</u>, 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, s/he may be allowed to re-take 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, teaching requirements, 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 the three faculty members representing the major. See page 31 for more information.

The Dissertation Committee Appointment form is found on the <u>UAccess Student Center</u> under the GradPath option. The Dissertation Director reviews and approves the electronic form on behalf of the Committee. In addition, the Section Chair 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 CPH/EPID 920

dissertation units. Students enroll in these units by contacting the Doctoral/MS Programs Coordinator.

#### Dissertation

The PhD dissertation should involve innovative research and demonstrate a sophisticated command of biostatistical methodology. If the research involves human subjects, even if it involves secondary data analysis, the student must have IRB approval before starting on this work. It is the responsibility of the student in consultation with the Dissertation Research Director to obtain the approvals. See page 33 for more information on the Human Subjects approval process.

The Biostatistics section faculty currently approves two dissertation formats: a standard dissertation or a three-paper format. The Dissertation Committee must 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 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.

#### 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 Doctoral/MS Programs Coordinator 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 <u>UAccess Student Center</u> 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 <u>specific semester deadlines</u>.

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 must take the final draft of the dissertation and three printed Approval Pages to the final defense for the Dissertation Committee members to sign.

The student needs to assure that all Dissertation Committee members can attend the final examination. The student also must inform the Biostatistics Section Chair and the Associate Dean for Academic Affairs. Members of the Graduate Committee from the minor department have the option to attend or not. 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 reexamination 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.

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 <u>electronic submission site</u> at the Graduate College website and must meet all Graduate College requirements. The student is also required to provide bound and letter copies of the dissertation to the Biostatistics Section Chair, Dissertation Research Director, Doctoral/MS Programs Coordinator, and if requested, to the other Graduate Committee members.

The UA Dean of the Graduate College certifies that the candidate has fulfilled all requirements for the Doctorate 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 section in MEZCOPH. A total of 15 course credits are required, as well as the successful completion of written and oral questions during the PhD comprehensive exam. See the MEZCOPH Academic Catalog 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 Section Chair 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 Doctoral/MS Programs Coordinator to request the form). The form is reviewed and approved by the Biostatistics faculty through the Section Chair. The form must be filed with the MEZCOPH Doctoral/MS Programs Coordinator 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 section. Biostatistics Minor Advisor/Committee Members may formulate questions for the written and oral comprehensive examinations.

#### **Transfer of Credits**

Graduate credit earned at other approved institutions may be counted towards fulfilling the requirements of the PhD minor in Biostatistics, if approved by the Minor Faculty Advisor, the faculty of the Biostatistics section, and the student's Graduate Committee. Two forms must be completed in addition to the ultimate incorporation on the Plan of Study: The MEZCOPH Course Substitution form (see page 38) 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 (see page 37).

#### THE MS IN BIOSTATISTICS PROGRAM

The Masters 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 applied biostatistical 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 thesis research.

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.

#### **MS Course Requirements**

The MS course requirements are determined by the Biostatistics section. See the MEZCOPH Academic Catalog found on the College's website for further details of the specific course requirements and schedule. The overall course of study will be developed by the student, the Faculty Advisor, and the Master's Thesis Committee, and approved by the Biostatistics Section Chair.

#### 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 course work to be completed to fulfill degree requirements. The Plan of Study form is completed on <u>UAccess Student Center</u>, under the GradPath option. The Plan of Study must have the approval of the Faculty Advisor and the Biostatistics Section Chair. As stated under the GradPath description (see page 22), 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. Credit for correspondence courses or extension work from other institutions will not be accepted for graduate credit. Grades of transfer work will not be used in computing the student's grade-point average.

In the MS program, a total of 12 units of graduate credit earned as an undergraduate senior (if not used toward the undergraduate degree), 12 units of graduate non-degree status, or 20% of the required credits from an accredited institution, can be applied for credit toward a master's degree. Non-degree seeking credits plus transfer credits may not total more than 12 credits. Up to 8 additional graduate credits, if earned while enrolled in a University of Arizona approved post-baccalaureate graduate certificate program, may also be applied toward a master's degree.

The student must 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 on the Plan of Study: The MEZCOPH Course Substitution form (see page 38) 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 (see page 37).

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**

The MEZCOPH Course Substitution form is used to evaluate the course for content and appropriateness within the Plan of Study. Please see page 38 for further information.

# **Independent Study/Research Units Registration Policy**

All students who wish to enroll in independent study (CPH 599/699) and/or research units (CPH 900) must complete an Independent Study and Research Unit Registration Form (found on the MEZCOPH Student HUB) before they can be registered for the units. Please see page 38 for further information.

## **Annual Progress Report**

All graduate students are required to complete an Annual Progress Report. Please see page 32 for further information.

## **Continuous Enrollment for MS Students**

According to Graduate College <u>policy</u>, MS students must register each Fall and Spring semester for a minimum of units from original matriculation until all degree requirements are met.

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 in order to remain in the program. If the student fails to maintain continuous enrollment or obtain a Leave of Absence, s/he will be required to apply for re-admission, to pay the Graduate College application fee, and pay all overdue tuition and fees, including cumulative late penalties. Tuition or registration waivers cannot be applied retroactively.

Minimum units required by full- and part-time status:

	Full-time Status without assistantship	Full-time Status with assistantship	Part-time Status* (has implications for financial aid and visa status)
MS student	9	6	3*
MS student with all degree requirements met except for final defense (completed all coursework listed on plan of study and completed the required 6 thesis units)	3*	6	1*

<sup>\*</sup>International students should work with the International Student Office to get special endorsement for this minimum number of units.

If the degree program requirements are to be completed in the summer, the student must register for a minimum of 1 unit of graduate credit in either Summer I or Summer II. If not graduating in the summer term, graduate 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.

Once a MS student has completed the minimum 6 thesis units (and all other coursework), they may consider enrolling in 3 units (to remain full-time) or 1 unit (to remain part-time) of CPH 910/Thesis during their final semester(s) in the program. Part-time students need to be aware that there are implications for financial assistance, loan repayment, and/or visa status.

# **MS Thesis Committee**

After selection of a research topic for the thesis, the student selects faculty members for a Master's Thesis Committee, in consultation with the Faculty Advisor. See page 32 for more information on the composition of the Thesis Committee.

#### **Thesis**

A thesis is required for the MS degree. Prior to initiating the research for the thesis, the student must submit a "prospectus" to their Thesis Committee, outlining her or his 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 on this work. It is the responsibility of the student in consultation with the Thesis Research Director to obtain the approvals. See page 33 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.

#### **Oral Defense of Thesis Research**

The MS student is required to complete a formal defense of the thesis research in a public seminar, followed by an oral examination by the candidate's Thesis Committee. The examination can be no more than one hour duration. The exam must be held prior to "reading day" in any given semester and prior to August 5th for any expected summer graduation. At least fifteen working days before the defense, the student should be in touch with the Doctoral/MS Programs Coordinator to schedule a MEZCOPH classroom and to publicize the open portion of the defense.

#### **Time Limitation**

Per Graduate College <u>policy</u>, 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.

## **Completion of Master's Requirements**

After addressing comments on the thesis from the Thesis Committee and obtaining final approval for the written thesis, the student prepares the final copies of the thesis. Bound and lettered copies are to be delivered to the Biostatistics Section Chair, the Thesis Research Director, the Doctoral/MS Programs Coordinator, and the other Thesis Committee members (if they request it).

Per Graduate College policy, after all requirements are met by the student, the student should notify the Doctoral/MS Programs Coordinator via email (copying the Thesis Director and Faculty Advisor). The Doctoral/MS Programs Coordinator 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 <u>Graduate College deadlines</u> 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.