

**DEPARTMENT OF  
SOCIAL AND PREVENTIVE  
MEDICINE**

**GRADUATE STUDENT  
HANDBOOK**

**2010-2011**



<http://sphhp.buffalo.edu/spm>  
(click on Current Students)

## SOURCES OF INFORMATION

Below are the websites for forms referred to in subsequent sections and checklists.

Graduate School Web Site: [www.grad.buffalo.edu](http://www.grad.buffalo.edu)

Documents:

*Graduate School Policies and Procedures Manual:* [www.grad.buffalo.edu/policies](http://www.grad.buffalo.edu/policies)

Graduate Faculty List: [www.grad.buffalo.edu/academics/facultyroster/roster.cgi](http://www.grad.buffalo.edu/academics/facultyroster/roster.cgi)

*Guidelines for Electronic Thesis/Dissertation Preparation and Submission:* [www.grad.buffalo.edu/etd](http://www.grad.buffalo.edu/etd)

Forms: [www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)

*Application to Candidacy Form (ATC)*

*Amendment to ATC*

*Certification of Full-Time Status Form*

*Graduate Student Exceptional Registration Form*

*Graduate Tuition Scholarship Form*

*Extension of Time Limit for Degree Completion*

*Leave of Absence*

Department Web Site: <http://sphhp.buffalo.edu/spm>

Forms:

*Abstract Form*

*Dissertation Committee Approval Form*

*Independent Study Form*

*Outside Reader Appointment Form (Ph.D. only)*

*Outside Reader Approval Form (Ph.D. only)*

*Thesis Committee Approval Form*

MPH Program Field Training Web Site: [http://sphhpbuffalo.edu/mph/program/field\\_training\\_guidelines.php](http://sphhpbuffalo.edu/mph/program/field_training_guidelines.php)

Forms:

*Form 1 Confirmation of Field Training*

*Form 2 Early Review of Field Training*

*Form 3 Field Site Mentor's Evaluation of the Field Training*

*Form 4 Student Evaluation of the Field Training*

*Form 5 Waiver Request for Field Training Based on Previous Public Health Experience*

*Time Record*

*Checklist for Students*

*Checklist for Faculty Advisors*

Student Response Center Web Site: [www.src.buffalo.edu](http://www.src.buffalo.edu)

*Academic Calendar*

*Class Schedule*

*MYUB*

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## **MISSION OF THE DEPARTMENT**

The Department of Social and Preventive Medicine is involved in research, teaching and service to understand the determinants of disease, how disease can be prevented and how best to implement this knowledge to improve public health. The Department offers a course of study leading to the following degrees: Ph.D. in Epidemiology, M.S. in Epidemiology, and an M.P.H. degree in the following concentrations: Epidemiology, Environmental Health, and Health Services Administration.

Training in epidemiology includes the study of epidemiologic research methods, biostatistics, and survey methods. In addition, training focuses on understanding the biological, behavioral, social, and organizational determinants of disease and outcomes. We offer training at the Ph.D., M.S. and M.P.H. levels. Epidemiologists work in a variety of settings such as academic and government research; public health agencies at the local, state, national, or international level; health care delivery systems such as hospitals and managed care organizations; private research firms; and industry.

In addition to epidemiology, the Department of Social and Preventive Medicine provides graduate training (MPH) in environmental health and health service administration. Training in environmental health focuses on an understanding of sources and physiologic effects of physical, chemical, and biologic agents that invade the environment. Training includes advanced level training in risk assessment, air pollution, water pollution and food toxicology. This program prepares students to work in public health in governmental agencies, academic settings, and non-profits focused on the environment and health. The Health Services Administration concentration prepares students in program planning and health policy who wish to focus on careers in health policy development or administration and evaluation of health programs in government, health agencies, as well as a variety of other settings such as non-profit health agencies, public health advocacy organizations, hospitals, or health maintenance organizations.

## **RESEARCH AND PROFESSIONAL CONDUCT**

The diversity of faculty interest areas allows for many opportunities for research. All graduate students are expected to be actively involved in research throughout their educational experience. The University and department hold standards for professional conduct (see Warning on Plagiarism).



### **WARNING ON PLAGIARISM**

DO NOT simply cut-and-paste information from the world wide web or anywhere else and insert it into your papers/reports/assignments without giving proper acknowledgement. The following can be found at this web site: <http://www.ub-judiciary.buffalo.edu/art1.shtml>

“15. The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.”

The following can be found at this web site: <http://www.ub-judiciary.buffalo.edu/art3a.shtml>. Students should read all information regarding plagiarism and the judiciary process outlined on these websites. It is the expectation of this department that the standards outlined in this manual and in the University websites are maintained.

**Academic Dishonesty.** The development of intelligence and strengthening of moral responsibility are two of the most important aims of education. Fundamental to the accomplishment of these purposes is the duty of the student to perform all of his or her required work without illegal help.

**Academic Integrity at UB Means:** "The University has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect for others' academic endeavors. By placing their name on academic work, students certify the originality of all work not otherwise identified by appropriate acknowledgments."

(Adapted from University of Wisconsin, "Student Disciplinary Guidelines," and University of Delaware, "Academic Comment Honesty and Dishonesty.")

A. The following actions constitute major forms, but not exclusively all forms, of academic dishonesty among students: (a) submission: submitting academically required material that has been previously submitted in whole or in substantial part in another course, without prior and expressed consent of the instructor; (b) plagiarism: copying or receiving material from a source or sources and submitting this material as one's own without acknowledging the particular debts to the source (quotations, paraphrases, basic ideas), or otherwise representing the work of another as one's own; (c) cheating: receiving information, or soliciting information, from another student or other unauthorized source, or giving information to another student, with the intent to deceive while completing an examination or individual assignment; (d) falsification of academic materials: fabricating laboratory materials, notes, reports, or any forms of computer data; forging an instructor's name or initials; resubmitting an examination or assignment for reevaluation which has been altered without the instructor's authorization; or submitting a report, paper, materials, computer data, or examination (or any considerable part thereof) prepared by any person other than the student responsible for the assignment; (e) procurement, distribution or acceptance of examinations, laboratory results, or confidential academic materials without prior and expressed consent of the instructor.

Additional information can be found at:

[Dartmouth College: What is Plagiarism?](http://www.dartmouth.edu/~sources/about/what.html)

([\*http://www.dartmouth.edu/~sources/about/what.html\*](http://www.dartmouth.edu/~sources/about/what.html))

[Plagiarism: What It is and How to Recognize and Avoid It](http://www.indiana.edu/~wts/wts/plagiarism.html)

([\*http://www.indiana.edu/~wts/wts/plagiarism.html\*](http://www.indiana.edu/~wts/wts/plagiarism.html))

## INTRODUCTION

This handbook is intended to provide information for all matriculated graduate students in the Department of Social and Preventive Medicine (SPM). These guidelines are meant to highlight important rules and procedures of the Department and also pertinent University regulations. However, all students are also responsible for knowing the general rules and procedures described in the University's ***Graduate School Policies and Procedures Manual*** ([www.grad.buffalo.edu/policies](http://www.grad.buffalo.edu/policies)). Generally the procedures, policies and course requirements in effect at the time of matriculation will apply throughout the student's degree program. However, the department reserves the right to amend its regulations and procedures when necessary and grant students the right to petition the amendments in individual cases. Students will be notified if and when regulations and procedures are amended, modified or otherwise changed.

**All students should activate and use their university email for university-related correspondence. Students are responsible for all information distributed via email.** Notices, announcements and cancellations are routinely posted through the Department's listserve.

Students are assigned mailboxes located in Room 265 Farber Hall. Items of general interest are also posted on the bulletin board outside Room 265.

### Checklist:

- ✓ **STUDENTS ARE RESPONSIBLE FOR ALL INFORMATION DISTRIBUTED VIA EMAIL. Check your UB email daily and notify the Department if there is a change in your email address.**
- ✓ Check your student mailbox (Room 265) regularly.
- ✓ Notify both the Department and the Student Response Center (<http://src.buffalo.edu>) when there is a change in your home address and/or telephone number.
- ✓ Notify the Department when there is a change in your work address and/or telephone number.
- ✓ International students should report their social security number to the Department as soon as a number is assigned by the Social Security Administration.

## ADVISEMENT

All students are assigned an academic advisor to assist in planning a program to meet their educational goals and to answer questions relating to graduate studies and career planning. The academic advisor will assist the student until all course work is completed and he/she chooses a major professor to chair their Ph.D. dissertation committee, M.S. thesis committee, or MPH integrative project. All administrative questions should be directed to the Graduate Program Coordinator.

Students are expected to consult with their advisor prior to registration each semester. Failure to do so could result in a student not fulfilling the requirements necessary for degree conferral. Students should schedule appointments with their advisor, taking into consideration faculty's time constraints or availability, and university deadlines. Students who have not completed ALL degree requirements and submitted all necessary paperwork will not be allowed to participate in the commencement ceremony.

If for any reason a student wishes to change advisors, he/she must submit their request in writing to the Director of Graduate Studies (a copy must also be sent to the current advisor). Changes will be made only with the approval of the new advisor. The department will try to accommodate all student requests.

## ABSTRACT SUBMISSION

Students intending to submit abstracts to professional meetings must obtain written approval from their advisor PRIOR to submission. All abstracts must include a full citation of authorship.

## **GRADUATE STUDENT TRAVEL AWARD**

The *Robert O'Shea Student Travel Award* was established in honor of Robert O'Shea, Ph.D., Associate Professor Emeritus, who served from 1977-1997 as the first Director of Graduate Studies in the Department of Social and Preventive Medicine.

Students requesting financial assistance to present their research at professional meetings must first seek funding from their advisor or faculty mentor. If funding is not available, students may submit a written request to the Department's Finance Committee for a *Robert O'Shea Travel Award*. Since funds for student travel are limited, and the travel award must be approved PRIOR to submitting an abstract, it is important to submit requests for funding well in advance of abstract submission deadlines.

**Important:** Original receipts are required to receive reimbursement. All students should see the Secretary to the Chair *prior to incurring expenses* to discuss and review the University and Departmental policies regarding travel. The department cannot cover items such as tax, liquor, or upgrades (hotel, air, transportation). Each student will be required to meet with the Secretary to the Chair to review policies.

Funding is NOT guaranteed and depends on availability of funds in the department and the number of requests received in any one year.

### *Student Travel Request Application Checklist*

- ✓ One request per student per academic year (July 1 – June 30). Maximum allowable per year: PhD-\$500; MS and MPH-\$200.
- ✓ Students must present either a poster or oral presentation.
- ✓ Presentations must be related to research associated with the student's degree while in the Department of SPM.
- ✓ Students must submit an application in writing to the Finance Committee PRIOR to submitting an abstract. The application must include:
  - ✓ Name
  - ✓ Co-authors
  - ✓ Title and abstract
  - ✓ Mentor name (mentor needs to co-sign the request or send support letter)
  - ✓ Meeting details (conference, location, dates)
  - ✓ Meeting/abstract information website
  - ✓ List of expected expenses
- ✓ Funds can be used to cover meeting registration, transportation, hotel accommodations and per diem according to the rules/regulations set forth by the University at Buffalo.
- ✓ All presentations and posters should be acknowledged (UB SPM logo). SPM should be the primary affiliation listed (along with RPCI when applicable).
- ✓ All presentations and posters must be approved by the student's faculty mentor before presenting.

A copy of the presentation or poster must be submitted to the department (small color version).

## **SAXON GRAHAM RESEARCH AWARD**

The *Saxon Graham Research Award* provides funds to support research activities undertaken toward the completion of a doctoral dissertation. In order to be eligible students must be doctoral candidates in the Ph.D. in Epidemiology Program who have successfully passed the preliminary exam. Awarded funds may be applied toward research activities such as participant recruitment, clinical specimen analysis, or travel to meet with collaborators. Funds must be spent according to University at Buffalo guidelines. A lump sum of funds will not be given to the



awardee. Instead, staff from the Department will work with the awardee to procure items or plan travel, as needed, and according to the awardee's proposed budget. The Department issues a Call for Applications each year.

Call for Applications Materials Checklist

- ✓ Specific aims (NIH format): maximum of two single-sided pages detailing study rationale and study aims
- ✓ Biosketch (NIH format)
- ✓ Budget and budget justification: maximum of two single-sided pages detailing proposed expenditure of Award funds

## **SAXON GRAHAM AWARD**

The *Saxon Graham Award* was established in 1997 to honor the excellent leadership provided by Saxon Graham, Ph.D., Professor Emeritus and Chair of the Department of Social and Preventive Medicine from 1981-1991. Awards are made at the annual Saxon Graham Lecture to a doctoral student who has demonstrated excellence throughout his/her academic career. In order to be eligible, students must gather epidemiologic data fairly extensively during their career (i.e., primary data collection), either for their dissertation or other epidemiologic purpose, and be nominated by their major professor, committee member, or other faculty in the Department. Only those students who meet the criteria can be nominated. The topic of the dissertation should include epidemiology and the prevention of disease, and is not limited to cancer. Selection for the award is made by an Awards Committee established by the Department's Education Committee.

## **TUITION SCHOLARSHIP**

Ph.D. students who are awarded a graduate assistantship may be eligible for a tuition scholarship.

- University tuition scholarship is limited to a maximum of 72 credit hours and/or a time limit of eight semesters for Ph.D. students. The limit also includes those semesters/credits of tuition support a student may have received while enrolled in another degree program or department at UB, regardless of whether or not those credits are applied to their current degree program.
- The tuition scholarship may not be used to offset the tuition costs associated with any course that will not be applied to the degree.
- Credit hour limits do not represent entitlements to tuition scholarship support for the specified number of credit hours. The limits refer to the total number of credit hours applied to the degree regardless of whether those credit hours consist of transfer credits, unsupported credit hours, credit supported from other sources, or any combination thereof.
- The scholarship does not cover credit hours taken during the summer semester or courses which are repeated.
- Students are responsible for all comprehensive and activity fees, and also for waiving the University health insurance if they are covered by an outside carrier. These fees are not covered by the tuition scholarship.

Master's students may also be eligible for tuition scholarship if they are funded on a grant and are appointed as a graduate or research assistant, and only if there are funds available in the grant to pay for tuition. The tuition scholarship limit for M.S. students 33 credit hours and/or a time limit of four semesters; for MPH students the credit hour limit is 49 credits and/or a time limit of four semesters.

Students eligible for tuition scholarship must complete a ***Graduate Student Scholarship Verification Form*** for the full academic year, both Fall and Spring semesters. The deadline for continuing students is early May, new

students must file by mid-August. Determination of eligibility for a tuition scholarship is made each semester and is limited by funding availability. Students who are not New York State residents, but are eligible to become residents, are required to do so as soon as possible, but no later than one year after their initial appointment.

**Student Employee Health Insurance.** Students receiving graduate assistantships are eligible to enroll in the State Student Employee Health Insurance Plan (SEHP). Domestic students who meet eligibility requirements may choose between the University's mandatory student health insurance plan or the SEHP. FI visa holders must enroll in the state sponsored plan. Students choosing to enroll in SEHP must enroll within 30 days of the effective date of their appointment. Enrollment sessions are held each Fall semester.

*Tuition Scholarship Checklist:*

- ✓ complete Section A of the ***Graduate Student Scholarship Verification Form***
- ✓ indicate the number of credit hours in Section C for both Fall and Spring semesters
- ✓ **forward to the funding supervisor to complete and sign Section C**
- ✓ forward to the Program Coordinator within the required deadline
- ✓ enroll in SEHP (if applicable)

## **PROGRAM REGULATIONS**

### **REGISTRATION**

All students are required to consult their advisor prior to registration, and to register at the beginning of each Fall and Spring semester according to the procedures and within the deadlines established by the Student Response Center. This includes semesters in which formal courses are taken, as well as semesters in which a student is working on their thesis/dissertation/project. No credit will be allowed for work done without proper registration. It is important that students verify their registration each semester before the last day of drop/add week. Courses dropped after the deadline will be assessed a tuition penalty.

Students who do not maintain continuous registration (without explicit approval for a leave of absence) are considered having left the University and will be dropped from the program (see section on Leave of Absence and Re-Entry to the Program).

**Registration Deadlines.** The registration timetable, course offerings and class schedules are posted on the Student Response Center's (SRC) web site ([www.src.buffalo.edu](http://www.src.buffalo.edu)). Continuing students may take advantage of early registration by registering in November for the Spring semester and April for the Fall semester. Registration is continuous through the last day of drop/add. In order to avoid a late registration penalty, continuing students must register before the University's first billing in the third week of July (for Fall) and early December (for Spring). Check the SRC website for dates.

*Registration Checklist:*

- ✓ verify registration before the add/drop deadline each semester

**Auditing Courses.** A student wishing to audit a course must officially register for the course. The student must also submit a written request to the instructor by the fourth week of class. The instructor's decision will be final and will be transmitted to the student in writing. A copy of the approval must also be forwarded to the department for the student's file. A student may re-register for the course at a later date and receive a grade and academic credit for work completed in the re-registered course.

**Course Resignations.** All course resignations processed *within the official deadlines* will be indicated as officially resigned by the notation 'R' on grade reports, transcripts, and other official University documents. There are no quality points attached to an 'R' designation. Resignation from all courses should be done by filing a **Graduate Student Exceptional Registration Change Form** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)).

Course Resignation Checklist:

- ✓ complete the **Exceptional Registration Change Form**
- ✓ obtain signature of course instructor(s) indicating approval of the resignation(s)
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School)

**Requirements for Full-Time Status.** Students must be registered for a minimum of 12 credit hours each Fall and Spring semester, (or a minimum of 9 credit hours per semester if appointed as a graduate, teaching or research assistant) to be considered full time.

- Full-time registration is a necessary condition of appointment for an assistantship and/or tuition scholarship.
- International students must maintain full-time registration as a condition of their student visa.
- Ph.D. students must fulfill a residency requirement of at least two consecutive semesters (Fall/Spring, Spring/Fall) where full-time registration is maintained (not including summer semesters).

**Certification of Full-Time Status.** Students who are required to maintain full-time status for the purpose of tuition assistantship/scholarship, loan deferral or immigrant status may be certified as full time when registered for less than 12 graduate credit hours (or 9 credit hours if appointed as a graduate, teaching or research assistant) ONLY if the following conditions have been met:

- ✓ all coursework has been completed
- ✓ student has maintained full-time status since matriculation in the program
- ✓ registration will include a minimum of one credit hour per semester
- ✓ student is engaged in full-time research on their thesis/dissertation/project
- ✓ the **Application to Candidacy Form** (ATC) has been completed and signed by all committee members NOTE: It is NOT required that the proposal be defended at this time. Attachments to the ATC are also not required at this time.

Certification must be requested using the **Certification of Full-Time Status** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)). Students must be registered for the semester in which they are filing. A PHOTOCOPY of the ATC signed by the student and all committee members should be attached to the **Certification of Full-Time Status Form** and forwarded to the Program Coordinator. Do not submit the original ATC. The student should retain the original ATC to present at their proposal defense. (See section on Application to Candidacy.)

Ph.D. students are required to file only once during their studies provided they register for the same number of credit hours each semester. If the number of credit hours change from the previous semester, or if the date of degree conferral has changed, the student must file an updated **Certification of Full-Time Status Form**. M.S./M.P.H. students can only be approved for a maximum of two semesters. If additional time is needed, the student must submit a new form along with a written request and progress update from their advisor/major professor.

Certification of Full-time Status Checklist:

- ✓ complete the **Certification of Full-Time Status Form**
- ✓ obtain signature of advisor/major professor
- ✓ attach a PHOTOCOPY of the ATC form signed by all committee members
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School)

**Continuous Registration.** Both full-time and part-time students must register each Fall and Spring semester for a minimum of one credit hour until all degree requirements are met (including the final defense of the thesis/dissertation/project). A zero credit course, (i.e., SPM 590 Departmental Seminar) does not fulfill the requirement for continuous registration. If a student is not on an approved leave of absence and fails to register for a semester, they are considered having left the University and must reapply to the program in order to re-enter. Re-applications must also include a detailed timeline for completion of the degree. The Department reserves the right to accept or deny readmission, and to determine what prior course work can be applied to the degree. Therefore, it is important to maintain continuous registration. Re-admitted students are subject to all policies in effect at the time of re-application.

- Students must register for a minimum of one credit hour in the semester following an approved leave of absence and in the semester of degree conferral.
- Students must be registered in the semester they defend their thesis/dissertation or present their integrative project. They may not be on a leave during the semester the degree is conferred. If a leave of absence terminates at the end of the Spring semester, registering for a minimum of one credit hour for the summer session is required for a September degree conferral.

NOTE: No credit will be allowed for work done without proper registration.

## **LEAVE OF ABSENCE**

Requests for a leave of absence must be negotiated through the Director of Graduate Studies using the **Graduate Student Petition Form** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)) and forwarded to the Graduate School at least two weeks prior to the start of the semester in which the leave is to begin. Typically, leaves of absence are approved for a maximum of one year, but may be extended for up to one additional year if circumstances warrant.

- The Graduate School will not approve a leave of absence for 'personal reasons,' you must be specific and present strong justification for your request.
- The Graduate School will not approve a leave of absence if a student is not in good academic standing.
- Students may not petition for a leave of absence after the leave has occurred.
- Students returning from a leave of absence are considered re-entering students and must be re-instated by the department in order to register (see section on Re-Entry).

NOTE: If a student is not on an approved leave of absence and fails to register for a semester, they are considered having left the University and must reapply to the program in order to re-enter. Therefore, it is important to maintain continuous registration. Re-entering students are subject to all policies in effect at the time of re-application. Re-applications must also include a detailed timeline for completion of the degree. The Department reserves the right to accept or deny re-admission, and to determine what prior course work can be applied to the degree.

### Leave of Absence Checklist:

- ✓ complete **Graduate Student Petition Form**
- ✓ obtain signature of major advisor
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School) at least two weeks prior to the start of the semester

**Re-Entry.** When a student returns from an approved leave of absence he/she must request in writing to have their status reactivated by the Department. This request should be made a minimum of two weeks before the start of the semester. Students will be unable to register for courses until their status has been reactivated.

### Re-entry Checklist:

- ✓ request in writing to have status reactivated by the Department

## **GRADUATE COURSE CREDIT**

**Graduate Course Credit** is granted only for 500, 600 and 700 level courses provided proper registration requirements are met.

**Undergraduate Courses for Graduate Credit** requires prior petition and approval by the Dean of the Graduate School. **Graduate Student Petition Forms** are located on the web ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)). The petition must be filed at the time of registration and before the end of drop/add week. A maximum of two undergraduate courses at the 400 level may be taken for graduate credit. All 400 level undergraduate courses that carry four or more credit hours will receive a maximum of three credit hours of graduate credit.

### *Undergraduate Courses for Graduate Credit Checklist:*

- ✓ complete ***Graduate Student Petition Form***
- ✓ provide justification for request
- ✓ obtain signature of course instructor
- ✓ include description of extra work required provided by the course instructor
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School)

## **TRANSFER CREDIT**

Each graduate program determines the applicability of graduate courses offered for transfer credit. Only those graduate courses completed at an accredited or recognized institution of higher education with a minimum grade of 'B' (3.0) are eligible for consideration for transfer credit. Courses with 'S' or 'P' grades are not transferable unless the transcript specifically states they are equivalent to a 'B' or higher grade.

International transcripts with numerical grades or grades of 'excellent' or 'good' must also include a grading scale documenting the grade is equivalent to a B or higher grade. This documentation should be obtained from the university where the courses were taken. Transcripts must also include the number of credit hours earned for each course. Credits earned in correspondence or undergraduate courses may not be transferred.

Requests for transfer credit should be made at the first opportunity after admission to the program and within the first semester of study. Students requesting approval for transfer credit should make their request in writing to the Director of Graduate Studies and provide a justification of how the course(s) relate to the student's program. A copy of the course outline and a brief description of each course must also be provided.

A maximum of 6 credit hours of graduate work may be transferred for the M.S., a maximum of 10 credit hours may be transferred for the MPH, and a maximum of 36 credit hours acquired in a relevant master's degree program may be transferred to the Ph.D. Thesis guidance and research credits are not transferable. The University's 10-year time limit for each course will be considered for each course request (see section on Age Limit for Prior Coursework).

During a student's matriculation in the program, courses taken outside the Departments of SPM, Biostatistics, Health Behavior, RPCI Natural Sciences or RPCI Cancer Prevention and Control Programs must first be approved by the Director of Graduate Studies.

Transfer Credit Checklist:

- ✓ make request in writing to the Director of Graduate Studies
- ✓ provide a brief rationale of applicability for each course
- ✓ provide course outline(s) and description(s)
- ✓ if the request is made for courses taken at an international university, the request must include an English translation with letter grades and credit hours, and a grading scale if no letter grades are available

**Policy on Transfer of Credit for Required Courses.** Students requesting transfer credit for the following required courses taken outside the University (SPM 501, SPM 502, SPM 505) must take and pass (B or higher grade) an examination in order to have these course credits transferred.

**Age Limit for Prior Coursework.** All coursework (whether transfer or UB credits) taken more than 10 years ago must be approved by the Director of Graduate Studies and petitioned to and approved by the Graduate School at the time of admission to the program. If these credits are included in an approved extension of time limit petition, they are valid only until the expiration date of that petition. Any further extension of the approved time limit for degree completion will require, concurrently, a re-petition for approval of these older courses. Requests for approval of courses more than 10 years old must be petitioned through the Graduate School by completing the **Graduate Student Petition Form** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)). Appropriate justification of how the course(s) relate to the student's program and how the student has kept current with the subject matter of each course must be provided.

Prior Coursework Checklist:

- ✓ complete **Graduate Student Petition Form**
- ✓ attach original official transcript for courses not completed at UB
- ✓ attach letter explaining how you have kept current the knowledge gained from the course(s)
- ✓ attach up-to-date CV or resume
- ✓ obtain signature of advisor/major professor
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School)

## **INDEPENDENT STUDY (SPM 599)**

This course is available as an elective when appropriate to the student's educational goals. Students must receive approval from both their supervising faculty and the Director of Graduate Studies. Students must provide their supervising faculty with a copy of the **Description of Informal Course Work Form** (<http://sphhp.buffalo.edu/spm>) (click on Current Students) which includes information in the checklist below. The form is signed by both student and supervising faculty and forwarded to the Director of Graduate Studies for approval a minimum of two weeks prior to the drop/add deadline. When approved, the student will be force registered into the course by the Department. A copy of the approved form is returned to the student. The **Description of Informal Course Work Form** must be appended to the **Application to Candidacy** when filed (see section on Application to Candidacy.)

Independent Study Checklist:

**Description of Informal Course Work Form** should include:

- brief summary of the goals and objectives of the independent study
  - syllabus outlining activities to be carried out such as literature review, data analysis
  - tangible mechanism for assessing student performance, e.g., test, term paper or a grant proposal
  - ability to demonstrate that the independent study includes an amount of effort equivalent to the number of credits requested, such as number of contact hours per week with faculty mentor
- ✓ Submit form to the Director of Graduate Studies a minimum of two weeks prior to the drop/add deadline

NOTE: the student will be force registered upon approval of the Director of Graduate Studies

## **DUAL MASTER'S DEGREES**

It is possible for graduate students to complete a program leading to two master's degrees at the same time. The integrity of each degree must be observed by completing a minimum of 24 credit hours uniquely applied for each degree, no more than 6 credit hours may be applied to both programs. In some programs, the curriculum may contain required courses that are common to both programs. Such required courses may be counted for both degree programs.

In cases where one or more specific courses are explicitly required by both programs (i.e., not merely as acceptable electives), such courses are considered "shared courses" and will be the first courses counted toward the 6 credit hour limit.

The required courses that are common to both the M.S. and M.P.H. degree programs and may be counted toward both degrees include:

SPM 501 Principles of Epidemiology (4 credits) (all M.P.H. concentrations)

SPM 505 Introduction to Biostatistics (4 credits) (M.P.H. Epidemiology concentration)

STA 527 Introduction to Medical Statistics (4 credits) (M.P.H. Environmental Health and Health Services concentrations)

SPM 502 Advanced Methodology (3 credits) (M.P.H. Epidemiology concentration)

SPM 506 Biostatistics II (4 credits) (MPH Epidemiology concentration),

## **STUDENT GENERAL PROGRESS REPORTS**

All students are required to schedule a meeting with their advisor at the end of each academic year to review their academic progress and complete their Student General Progress Report. This review is designed to develop a program most suitable for each student, to discuss their coursework and plans for upcoming registration, and to advise a student of any deficiency in their progress toward degree conferral. All first-year students will also have their academic progress evaluated after their first semester of enrollment in the program. Students receive a copy of their progress report for their review and signature. Students who fail to meet with their advisor to complete their General Program Report will have a check stop issued and will not be able to register for the following semester.

## **ACADEMIC PROGRESS**

Students must maintain at minimum an overall 'B' average (3.0) and achieve a grade of 'B' (3.0) in each required course. NOTE: 'B-' (2.67) is below the minimum grade for required courses.

**Academic Deficiency.** Students who achieve a B- or less grade in **one** required course:

- will be notified by letter that they will be placed on *academic deficiency*
- must retake the course within one year and achieve a B (3.0) or higher grade
- may continue to take courses, including required courses, only with permission of the instructor

**Academic Probation.** Students who achieve a B- or less grade **in more than one** required course, who receive a grade of 'U', 'D' or 'F' in any course required for completion of the degree program, whose cumulative GPA falls below 3.0, or who indicates a lack of ability as determined by the program faculty:

- will be notified by letter that they will be placed on *academic probation*
- must retake each course within one year and achieve a B (3.0) or higher grade
- may continue to take courses, including required courses, only with permission of the instructor

**Academic Dismissal.** Students receiving three grades lower than B- in any courses (either required or elective), including courses which have been repeated, and/or students who have two consecutive semesters with less than an overall B average (3.0) will be dismissed from the program.

NOTE: Students are allowed only one opportunity to retake a course. Students who fail to achieve a B or higher grade at the end of their deficient/probation will be dismissed from the program.

### **Repeating Required Courses:**

- Students who retake a course must officially register for it. Students are allowed only one opportunity to retake a course.
- Students are responsible for the tuition for repeated courses even if they are currently receiving a tuition scholarship.
- The grade and semester from the repeated course will be reported on the ***Application to Candidacy Form*** and will be used to certify that a student has met the minimum B grade requirement.
- The initial grade will remain on the student's transcript and all courses registered for (including repeated courses) will be used in calculating the student's GPA .

## **GRADES**

All students are responsible for verifying their grade reports each semester and reporting any discrepancy to their course instructor.

### **Grade Options.**

- **S/U** - students electing to receive an S/U grade must inform the instructor in writing by the fourth week of the semester, or the letter grade system will prevail. If the instructor approves the request, a copy of the approval must be sent to the Department for the student's file. An S grade will be awarded only in those instances where a student's letter grade would be C or better.
- **S** - not allowed for required courses. S grades are assigned for thesis/dissertation guidance, field training and integrative project.
- **N** - denotes an audit grade.
- **R** - indicates the student officially resigned from the course within the official University deadline.
- **L** - may be assigned for thesis/dissertation guidance, field training or integrative project courses where continuing work is to be indicated instead of a final grade. L grades automatically convert to S grades at degree conferral.



- **J** - denote an invalid grade (i.e., no grade submitted). Students should immediately contact the professor to validate their grade or the J will default to an F grade at the end of the following semester. Students will not be approved for degree conferral with outstanding J grades on their transcript.

### **Incomplete Grades.**

- may be assigned only when the student has been unable to complete all the assigned projects and/or examinations in a course due to illness or other unforeseeable and compelling circumstance. Such circumstance must be communicated to the instructor as soon as known, but no later than the last day of class of the semester during which the course is taken.
- cannot be assigned when a student has not attended the class.
- not an option to students who have not satisfactorily completed other academic requirements of the course.
- cannot be assigned for thesis/dissertation guidance.

If an 'I' is assigned, a letter grade must be assigned within two semesters (May 31 of the following year for the Spring semester, August 31 of the following year for the summer semester, and December 31 of the following year for the Fall semester.) If the course requirements are not completed by the deadline, the 'Incomplete' will automatically default to an 'Unsatisfactory' 'U' grade.

Individual instructors may set their own conditions for removing 'I' grades providing the time limit is not longer than specified by the University. Each instructor must clearly state such policy if it differs from that of the University. If there is a valid reason for waiving the deadline for removing an 'Incomplete' grade, the student may petition the Graduate School prior to the deadline using the **Graduate Student Petition Form** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)).

*Incomplete Grade Checklist:*

- ✓ be sure to verify the change of grade has been made in the Student Response Center

# MASTER OF PUBLIC HEALTH (MPH)

## COURSE REQUIREMENTS

Candidates for the M.P.H. degree must complete 49 credits for degree conferral.

### **Required Courses for All Concentrations:**

- SPM 501 Principles of Epidemiology (4 credits)
- SPM 505 Introduction to Biostatistics (4 credits) (Epidemiology concentration)
- STA 527 Introduction to Medical Statistics (4 credits) (Environmental Health and Health Services concentrations)
- SPM 507 Health Care Organization (3 credits)
- HB 501 Study of Health Behaviors (3 credits)
- SPM 533 Principles of Public Health (3 credits)
- SPM 535 Biological Basis of Public Health (3 credits) (*waived for students with a health professions background*)
- SPM 549 Environmental Health (3 credits)
- SPM 554 Occupational Health (3 credits) (required only for Preventive Medicine Residents)
- SPM 591 Public Health Seminar (0)
- SPM 544 Master of Public Health Field Training (6 credits)
- SPM 630 Master of Public Health Integrative Project (3 credits)

In addition to the above:

### **Required Courses for the Epidemiology Concentration:**

- SPM 502 Advanced Methods (3 credits)
- SPM 506 Application of Statistics to Epidemiology (4 credits)

### **Electives for the Epidemiology Concentration:**

SPM 509, 511, 513, 515, 519, 534, 551, 552, 554, 604, 605, 614, 618, 622, PTR 525

### **Required Courses for the Environmental Health Concentration:**

- STA 506 Introduction to Statistical Computing (3 credits)
- PMY 626/627 Toxicology Principles and Practice (4 credits)
- SPM 649 Advanced Environmental Health Sciences (3 credits)
- SPM 650 Environmental Toxicology and Risk Assessment (2 credits)

### **Electives for the Environmental Health Concentration:**

- SPM 534, 537, 551 or 552, 554, 615, 626, GEO 506

### **Required Courses for the Health Services Administrative Concentration:**

- SPM 523 Introduction to Program Planning and Evaluation (3 credits)
- SPM 530 Administrative Theory and Practice for Public Health Practitioners (3 credits)
- SPM 543 Public Health Practice (3 credits)

### **Electives for the Health Services Administration Concentration:**

- SPM 529, 536, 537, 538, 539, 542, 632, STA 506

With permission of the Director of Graduate Studies, students may take a course outside their concentration area if relevant to their future career plans.

**EXAMPLE TWO YEAR COURSE SEQUENCE BY CONCENTRATION AREA**

<b>EPIDEMIOLOGY</b>	
<b>Year 1: Fall Semester</b>	<b>Year 1: Spring Semester</b>
Core Courses SPM 501 Epidemiology Principles (4) SPM 505 Introduction to Biostatistics (4) SPM 507 Introduction to Health Care Organization (3) <i>or</i> SPM 535 Biological Basis of Public Health (3) HB 501 Study of Health Behaviors (3) SPM 591 Public Health Seminar (0)	Core Courses SPM 502 Advanced Methodology (3) SPM 506 Biostatistics II (4) SPM 533 Principles of Public Health (3) SPM 549 Environmental Health (3) SPM 591 Public Health Seminar (0)
<b>Year 2: Fall Semester</b>	<b>Year 2: Spring Semester</b>
Core Courses SPM 507 Introduction to Health Care Organization (3) <i>or</i> SPM 535 Biological Basis of Public Health (3) SPM 544 Field Training (6)  Concentration Area Courses One/two epidemiology elective(s) (3/6)	Core Courses SPM 630 Integrative Project (2)  Concentration Area Courses Two/three epidemiology electives (6/9)

<b>ENVIRONMENTAL HEALTH</b>	
<b>Year 1: Fall Semester</b>	<b>Year 1: Spring Semester</b>
Core Courses SPM 501 Epidemiology Principles (4) SPM 507 Introduction to Health Care Organization (3) <i>or</i> SPM 535 Biological Basis of Public Health (3) STA 527 Introduction to Medical Statistics (4) HB 501 Study of Health Behaviors (3) SPM 591 Public Health Seminar (0)	Core Courses STA 506 Introduction to Statistical Computing (3) SPM 533 Principles of Public Health (3) SPM 549 Environmental Health (3) SPM 591 Public Health Seminar (0)
<b>Year 2: Fall Semester</b>	<b>Year 2: Spring Semester</b>
Core Courses SPM 507 Introduction to Health Care Organization (3) <i>or</i> SPM 535 Biological Basis of Public Health (3) SPM 544 Field Training (6) SPM 649 Advanced Environmental Health Sciences (3) SPM 650 Environmental Toxicology and Risk Assessment (2) PMY 626/627 Toxicology Principals and Practice (4)	Core Courses SPM 630 Integrative Project (2)  Concentration Areas Courses Two environmental health electives (6)

<b>HEALTH SERVICES ADMINISTRATION</b>	
<b>Year 1: Fall Semester</b>	<b>Year 1: Spring Semester</b>
Core Courses SPM 501 Epidemiology Principles (4) SPM 507 Introduction to Health Care Organization (3) <i>or</i> SPM 535 Biological Basis of Public Health (3) STA 527 Introduction to Medical Statistics (4) HB 527 Study of Health Behaviors (3) SPM 590 Graduate Seminar (0)	Core Courses SPM 533 Principles of Public Health (3) SPM 543 Public Health Practice (3) SPM 549 Environmental Health (3) SPM 590 Graduate Seminar (0)  Concentration Area Courses One health services administration electives (3)
<b>Year 2: Fall Semester</b>	<b>Year 2: Spring Semester</b>
Core Courses SPM 507 Introduction to Health Care Organization (3) <i>or</i> SPM 535 Biological Basis of Public Health (3) SPM 523 Introduction to Program Planning & Evaluation (3) SPM 530 Administrative Theory and Practice for Public Health Practitioners (3) SPM 544 Field Training (6)	Core Courses SPM 630 Integrative Project (2)  Concentration Areas Courses Two health services administration electives (6)

**NOTE; Field training hours may also be completed during the summer semester**

## **DEGREE REQUIREMENTS**

The M.P.H. degree requires a minimum of 49 credit hours (unless a student is waived from required course work). Students must maintain a minimum overall GPA of 3.0 and a minimum grade of 'B' (3.0) in all required courses. Note: B- (2.67) is below the minimum grade for required courses.

**Public Health Seminar.** SPM 591 Public Health Seminar is a required course for all first year students. All students must register for and attend the weekly seminars. The course will be assigned an S/U grade. Students are allowed two unexcused absences per semester.

**Time Limit to Complete the Degree.** The time limit for obtaining the M.P.H. degree is FOUR years from the date of first registration in the degree program, excluding official leaves of absence.

**Extension of Time to Complete the Degree.** Students unable to complete the M.P.H. program within the time limit must petition the Graduate School for an extension of time to complete the degree provided there exists adequate reason to justify such a request. The Graduate School will not approve an extension for 'personal reasons,' you must be specific and provide strong justification for your request. Students must provide a detailed description of work completed to date, a detailed month-to-month timeline for completion of the project/degree, and a written endorsement from the advisor/major professor. Requests for extensions should be made at least two weeks prior to the start of the semester. ***Graduate Student Petition Forms*** are available at [www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms).

**Extension of Time Checklist:**

- ✓ complete ***Graduate Student Petition Form***
- ✓ obtain signature of advisor/major professor
- ✓ attach written statement indicating:
  - cause of the delay
  - detailed description of work completed thus far
  - detailed month-to-month plan of work to be completed
- ✓ attach written endorsement from advisor/major professor
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School)

**Project Committee.** With the advice of their advisor the student will select a project committee which includes a Major Professor who is a member of the UB Graduate Faculty; and one additional Committee Member who holds the rank of assistant, associate or full professor at the University to supervise work on their integrative project. A list of eligible Graduate Faculty is available at the Graduate School website [www.grad.buffalo.edu/academics/facultyroster/roster.cgi](http://www.grad.buffalo.edu/academics/facultyroster/roster.cgi)

**Application to Candidacy.** The ***Application to Candidacy (ATC)*** is a document that includes a summary of courses to be applied toward a degree. The filing of this document is required at least one semester before degree conferral. The ATC is available at [www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms). Once the ATC has been approved, a student is not required to enroll for 12 credits to be considered full time provided they submit a ***Certification of Full-Time Status Form***. (See section on Certification of Full-Time Status).

Be sure to refer to the Application to Candidacy Checklist on the following page.

Application to Candidacy Checklist:

- ✓ Complete (type) Parts 1-7.

Part 1 Degree Program: Public Health and concentration area

Part 2a: The Department will attach original transcripts for the baccalaureate degree, if required.

Part 4: All courses must be listed in chronological order. If an intended course(s) and/or credit hours change, the student must complete a **Graduate Student Petition Form** to amend the ATC ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)).

Part 5: If you have taken courses which will not be applied to the MPH degree, attach an unofficial UB transcript and cross out course(s) which will not be applied. Course credits must total 49 (including waived, transferred and future credits).

Part 6: All courses must be listed in chronological order. If transcripts were submitted at the time of application to the program, the department will attach.

Part 7: Student signature and signatures of the Major Professor and Committee Member are required (the student is responsible for obtaining signatures). Original signatures are required. ATCs submitted without all signatures will be returned to the student.

Submit to the Program Coordinator for Director's signature.

NOTE: name and signatures for Academic Dean, Divisional Committee and Graduate School do not need to be completed by the student.)

- ✓ If Independent Study courses are submitted for the degree, attach the approved **Description of Informal Graduate Course Work Form(s)**
- ✓ If required, attach copies of approved **Graduate Petition Forms** for leaves of absence or extension of time to complete the degree
- ✓ Submit the completed ATC to the department **no later than FOUR weeks before the Graduate School's official deadline**. Deadlines are:

September 1 for a February degree conferral

February 1 for a June degree conferral

June 1 for a September 1 degree conferral

**\*Read Carefully:** The Application to Candidacy (ATC) form must be submitted to the Department a minimum of FOUR weeks before the Graduate School deadline. This will allow time to be reviewed by the Director of Graduate Studies and Associate Dean before it is forwarded to the Graduate School. Incomplete ATCs will be returned to the student. If the ATC form is not submitted one month prior to the deadline, the department cannot guarantee it will be reviewed and approved in time for the student to graduate as planned.

**Integrative Project.** In addition to the required and elective courses, all M.P.H. students must complete an integrative project (SPM 630). The project will take the form of a written document completed during the concluding semester of the students' program. Students are encouraged to work on their project throughout the course of their program. Examples of integrative projects include analysis of a public health problem, designing a program implementation, or writing a research grant, community service grant, or program evaluation proposal. The project will conclude with a student presentation of their integrative project.

**Integrative Project Proposal.** Students are required to submit a 150 word summary of their *proposed* integrative project. The summary must be approved and signed by the student's Major Professor and submitted to the Director of Graduate Studies by October 1 or March 1 of the semester in which they are registered for SPM 630.

**Integrative Project Abstract.** All students must submit a 150 word abstract of their *completed* integrative project at the time of their presentation. The abstract must be submitted with the M-Form (see below).

**M-Form.** The ***M-Form*** (Multi-Purpose Form) is prepared by the Graduate Program Coordinator and is brought by the student to the presentation of their integrative project. This form is signed by the Major Professor, Committee Member and submitted to the Director of Graduate Studies after successful presentation of the integrative project. No ***M-Forms*** will be forwarded to the Graduate School without an abstract and a copy of the integrative project. The ***M-Form*** must be received at the Graduate School by the following deadlines:

Friday before spring classes for a February 1 degree conferral  
Day after last day of spring exams for a June 1 degree conferral  
Friday before fall classes for a September 1 degree conferral

**M Form Checklist:**

- ✓ notify the Graduate Program Coordinator of the title for the integrative project (a copy of the prepared ***M-Form*** and ***Graduation Information Form*** will be placed in the student's mailbox)
- ✓ bring the following to the integrative project presentation:
  1. ***M-Form***
  2. abstract of the integrative project
  3. copy of integrative project
  4. ***Graduation Information Form***

**Graduation Information Form.** The ***Graduation Information Form*** should be completed and brought to the integrative project presentation.

**CHECKLIST FOR M.P.H. DEGREE CONFERRAL**

- 49 graduate credit hours are completed with an overall 'B' (3.0) average
- A minimum grade of B (3.0) in all required course work.
- Registration and attendance at the departmental seminars during first year in the program.
- Continuous registration from the date of matriculation (unless on an approved leave of absence).
- If beyond the four-year time limit for completion of degree, an approved ***Graduate Student Petition Form*** for extension of time to complete the degree is on file in the Graduate School.
- An approved ***Application to Candidacy*** is on file in the Graduate School with all necessary attachments, including original transcripts.
- Review unofficial transcript and address any I or J grades.
- Successful completion and presentation of the integrative project.
- Abstract of integrative project and ***M Form*** are received by the Graduate School within the established deadlines (the Graduate School does not require copies of a project).
- Copy of the integrative project and ***Graduation Information Form*** submitted to the Department.

<b>Degree Conferral Timetable</b>			
<b>For Degree Conferral on:</b>	<b>February 1</b>	<b>June 1</b>	<b>September 1</b>
Application to Candidacy due to the Department	<b>September 1</b>	<b>February 1</b>	<b>June 1</b>
Application to Candidacy due at the Graduate School	October 1*	March 1*	July 1*
ALL required materials must be received in the Graduate School by	Friday Before Spring Classes Begin	Day After Last Day of Spring Exams	Friday Before Fall Classes Begin

**\*Read Carefully:** The Application to Candidacy (ATC) form must be submitted to the Department a minimum of FOUR weeks before it is due at the Graduate School. This will allow time to be reviewed by the Director of Graduate Studies and the Associate Dean before it is forwarded to the Graduate School. Incomplete ATCs will be returned to the student. If the ATC form is not submitted one month prior to the deadline, the department cannot guarantee it will be reviewed and approved in time for the student to graduate as planned.

# MASTERS OF SCIENCE (MS)

## COURSE REQUIREMENTS

The overall objective of this degree program is for all M.S. students to demonstrate the ability to process, analyze, interpret, discuss, and write up epidemiological data and show a minimum level of computer literacy during their training. Candidates for the M.S. degree must complete 33 credits for degree conferral.

### **Required Courses for all Concentrations:**

- SPM 501 Principles of Epidemiology (4 credits)
- SPM 502 Advanced Methods (3 credits)
- SPM 505 Introduction to Biostatistics (4 credits)
- SPM 506 Biostatistics II (4 credits)
- SPM 590 Graduate Seminar (0 Credits)
- One Advanced Epidemiology course: SPM 509, 511, 513, 515, 551, 552, 561, 604, 605, 614, 618, 620, 621, 622, PTR 525

In addition to the above:

### **Required Courses for the Epidemiology Concentration**

Two of the following advanced epidemiology courses: SPM 509, 511, 513, 515, 551, 552, 561, 604, 605, 614, 618, 620, 621, 622, PTR 525

### **Required Courses for the Preventive Medicine Residency Concentration:**

Two of the following advanced epidemiology courses: SPM 509, 511, 513, 515, 551, 552, 561, 604, 605, 614, 618, 620, 621, 622, PTR 525

SPM 507 Introduction to Health Care Organization

SPM 549 Environmental Health

SPM 554 Occupational Health

HB 501 Health Behavior

### **Required Courses for the Primary Care Research Fellow Concentration:**

Two of the following advanced epidemiology courses: SPM 509, 511, 513, 515, 551, 552, 561, 604, 605, 614, 618, 620, 621, 622, PTR 525

SPM 625

The balance of hours remaining will be divided between electives and the thesis. Up to six hours will be granted for SPM 700 Thesis Guidance. Courses taken outside the Departments of SPM, Biostatistics, Health Behavior, RPCI Natural Sciences, or RPCI Cancer Prevention and Control Programs must first be approved by the Director of Graduate Studies.

### **MS Recommended Sequence for Required Courses**

EPIDEMIOLOGY	
Year 1: Fall Semester	Year 1: Spring Semester
<b>Required Courses</b> SPM 501 Epidemiology Principles (4) SPM 505 Introduction to Biostatistics (4) SPM 590 Departmental Seminar (0)  SPM 519 Principles of Measurement in Public Health (highly recommended) (3)	<b>Required Courses</b> SPM 502 Advanced Methodology (3) SPM 506 Application of Statistics to Epidemiology (4) SPM 590 Departmental Seminar (0)  Advanced Epidemiology Course(s) (3 or 6)
Year 2: Fall Semester	
<b>Required Courses</b>  Advanced Epidemiology Course(s) (3 or 6)	SPM 700 Thesis Guidance (6)



## **DEGREE REQUIREMENTS**

The M.S. degree requires 33 credit hours: a minimum of 27 credit hours of graduate courses plus a maximum of six credit hours of thesis credit can be applied to the degree. Students must maintain a minimum overall GPA of 3.0 and a minimum grade of 'B' (3.0) in all required courses. Note: B- (2.67) is below the minimum grade for required courses.

**Comprehensive Examination.** Master's students who intend to pursue the Ph.D., should consider taking the Comprehensive Exam while in the master's program (see section on Ph.D. Comprehensive Examination).

**Departmental Seminar.** SPM 590 Departmental Seminar is a required course for:

- all full-time students
- all students who are certified full-time
- all full and part-time students who have completed their course work and are registered for a minimum of one credit hour of Thesis Guidance or RPCI Natural Sciences Research.

Students must register for and attend the weekly departmental seminars. The course will be assigned an S/U grade. Students are allowed two unexcused absences per semester. Additional absences may be granted for extenuating circumstances and require the permission of the Director of Graduate Studies prior to the seminar. Part-time students are strongly encouraged to attend the seminars.

**Time Limit to Complete the Degree.** The time limit for obtaining the M.S. degree is four years from the date of first registration in the degree program, excluding official leaves of absence, regardless of full- or part-time status.

**Extension of Time to Complete the Degree.** Students unable to complete the M.S. program within the time limit must petition the Graduate School for an extension of time to complete the degree provided there exists adequate reason to justify such a request. The Graduate School will not approve an extension for 'personal reasons,' you must be specific and present strong justification for your request. Students must provide a detailed description of work completed to date, a detailed month-to-month timeline for completion of the thesis/degree, and a written endorsement from the advisor/major professor. Requests for extensions should be made at least two weeks prior to the start of the semester. ***Graduate Student Petition Forms*** are available at [www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms).

### *Extension of Time Checklist:*

- ✓ complete ***Graduate Student Petition Form***
- ✓ obtain signature of advisor/major professor
- ✓ attach written statement indicating:
  - cause of the delay
  - detailed description of work completed thus far
  - detailed month-to-month plan or work to be completed
- ✓ attach written endorsement from advisor/major professor
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School)

**Thesis.** The thesis provides the student with an opportunity to raise theoretical questions and to attempt to answer them through the conduct of a research study. It provides opportunity for an independent research effort that demonstrates ability to identify a problem, develop a research design, and analyze, interpret and discuss data with the purpose of developing or testing theory. Students are urged to examine copies of theses on file in the Department's graduate office.

**Thesis Committee.** When all formal coursework has been completed, and with the advice of their advisor, the student selects a committee which consists of a Major Professor who is a member of the UB Graduate Faculty whose primary geographic appointment is in the Department of SPM or Roswell Park Cancer Institute (RPCI) Department of Cancer Prevention and Control; and two additional Committee Members who hold the rank of assistant, associate or full professor at the University. A list of eligible Graduate Faculty is available at the Graduate

School website at [www.grad.buffalo.edu/academics/facultyroster](http://www.grad.buffalo.edu/academics/facultyroster). NOTE: geographic is defined as the department or unit of primary paying appointment were full-time professional services and activities are conducted.

Before a student begins work on their thesis, the student's committee must be approved by the Director of Graduate Studies using the **Thesis Committee Approval Form** (<http://sphhp.buffalo.edu/spm>) (click on Current Students)

All faculty members of the thesis committee should be involved throughout the design and execution of the research. Faculty who geographically leave UB may remain on a student's committee for up to one year as a Committee Member but not as Major Professor. If the Major Professor is no longer a full-time geographic SPM or RPCI Cancer Prevention and Control faculty member, the Major Professor must be replaced, however, they may remain on the committee as a Committee Member for up to one year. Students could petition the Education Committee to have the faculty member remain in exceptional circumstances. The student would be required to have the unanimous vote of the Education Committee.

Thesis Committee Checklist:

- ✓ submit the **Thesis Committee Approval Form** to the Director of Graduate Studies

**Proposal Defense.** With guidance from the Major Professor, the student must develop a written study plan (protocol). This plan includes: a definition of the problem the student intends to address, statement of objectives, study questions and/or hypotheses, a review of the relevant literature, and a description of the intended design in regard to any sampling, data collection and data analysis.

Before a student may proceed with their thesis, they must defend their proposal at a formal defense with the Major Professor and all Committee Members present. If all Committee Members cannot be present, a maximum of one Member may participate via conference telephone. The proposal, summarized on the **Abstract of Research Form**, must be approved by the committee. The **Application to Candidacy** (ATC) and **Abstract of Research** are signed by the committee at the proposal defense (see sections on ATC and Abstract of the Proposed Research).

Proposal Defense Checklist:

- ✓ with the approval of the committee, schedule the proposal defense
- ✓ reserve a room for the defense through the Graduate Program Coordinator
- ✓ distribute copies of the proposal in FINAL form to the committee at least two weeks prior to the date of the proposal defense
- ✓ formally defend the proposal with the Major Professor and all Committee Members present
- ✓ bring the completed **Application to Candidacy Form** and **Abstract of Research Form** (see section on ATC) to the defense for signature of the committee
- ✓ submit the completed **Application to Candidacy Form** and **Abstract of the Research Form** to the Graduate Program Coordinator for signature of the Director of Graduate Studies

**Abstract of Research Form.** All students must submit an **Abstract of Research Form** (<http://sphhp.buffalo.edu/spm>) (click on Current Students). Be sure to follow the example format. The abstract form is signed by the committee at the proposal defense and submitted with the ATC (see section on Proposal Defense and ATC).

**Application to Candidacy.** The ***Application to Candidacy (ATC)*** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)) is a document that includes a summary of courses to be applied toward a degree. The filing of this document is required when all formal course work has been completed, and after the student has successfully defended the proposal. The ATC must be presented at the proposal defense for signature of the committee. Students must include an abstract of their research (***Abstract of Research***) (<http://sphhp.buffalo.edu/spm>) (click on Current Students). Be sure to follow the example format. Once the ATC has been approved, a student is not required to enroll for 12 credit hours (or 9 credit hours if appointed as a graduate, teaching or research assistant) to be considered full-time for tuition assistantship/scholarship, loan deferral, or immigrant status. To be certified full time a student must be registered for a minimum of one credit hour and submit a ***Certification of Full-Time Status Form***. (See section on Certification of Full-Time Status).

**Application to Candidacy Checklist:**

- ✓ Complete (type) Parts 1-7.

Part 2a: The Department will attach original transcripts for the baccalaureate degree, if required.

Part 4: All courses must be listed in chronological order. If an intended course(s) and/or credit hours change, the student must complete a ***Graduate Student Petition Form*** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)) correcting the original ATC.

Part 5: If you have taken courses which will not be applied to the MS degree, attach An unofficial UB transcript and cross out course(s) which will not be applied. Course credits must total 33 (including transferred and future credits).

Part 6: All courses must be listed in chronological order. If transcripts were submitted at the time of application to the program, the department will attach.

Part 7: Student signature and signatures of the Major Professor and Committee Members are required (the student is responsible for obtaining signatures). Original signatures are required.  
Submit to the Program Coordinator for Director's signature.

NOTE: name and signatures for Academic Dean, Divisional Committee and Graduate School do not need to be completed by the student.

- ✓ Include the ***Abstract of Research Form*** signed by the committee.
- ✓ If Independent Study courses are submitted for the degree, attach the approved ***Description of Informal Graduate Course Work Form(s)***.
- ✓ If required, attach copies of approved ***Graduate Petition Forms*** for leaves of absence or extension of time to complete the degree.
- ✓ Submit the completed ATC to the department **no later than FOUR weeks before the Graduate School's official deadline**. Deadlines are:
  - September 1 for a February degree conferral
  - February 1 for a June degree conferral
  - June 1 for a September 1 degree conferral

**\*Read Carefully:** The Application to Candidacy (ATC) form must be submitted to the Department a minimum of FOUR weeks before the Graduate School deadline. This will allow time to be reviewed by the Director of Graduate Studies and the Associate Dean before it is forwarded to the Graduate School. Incomplete ATCs will be returned to the student. If the ATC form is not submitted one month prior to the deadline, the department cannot guarantee it will be reviewed and approved in time for the student to graduate as planned.

**Thesis Defense.** All M.S. students must complete and formally defend a thesis approved by the student's Major Professor and all Committee Members. The Major Professor, all Committee Members, and Director of Graduate Studies must be present for the final defense. In extenuating circumstances, if all Committee Members cannot be present, a maximum of one Member may participate via conference telephone. A minimum of two weeks (14 days) notice must be allowed for the public posting of the defense. Prior to the posting of the defense, a hard copy of the final draft of the thesis approved by the student's committee must be on file in the department for review.

Thesis Defense Checklist:

- ✓ with the approval of the committee, schedule an oral defense of the completed thesis:
  - confirm date with the committee and the Director of Graduate Studies
  - confirm availability of room
  - confirm availability of a laptop and/or projector used with laptop (if needed)
- ✓ distribute to the committee copies of the thesis in FINAL form at least two weeks prior to the date of the defense
- ✓ notify the Graduate Program Coordinator of the defense date and title of the thesis.
- ✓ if laptop and/or projector equipment is needed, reserve (via email) through the Department Computer Programmer
- ✓ provide the department with a HARD COPY of the approved final draft of the thesis (do not send via email). A room will be reserved and a public notice will be posted for the defense. A minimum of two weeks notice (14 days) must be allowed for posting of the defense. A copy of the prepared **M-Form** and **Graduation Information Form** will be prepared and placed in the student's mailbox (see section on **M-Form**).

**M-Form.** The **M-form** (Multi-Purpose Form) is prepared by the Graduate Program Coordinator and is brought by the student to the defense. This form is signed by the Major Professor, Committee Members, and Director of Graduate Studies to certify that the defense of the thesis was satisfactorily completed in partial fulfillment of the requirements for the degree. The **M-Form** is submitted to the Program Coordinator allowing enough time to be received at the Graduate School by the following deadlines:

Friday before spring classes for a February 1 degree conferral  
Last day of spring exams for a June 1 degree conferral  
Friday before fall classes for a September 1 degree conferral

NOTE: The M-Form will not be forwarded to the Graduate School until a bound copy (or bindery receipt) of the thesis is submitted to the Department.

M Form Checklist:

- ✓ present the **M-Form** at the thesis defense for signatures of the committee and Director of Graduate Studies
- ✓ submit to the Program Coordinator
- ✓ submit completed **Graduation Information Form**
- ✓ submit bound copy of the thesis or bindery receipt

**Graduation Information Form.** The **Graduation Information Form** should be completed and brought to the thesis defense.

**Submission of the Thesis.** A booklet entitled Guidelines for Electronic Thesis/Dissertation preparation and Submission is available at [www.grad.buffalo.edu/etd](http://www.grad.buffalo.edu/etd) or from the Graduate School's Office of Student Services, 408 Capen Hall.

The Department requires one bound copy of the thesis in black imitation leather with gold stamping. The title, student's name, degree and date should appear on the cover. The student's name, degree and date should also appear on the spine. Refer to the NYNEX Yellow Pages for local bookbinding companies. The Department neither endorses nor supports the use of any particular company or companies. A bound copy of the thesis should also be provided to the Major Professor and each Member of the committee (unless otherwise indicated).

The Graduate School requires an electronic submission of the thesis. Electronic submission can be made at [www.grad.buffalo.edu/etd](http://www.grad.buffalo.edu/etd). Students must also complete and forward to the Graduate School a *Publishing/Copyright Billing Form* ([www.grad.buffalo.edu/etd](http://www.grad.buffalo.edu/etd)).

## **GUIDELINES FOR THE THESIS/DISSERTATION**

Several style manuals are available, including Strunk and White (1995), Turabian (1996) and the University of Chicago Press (1993), which will answer a host of questions regarding the technical aspects of preparing the thesis or dissertation. Copies of completed thesis/dissertations are available in the department for reference.

At least two weeks should be allowed for binding the final copy. Copies should be bound in boards covered with black imitation leather, with the title and author's name embossed, not printed, on the front in gold and the author's last name, degree and year of conferral of the degree on the spine (also in gold).

Students should also provide bound copies for their committee members unless otherwise indicated.

## **CHECKLIST FOR M.S. DEGREE CONFERRAL**

- 33 graduate credit hours are completed with an overall 'B' (3.0) average (a minimum of 27 credit hours of graduate course work plus a maximum of six credit hours of thesis credit).
- A minimum grade of B (3.0) in all required course work.
- Registration and attendance at the departmental seminars when registered full time, certified full time, and/or while registered for a minimum of one credit hour of Thesis Guidance or RPCI Natural Sciences Research.
- Continuous registration from the date of matriculation (unless on an approved leave of absence).

- ❑ An approved **Application to Candidacy** is on file in the Graduate School with all necessary attachments, including original transcripts.
- ❑ Submission of an approved **Abstract of Research Form**.
- ❑ If beyond the four-year time limit for completion of degree, an approved **Graduate Student Petition Form** for extension of time to complete the degree is on file in the Graduate School.
- ❑ Review unofficial UB transcript and address any “I” or “J” grades.
- ❑ Successful completion and defense of a thesis.
- ❑ **M Form** submitted to the Graduate School by the established deadlines.
- ❑ **Graduation Information Form** submitted to the Department.
- ❑ One bound copy of the thesis submitted to the Department. (Copies should also be provided to the committee unless otherwise indicated).
- ❑ Electronic submission of the thesis to the Graduate School.
- ❑ **Publishing/Copyright Billing Form** submitted to the Graduate School.

<b>Degree Conferral Timetable</b>			
<b>For Degree Conferral on:</b>	<b>February 1</b>	<b>June 1</b>	<b>September 1</b>
Application to Candidacy due to the Department	<b>September 1</b>	<b>February 1</b>	<b>June 1</b>
Application to Candidacy due at the Graduate School	October 1*	March 1*	July 1*
ALL required materials must be received in the Graduate School by	Friday Before Spring Classes Begin	Day After Last Day of Spring Exams	Friday Before Fall Classes Begin

**\*Read Carefully:** The Application to Candidacy (ATC) form must be submitted to the Department a minimum of FOUR weeks before it is due at the Graduate School. This will allow time to be reviewed by the Director of Graduate Studies and the Associate Dean before it is forwarded to the Graduate School. Incomplete ATCs will be returned to the student. If the ATC form is not submitted one month prior to the deadline, the department cannot guarantee it will be reviewed and approved in time for the student to graduate as planned.

# DOCTOR OF PHILOSOPHY IN EPIDEMIOLOGY (Ph.D.)

## COURSE REQUIREMENTS

The overall objective of this degree program is for all Ph.D. students to demonstrate the ability to design, conduct, analyze, interpret, discuss, and succinctly write up original independent epidemiological research. Candidates for the Ph.D. degree must complete 72 credits for degree conferral.

### **Required Courses:**

#### Principles and Methods of Epidemiology

- SPM 501 Principles of Epidemiology (4 credits)
- SPM 502 Advanced Methods (3 credits)

#### Statistical Methods

- SPM 505 Introduction to Biostatistics (4 credits)
- SPM 506 Biostatistics II (4 credits)
- PTR 502 Analysis of Health Related Data (4 credits)
- STA 503 Regression Analysis (3 credits), or NUR 695 Advanced Statistical Techniques (3 credits)
- STA 504 Statistical Comparisons and Associations (3 credits) or another advanced statistics course (with the approval of the Director of Graduate Studies)\*

#### Advanced Epidemiology (students are required to take **four** advanced epidemiology courses)

- SPM 509, 511, 513, 515, 551, 552, 561, 604, 605, 614, 618, 620, 621, 622, PTR 525

#### Seminar

- SPM 590 Graduate Seminar (0 credits). All Ph.D. students are required to present at one Graduate Seminar before scheduling their dissertation defense.

### **NOTE: Students must complete three out of the following eight courses:**

- SPM 515 Epidemiology of Cardiovascular Disease\*\*
- SPM 519 Principles of Measurement in Public Health (3 credits) (highly recommended)
- SPM 551 Epidemiologic Applications to Environmental Health\*\*
- SPM 604 Fundamentals of Genetic Epidemiology\*\*
- SPM 605 Epidemiology of Type 2 Diabetes and Related Conditions\*\*
- SPM 614 Molecular Epidemiology\*\*
- SPM 618 Perinatal Epidemiology\*\*
- PTR 525 Cancer Epidemiology\*\*

All doctoral students must obtain formal training in the Responsible Conduct of Research (RCR). Students may fulfill this training through:

- PHI 640 Graduate Research Ethics, or
- RPN 541 Ethics and Conduct of Research, or
- Collaborative Institutional Training Initiative (CITI) online course with a score of 80% or higher

The remaining courses to be taken are tailored to the trainee's particular interests and needs, and are planned in consultation with the faculty advisor. Courses taken outside the Departments of SPM, Biostatistics, Health Behavior, RPCI Natural Sciences, or RPCI Cancer Prevention and Control Programs must first be approved by the Director of Graduate Studies.

\* If a student petitions to replace STA 504 with a similar advanced course, the petition must be approved by the Director of Graduate Studies. The student must pass the petitioned course with a B or higher grade.

\*\* course fulfills the advanced epidemiology course requirement

**Recommended Sequence for Required Courses  
PhD in Epidemiology  
(formerly the PhD in Epidemiology and Community Health)**

<b>Year 1: Fall Semester</b>	<b>Year 1: Spring Semester</b>
<b>Core Courses</b> SPM 501 Epidemiology Principles (4) SPM 505 Introduction to Biostatistics (4) SPM 590 Departmental Seminar (0)  SPM 519 Principles of Measurement in Public Health (highly recommended) (3)	<b>Core Courses</b> SPM 502 Advanced Methodology (3) SPM 506 Biostatistics II (4) SPM 590 Departmental Seminar (0)  Advanced Epidemiology Courses  <b>Comprehensive Exam</b>
<b>Year 2: Fall Semester</b>	<b>Year 2: Spring Semester</b>
<b>Core Courses</b> STA 503 Regression Analysis (3) SPM 590 Departmental Seminar  Advanced Epidemiology Courses	<b>Core Courses</b> STA 504 Stat Comparisons & Associations or another advanced statistics elective (3) SPM 590 Departmental Seminar  Advanced Epidemiology Courses
<b>Year 3: Fall Semester</b>	<b>Year 3: Spring Semester</b>
<b>Core Courses</b>  Advanced Epidemiology Courses	<b>Course Courses</b> PTR 502 Analysis of Health Related Data (3)

**DEGREE REQUIREMENTS**

The Ph.D. degree requires 72 credit hours: a minimum of 60 hours of graduate courses plus a maximum of 12 hours of dissertation credit can be applied to the degree. Students must maintain a minimum overall GPA of 3.0 and a minimum grade of “B” (3.0) in all required courses. NOTE: B- (2.67) is below the minimum grade for required courses.

**Comprehensive Examination.** A written in-class Comprehensive Exam is required for all Ph.D. students. The purpose of the exam is to assess mastery of basic epidemiological concepts and the ability to integrate those concepts. The exam must be taken immediately following successful completion (B or better) of the four core required courses or the equivalent: SPM 501, SPM 502, SPM 505.

- Full-time students must take the exam after the 1<sup>st</sup> year of classes.
- Part-time students must take the exam by the Spring semester immediately following completion of the required courses (see above).
- Re-entering students must take the exam after their first year of re-entering the program or, if preferred, prior to re-entering

The exam will be given 2-3 weeks after the end of the Spring semester (date to be announced).

- All students who have completed the necessary courses (see above) must take this exam on the date scheduled. **There are no exceptions.**
- Missing the exam for any reason requires documentation. Legitimate excuses for absence at the exam include: religious observance, illness documented by a physician or other appropriate health care professional, conflicts with University sanctioned activities, public emergencies, and documented personal or family emergencies. The student is responsible for notifying the department in writing with as much advance notice as possible. Absences for University sanctioned activities shall be certified in writing by an appropriate senior University administrator, e.g., Vice President of Student Affairs, Dean for Student Affairs, or Vice Provost for Academic Affairs.
- A non-excusable absence is considered a failure. The student must take the exam in August of the same year or wait until the following year. Students who opt to take the exam the following year will not be allowed to continue their course work until they successfully pass the exam.
- Grades will be provided approximately two weeks after the exam.



The exam will include any material from these required courses:

SPM 501 – Principles of Epidemiology  
SPM 502 – Advanced Methodology  
SPM 505 – Introduction to Biostatistics

- The exam will consist of multiple choice, short written answers, and calculation and interpretation questions. The exam will not be open book.
- The exam will be a full day exam given in two parts.

Students must successfully complete this exam before proceeding with additional coursework.

- Minimum passing grades: 80%
- One makeup exam will be allowed during the same summer for students who do not pass the exam on the first attempt.
- Students who fail will be allowed to complete the requirements for a master's degree.

**Residency Requirement.** All Ph.D. students must fulfill a residency requirement of at least two consecutive semesters (Fall/Spring, Spring/Fall) where full-time registration is maintained (not including the summer semester). Full-time registration is defined as a minimum of 12 credit hours per semester (or a minimum of 9 credit hours if appointed as a graduate, teaching or research assistant).

**Departmental Seminar.** SPM 590 Departmental Seminar is a required course for:

- all full-time students
- all students who are certified full-time
- all full and part-time students who have completed their course work and are registered for a minimum of one credit hour of Thesis Guidance or RPCI Natural Sciences Research.

Students are required to register for and attend the weekly departmental seminars. The course will be assigned an S/U grade. Students are allowed two unexcused absences per semester. Additional absences may be granted for extenuating circumstances and require the permission of the Director of Graduate Studies prior to the seminar.

For doctoral students who have successfully defended their proposal AND filed their ATC (with abstract) BEFORE the start of the semester, a minimum of 50 percent attendance at the seminars is required for each semester until degree completion.

Doctoral students are required to present at least one departmental seminar while in the final stages of their data analysis and PRIOR to scheduling their dissertation defense.

Part-time students are strongly encouraged to attend the seminars.

*Departmental Seminar Checklist:*

- ✓ Present a departmental seminar prior to scheduling the dissertation defense

NOTE: The proposal must be successfully defended and the ATC must be submitted BEFORE the start of the semester for the 50% attendance rule to apply.

**Responsible Conduct of Research (RCR) Training.** Doctoral students must receive formal training in the Responsible Conduct of Research. Students may fulfill this training requirement by either enrolling in and passing PHI 640 Graduate Research Ethics, or RPN 541 Ethics and Conduct of Research, or by completing the Collaborative Institutional Training Initiative (CITI) online course with a score of 80% or higher. Students are required to document successful completion of their training when they submit their ***Application to Candidacy (ATC)*** (see section on Application to Candidacy).

**Time Limit to Complete the Degree.** The time limit for completing the Ph.D. degree is SEVEN years from the date of first registration in the degree program, not including official leaves of absence, regardless of full- or part-time status. Students who complete the M.S./M.P.H. in the Department of Social and Preventive Medicine and continue in the Ph.D. program without a break in registration begin the seven-year limit at the date of first registration in the M.S./M.P.H. program.

**Extension of Time to Complete the Degree.** Students unable to complete the Ph.D. program within the time limit must petition the Graduate School for an extension of time to complete the degree provided there exists adequate reason to justify such a request. The Graduate School will not approve an extension for 'personal reasons,' you must be specific and present strong justification for your request. Students must provide a detailed description of work completed to date, a detailed month-to-month timeline for completion of the dissertation/degree, and a written endorsement from the advisor/major professor. Requests for extensions should be made at least two weeks prior to the start of the semester. **Graduate Student Petition Forms** are located on the web at [www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms).

*Extension of Time Checklist:*

- ✓ complete **Graduate Student Petition Form**
- ✓ obtain signature of advisor/major professor
- ✓ attach written statement indicating
  - cause of the delay
  - detailed description of work completed thus far
  - detailed month-to-month plan of work to be completed
- ✓ attach written endorsement from advisor/major professor
- ✓ forward to the Program Coordinator (do not send directly to the Graduate School)

**Preliminary Exam.** Students are eligible to sit for the preliminary exam after successfully completing 60 credit hours toward the doctorate (including all required courses) and before developing a doctoral dissertation proposal. Permission of the student's advisor is required in order to sit for the preliminary exam. The purpose of the exam is to determine whether the student has sufficient knowledge essential for conducting advanced epidemiology research toward a doctoral degree. The preliminary exam is offered in August of each year. Students interested in taking the exam should submit their request in writing to the Director of Graduate Studies and include their specialty concentration. Specialty concentrations include and are limited to: epidemiology of cardiovascular disease, epidemiology of cancer, nutritional epidemiology, epidemiologic applications of public health, and epidemiology of women's health.

In addition to course work, preparation for the preliminary exam should include self-directed independent preparation by the student. Students are strongly encouraged to do independent reading, attend relevant seminars and participate in the preliminary exam study sessions organized by graduate students. All students are expected to be actively involved in research throughout their educational experience.

*Preliminary Exam Checklist:*

- ✓ receive permission of advisor
- ✓ notify the Director of Graduate Studies in writing and indicate the specialty concentration

**Dissertation.** Students are required to design and undertake significant original independent epidemiological research reported in a doctoral dissertation. In accordance with the rules of the Graduate School, the dissertation proposal and the completed research must be defended before a three-member committee selected by the candidate with the approval of the department.

**Dissertation Committee.** When all formal coursework and the preliminary exam has been successfully completed, and with the recommendation of their advisor, the student selects a committee which consists of a Major Professor who is a member of the UB Graduate Faculty whose primary geographic appointment is in the Department of SPM or RPCI Cancer Prevention and Control; and two additional Committee Members who are also members of the UB Graduate Faculty whose primary geographic appointment is at UB. A list of eligible Graduate Faculty is available at the Graduate School website at [www.grad.buffalo.edu/academics/facultyroster](http://www.grad.buffalo.edu/academics/facultyroster). Associate graduate faculty members may not serve as one of the three committee members, but may serve as an additional committee member.

NOTE: geographic is defined as the department or unit of primary paying appointment where full-time professional services and activities are conducted.

Before a student begins work on their dissertation, the student's committee must be approved by the Director of Graduate Studies using the **Dissertation Committee Approval Form** (<http://sphhp.buffalo.edu/spm>) (click on Current Students). If additional expertise is needed, students can include a 4<sup>th</sup> member on their committee. A 4<sup>th</sup> member is not required to have a primary geographic, graduate faculty, or UB appointment.

All doctoral students are required to include a biostatistician or methodologist faculty member on their committee. Students who do not have a biostatistician or methodologist faculty member must have their committee approved by the Education Committee.

All faculty members of the dissertation committee should be involved throughout the design and execution of the original research project. Faculty who geographically leave UB may remain on a student's committee for up to one year as a Committee Member but not as Major Professor. If the Major Professor is no longer a full-time geographic SPM or RPCI Cancer Prevention and Control faculty member, the Major Professor must be replaced, however, they may remain on the committee as a Committee Member for up to one year. Students could petition the Education Committee to have the faculty member remain in exceptional circumstances. The student would be required to have the unanimous vote of the Education Committee.

*Dissertation Committee Checklist:*

- ✓ submit the **Dissertation Committee Approval Form** to the Director of Graduate Studies

**Proposal Defense.** With guidance from the Major Professor, the student must develop a written study plan (protocol). This plan includes: a definition of the problem the student intends to address, statement of objectives, study questions and/or hypotheses, a review of the relevant literature, and a description of the intended design in regard to any sampling, data collection and data analysis.

Before a student may proceed with their dissertation, they must defend their proposal at a formal defense with the Major Professor and all Committee Members present. If all Committee Members cannot be present, a maximum of one Member may participate via conference telephone. The proposal, summarized on the **Abstract of Research Form**, must be approved by the committee. The **Application to Candidacy** (ATC) and **Abstract of the Research** are signed by the committee at the proposal defense. (see sections on ATC and Abstract of Research).

Proposal Defense Checklist:

- ✓ with the approval of the committee, schedule the proposal defense.
- ✓ reserve a room for the defense through the Graduate Program Coordinator
- ✓ distribute copies of the proposal in FINAL form to the committee at least two weeks prior to the date of the proposal defense
- ✓ formally defend the proposal with the Major Professor and all Committee Members present
- ✓ bring the completed **Application to Candidacy Form** and **Abstract of Research Form** (see section on ATC) to the defense for signature of the committee
- ✓ submit the completed **Application to Candidacy Form** and **Abstract of Research** to the Graduate Program Coordinator for signature of the Director of Graduate Studies

**Abstract of Research Form.** All students must submit an **Abstract of Research Form** (<http://sphhp.buffalo.edu/spm>) (click on Current Students). Be sure to follow the example format. The abstract form is signed by the committee at the proposal defense and submitted with the ATC (see section on Proposal Defense and ATC).

**Application to Candidacy.** The **Application to Candidacy (ATC)** ([www.grad.buffalo.edu/docs/forms](http://www.grad.buffalo.edu/docs/forms)) is a document that includes a summary of courses to be applied toward a degree. The filing of this document is required when all formal course work has been completed, and after the student has successfully defended the proposal. The ATC must be presented at the proposal defense for signature of the committee. Students must include an abstract of their proposed research (**Abstract of Proposed Research**) (<http://sphhp.buffalo.edu/spm>) (click on Current Students). Be sure to follow the example format. Once the ATC has been approved, a student is not required to enroll for 12 credit hours (or 9 credit hours if appointed as a graduate, teaching or research assistant) to be considered full-time for tuition assistantship/scholarship, loan deferral or immigrant status. To be certified full time a student must be registered for a minimum of one credit hour and submit a **Certification of Full-Time Status Form**. (See section on Certification of Full-Time Status). Be sure to refer to the checklist on the following page.

Application to Candidacy Checklist:

- ✓ Complete (type) Parts 1-7.

Part 2a: The Department will attach original transcripts for the baccalaureate degree, if required.

Part 4: All courses must be listed in chronological order. If an intended course(s) and/or credit hours change, the student must complete a **Graduate Student Petition Form** ([www.grad.buffalo.edu/forms](http://www.grad.buffalo.edu/forms)) correcting the original ATC.

Part 5: If you have taken courses which will not be applied to the Ph.D. degree, attach unofficial UB transcript and cross out course(s) which will not be applied. Course credits must total 72 (including transferred and future credits).

Part 6: All courses must be listed in chronological order. If transcripts were submitted at the time of application to the program, the department will attach.

Part 7: Student signature and signatures of the Major Professor and Committee Members are required (the student is responsible for obtaining signatures). Original signatures are required. Submit to the Program Coordinator for Director's signature.

Note: name and signatures for Academic Dean and Divisional Committee do not need to be completed by the student.

- ✓ Include the **Abstract of Research Form** signed by the committee.
- ✓ If Independent Study courses are submitted for the degree, attach the approved **Description of Informal Graduate Course Work Form(s)**.
- ✓ If Responsible Conduct of Research (RCR) training was fulfilled by completing the CITI online course, attach a copy of documentation of successful completion.
- ✓ If required, attach copies of approved Graduate Petition Forms for leaves of absence or extension of time to complete the degree.
- ✓ Submit the completed ATC to the department **no later than FOUR weeks before the Graduate School's official deadline**. Deadlines are:
  - September 1 for a February degree conferral
  - February 1 for a June degree conferral
  - June 1 for a September 1 degree conferral

**\*Read Carefully:** The Application to Candidacy (ATC) form must be submitted to the Department a minimum of FOUR weeks before the Graduate School deadline. This will allow time to be reviewed by the Director of Graduate Studies and the Associate Dean before it is forwarded to the Graduate School. Incomplete ATCs will be returned to the student. If the ATC form is not submitted one month prior to the deadline, the department cannot guarantee it will be reviewed and approved in time for the student to graduate as planned.

**Outside Reader.** In addition to the required three member committee, an outside reader must examine a FINAL draft of the doctoral dissertation. The student's Major Professor identifies and conducts all communication with the outside reader. An outside reader is a qualified individual from outside the University who normally holds a Ph.D. in his or her respective field, holds a tenured/tenure-track faculty appointment (or comparable research appointment) and has completed significant independent research/scholarship in the dissertation topic, has no pre-existing relationship with the Ph.D. candidate, major professor or committee member, and no active scholarly collaboration within the past five years. If the outside reader formerly held an appointment at UB, there must be five years from appointment with no continuing ties to UB.

Before an outside reader can be appointed, the **Outside Reader Appointment Form** (<http://sphhp.buffalo.edu/spm>) (click on Current Students) must be approved by the Director of Graduate Studies. A copy of the outside reader's CV must also be attached. NOTE: The dissertation must not be forwarded to the outside reader before the reader has been approved by the Director of Graduate Studies AND the Major Professor and all Committee Members have approved a FINAL draft of the dissertation. After the **Outside Reader Appointment Form** has been approved by the Director of Graduate Studies, notification of approval will be sent to the student and his/her Major Professor.

Outside Reader Appointment Checklist:

- ✓ complete **Outside Reader Appointment Form** (be sure to attach the outside reader's CV)
- ✓ forward the **Outside Reader Appointment Form** and outside reader's CV to the Director of Graduate Studies

The outside reader provides an independent evaluation of the student's research. Normally this would be limited to an examination of the FINAL draft of the dissertation. In communicating his/her evaluation, the outsider reader must submit their comments using *the Outside Reader Response Form* (<http://sphhp.buffalo.edu/spm>) (click on Current Students). The form should be forwarded to the outside reader by the major professor. The completed **Outside Reader Response Form**, along with the reader's comments, must be returned to the Program Coordinator before the dissertation defense can be scheduled. The outside reader's comments will be forwarded to the student, the student's committee, and Director of Graduate Studies. Permission for the defense is contingent in part on the receipt of written approval by the outside reader with final approval determined by the dissertation committee.

Outside Reader Response Checklist:

- ✓ provide outside reader with **Outside Reader Response Form**

**Dissertation Defense.** All Ph.D. students must complete and formally defend a dissertation approved by the student's committee. The dissertation must be examined and approved by the Major Professor, all Committee Members, and the outside reader. The Major Professor, all Committee Members, and the Director of Graduate Studies must be present for the final defense. In extenuating circumstances, if all Committee Members cannot be present, a maximum of one Member may participate via conference telephone. A minimum of two weeks (14 days) notice must be allowed for the public posting of the defense.

Prior to scheduling a defense, the student must have presented at least one department seminar while in the final stages of their data analysis, and a hard copy of the FINAL draft of the dissertation approved by the Major Professor and all Committee Members must be on file in the department for review.

Dissertation Defense Checklist:

- ✓ present a departmental seminar while in final stages of data analysis
- ✓ verify that the **Outside Reader Response Form** (with comments) has been received by the department
- ✓ with the approval of the committee, schedule an oral defense of the completed dissertation:
  - confirm date with committee and the Director of Graduate Studies
  - confirm availability of room
  - confirm availability of a laptop and/or projector used with laptop (if needed)
- ✓ distribute to the committee copies of the dissertation in FINAL form at least two weeks prior to the date of the defense
- ✓ notify the Graduate Program Coordinator of the defense date and title of the dissertation
- ✓ if a laptop and/or projector equipment is needed, reserve (via email) through the Department Computer Programmer.
- ✓ provide the department with a HARD COPY of the approved final draft of the dissertation (do not provide via email). A room will be reserved and a public notice will be posted for the defense. A minimum of 14 days notice must be allowed for the posting of the defense. A copy of the prepared **M-Form** and **Graduation Information Form** will be prepared and placed in the student's mailbox (see section on **M-Form**).

**M-Form.** The **M-form** (Multi-Purpose Form) is prepared by the Graduate Program Coordinator and brought by the student to the defense. This form must be signed by the Major Professor, Committee Members, and Director of Graduate Studies to certify that the defense of the dissertation was satisfactorily completed in partial fulfillment of the requirements for the degree. The **M-Form** is submitted to the Program Coordinator allowing enough time to be received at the Graduate School by the following deadlines:

Friday before spring classes for a February 1 degree conferral

Last day of spring exams for a June 1 degree conferral

Friday before fall classes for a September 1 degree conferral

NOTE: The **M-Form** will not be forwarded to the Graduate School until a bound copy (or bindery receipt) of the dissertation is submitted to the Department.

M Form Checklist:

- ✓ present the **M-Form** at the dissertation defense for signature of the committee and Director of Graduate Studies
- ✓ submit the **M-Form** and **Graduation Information Form** to the Program Coordinator with bound copy of the dissertation or bindery receipt

**Graduation Information Form.** The *Graduation Information Form* should be completed and brought to the thesis defense.

**Submission of the Dissertation.** The Department requires one bound copy of the dissertation in black imitation leather with gold stamping. The title, student's name, degree and date should appear on the cover. The student's name, degree and date should also appear on the spine. Refer to the NYNEX Yellow Pages for local bookbinding companies. The Department neither endorses nor supports the use of any particular company or companies. A bound copy of the dissertation should also be provided to each member of the committee.

The Graduate School requires an electronic submission of the dissertation. Electronic submission can be made at [www.grad.buffalo.edu/etd](http://www.grad.buffalo.edu/etd). Students should also complete and forward to the Graduate School a *Publishing/Copyright Billing Form* and *Survey of Earned Doctorates Form* ([www.grad.buffalo.edu](http://www.grad.buffalo.edu)).

## **GUIDELINES FOR THE THESIS/DISSERTATION**

Several style manuals are available, including Strunk and White (1995), Turabian (1996) and the University of Chicago Press (1993), which will answer a host of questions regarding the technical aspects of preparing the thesis or dissertation. Copies of completed thesis/dissertations are available in the department for reference.

At least two weeks should be allowed for binding the final copy. Copies should be bound in boards covered with black imitation leather, with the title and author's name embossed, not printed, on the front in gold and the author's last name, degree and year of conferral of the degree on the spine (also in gold).

Students should also provide bound copies for their committee members unless otherwise indicated.

## **CHECKLIST FOR PH.D. DEGREE CONFERRAL**

- 72 graduate credit hours are completed with an overall 'B' (3.0) average (a minimum of 60 credit hours of graduate course work plus a maximum of 12 credit hours of dissertation credit).
- A minimum grade of B (3.0) in all required course work.
- Successful completion of the Comprehensive Examination.
- Registration and attendance at the departmental seminars when registered full time, certified full time, and/or when registered for a minimum of one credit hour of Thesis Guidance or RPCI Natural Sciences Research.
- Departmental seminar presentation while in the final stages of the data analysis for the dissertation.
- Continuous registration from the date of matriculation (unless on an approved leave of absence).
- Fulfill residency requirement of at least two consecutive semesters where full-time registration is maintained (not including the summer semester).
- Successful completion of the Preliminary Exam.
- An approved *Application to Candidacy* is on file in the Graduate School with all necessary attachments, including original transcripts.
- Complete UB's Responsible Conduct of Research (RCR) Training Requirement
- Submission of an approved *Abstract of Research Form*.



- If beyond the seven-year time limit for completion of degree, an approved **Graduate Student Petition** for extension of time to complete the degree is on file in the Graduate School.
- Submission of the **Outside Reader Appointment Form** and **Outside Reader Response Form**.
- Review unofficial transcript and address any “I” or “J” grades.
- Successful completion and defense of the dissertation.
- M Form** submitted to the Graduate School by the Graduate School’s established deadlines.
- Graduation Information Form** submitted to the Department.
- One bound copy of the dissertation submitted to the Department and to each member of the student’s committee.
- Electronic submission of the dissertation to the Graduate School.
- Publishing/Copyright Billing Form** submitted to the Graduate School.
- Survey of Earned Doctorates Form** submitted to the Graduate School.

<b>Degree Conferral Timetable</b>			
<b>For Degree Conferral on:</b>	<b>February 1</b>	<b>June 1</b>	<b>September 1</b>
Application to Candidacy due to the Department	<b>September 1</b>	<b>February 1</b>	<b>June 1</b>
Application to Candidacy due at the Graduate School	October 1*	March 1*	July 1*
ALL required materials must be received in the Graduate School by	Friday Before Spring Classes	Day After Last Day of Spring Exams	Friday Before Fall Classes

**\*Read Carefully:** The Application to Candidacy (ATC) form must be submitted to the Department a minimum of FOUR weeks before it is due at the Graduate School. This will allow time to be reviewed by the Director of Graduate Studies and the Associate Dean before it is forwarded to the Graduate School. Incomplete ATCs will be returned to the student. If the ATC form is not submitted one month prior to the deadline, the department cannot guarantee it will be reviewed and approved in time for the student to graduate as planned.

## **GRADUATE COURSES**

### **Epidemiologic Research Methods and Principles**

SPM 501 Principles of Epidemiology  
SPM 502 Advanced Methods  
PTR 502 Analysis of Health Related Data  
PTR 511 Measurement Error in Epidemiology  
SPM 519 Principles of Measurement in Public Health  
SPM 602 Advanced Epidemiologic Study Designs

### **Biostatistics (for a complete list of courses and course descriptions see <http://sphhp.buffalo.edu/biostat>)**

SPM 505 Introduction to Biostatistics  
SPM 506 Application of Statistics to Epidemiology  
STA 503 Regression Analysis  
STA 504 Statistical Comparisons and Associations  
NUR 695 Multivariate Data Analysis

### **Epidemiology of Diseases and Conditions**

SPM 509 Alcohol Epidemiology  
SPM 511 Nutritional Epidemiology  
SPM 513 Epidemiology of Infectious Diseases  
SPM 515 Epidemiology of Cardiovascular Disease  
PTR 525 Cancer Epidemiology  
RPN 530 Oncology for Scientists  
SPM 551 Epidemiologic Applications of Environmental Health  
SPM 552 Epidemiologic Applications to Occupational Health  
SPM 561 Advanced Cancer Epidemiology and Prevention  
SPM 604 Fundamentals of Genetic Epidemiology  
SPM 605 Epidemiology of Type 2 Diabetes and Related Conditions  
SPM 614 Molecular Epidemiology  
SPM 618 Perinatal Epidemiology  
SPM 620 Epidemics and Outbreaks  
SPM 621 Advanced Topics in Cardiovascular Disease Epidemiology and Prevention  
SPM 622 The Role of Physical Activity in the Etiology, Treatment and Prevention of Chronic Disease

### **Environmental Health**

GEO 506 Geographic Information Systems  
SPM 534 Global Health  
SPM 549 Environmental Health  
SPM 554 Introduction to Occupational Health  
SPM 615/APY 710/MED 871 Geographic Medicine  
PMY 626 Toxicology Principles and Practice  
PMY 627 Toxicology at Target Organs  
SPM 649 Advanced Environmental Health Sciences  
SPM 650 Environmental Toxicology and Risk Assessment

### **Health Behavior**

HB 501 Study of Health Behaviors

## **Health Services Administration**

SPM 507/MGH 631/LAW 718 Introduction to Health Care Organization  
SPM 523 Introduction to Program Planning and Evaluation  
SPM 529 Field Experience in Program Planning and Evaluation  
SPM 530 Administrative Theory and Practice  
SPM 536 Management for Public Health Practitioners  
SPM 537/LAW 618 Public Health Law  
SPM 539/MGH 633 Introduction to Health Economics  
SPM 542/MGH634/LAW 719 Health Policy in the United States  
SPM 543 Public Health Practice  
SPM 632/MGH 632 Strategic and Operations Management in Health Care Systems  
SPM 634 Public Health and Managed Health Care  
SPM 635 Designing and Evaluating Advanced Medical Management Systems

## **Other Courses**

PTR 500 Cancer Control and Prevention  
SPM 522 Selected Topics  
SPM 533 Principles of Public Health  
SPM 535 Biological Basis of Public Health  
SPM 538 Community Health Assessment and Surveillance  
RPN 541 Natural Sciences Seminar: Responsible Conduct of Research  
SPM 544 MPH Field Training  
SPM 545 History and Philosophy of Public Health  
SPM 553 Fundamentals of Grant Development  
SPM 590 Departmental Seminar  
SPM 591 Public Health Seminar  
SPM 599 Independent Study  
SPM 625 Translating Research into Practice and Community  
SPM 630 MPH Integrative Project  
PHI 640 Graduate Research Ethics

## **GRADUATE COURSES/SEMINAR DESCRIPTIONS**

(All courses are 3 credit hours unless otherwise indicated. If prerequisites are required, the grade achieved in the prerequisite course must be B or higher.)

Includes required courses offered by the Departments of Biostatistics (STA), Health Behavior (HB), Pharmacology & Toxicology (PMY), and Roswell Park Cancer Institute (RPN & PTR):

### **PTR 500 Cancer Control and Prevention**

Focuses on concepts, methods, issues, and applications related to the principles and practice of cancer prevention and control. Students will gain experiences through didactic lectures, critical appraisal of the literature, group discussion and presentations. (Mahoney)

Prerequisites: None

Spring Semester

### **SPM 501 Principles of Epidemiology (4 credits)**

Introduction to the basic principles, methods, and uses of epidemiology. (LaMonte)

Prerequisite: None

Fall Semester

### **HB 501 Study of Health Behaviors**

Examination of selected approaches for explaining people's health-related behaviors (i.e., cultural, economic, social structure, social psychological), and a review of intervention strategies designed to modify health-related behaviors. (Kiviniemi)

Prerequisite: None

Fall Semester

### **SPM 502 Advanced Methodology**

Provides information on advanced topics in epidemiological methods. Emphasis is on various concepts related to the conduct of epidemiologic research. This course extends understanding of topics presented in SPM 501 and presents new topics in advanced epidemiologic methods (Millen)

Prerequisite: SPM 501

Spring Semester

### **PTR 502 Analysis of Health Related Data**

Provides students in the health sciences with practical experience in preparing, analyzing and reporting findings from epidemiologic and other health-related data. Using existing epidemiologic data sets, students will complete assignments related to data cleanup, data file construction and management, basic descriptive statistics, analytical strategies, biostatistical analysis, and data interpretation. Course requirements will include analysis and reporting of findings from analysis of existing health-related data. (McCann)

Prerequisites: SPM 506, or permission of instructor

Spring Semester

### **SPM 505 Introduction to Biostatistics (4 credits)**

The course has an emphasis on the application and interpretation of statistical tests commonly employed in epidemiologic research. It is not a mathematics course and so will not stress derivations of formulae but rather will emphasize statistics concepts and the application of statistical methods to test hypotheses in epidemiologic datasets. Topics include descriptive statistics, probability and probability distributions, point and confidence interval estimation, hypothesis testing for means, proportions, elementary non-parametric techniques, tests for categorical data, ANOVA, correlations and introduction to regression methods. Students will be introduced to SAS in weekly laboratory sessions to learn how to enter and manage datasets and perform data analysis using statistical methods covered in the course. (Ochs-Balcom)

Prerequisites: None

Fall Semester

**GEO 506 Geographic Information Systems**

Covers the development and basic principles of geographic information systems and practical experience in the use of these systems, and also the technology used to represent observations about the geographic world. Students will learn to identify and describe hardware components of GIS; state differences between database models; describe and evaluate typical GIS operations; identify types of GIS products; identify various applications of GIS; and understand differences between raster and vector systems.

Prerequisites: None

Fall Semester

**SPM 506 Application of Statistics to Epidemiology (4 credits)**

This course is designed to teach students how to perform multivariate statistical analysis commonly used in epidemiologic studies. Topics include correlation, multivariate logistic and linear regression, regression diagnostics, modeling strategies, and survival analysis. Students learn SAS coding in the lab session. (Rudra)

Prerequisite: SPM 501, SPM 502, SPM 505 or STA 527 and STA 506

Spring Semester

**SPM 507/MGH 631/Law 718 Introduction to Health Care Organization**

Introduces students to the historical development, structure, operation, and current and future directions of the major components of the American health care delivery system. It examines the ways in which health care services are organized and delivered, the influences that impact health care public policy decisions, factors that determine priorities in financing health care services and the relationship of health care costs to measurable benefits. The course enables students to assess the role of organized efforts to influence health policy formulation, and the contributions of medical technology, research findings, and societal values to the evolving U.S health care delivery system. Class time is also devoted to exploring emerging policy, ethical and legal dilemmas resulting from medical and technological advances. (Young)

Prerequisite: None

Fall Semester

**SPM 509 Alcohol Epidemiology**

The basic concepts of epidemiology will be applied to alcoholism and alcohol-related problems. Methods used to study the prevalence of alcohol abuse and alcoholism will be critically examined and data will be reviewed on the relationship of alcohol consumption to other health problems. (Wieczorek)

Prerequisite: SPM 501

Fall Semester

**SPM 511 Nutritional Epidemiology**

Discusses the major strengths and weakness of dietary assessment methods used in epidemiologic studies to investigate associations between diet and disease (e.g., 24-hour recalls, food records, food frequency questionnaires, nutritional biomarkers). An introduction to nutritional epidemiologic analysis will be presented and discussed including analysis of nutrients, foods and dietary patterns. Critical evaluation of nutritional epidemiologic literature will be practiced. (Millen)

Prerequisite: SPM 501

Spring Semester

**PTR 511 Measurement Error in Epidemiology**

The course will address the problem of measurement error in epidemiology. It will consist largely of computer-based statistical simulation exercises that consider the impact of measurement within the context of different study methods. (Marshall)

Prerequisite: statistics beyond multiple regression

Fall Semester

**SPM 513 Epidemiology of Infectious Diseases**

Focuses on the theory and epidemiologic methods used in the epidemiologic study of infectious diseases. Emphasis is on the investigation of infectious disease outbreaks, evaluations of vaccine efficacy and effectiveness, and surveillance for infectious diseases of public health importance. The course includes an examination of the following infectious diseases, among others: HIV/AIDs, influenza, foodborne disease, sexually transmitted infections, dengue fever, and vaccine-preventable diseases. (Ram)

Prerequisite: SPM 501

Spring Semester

**SPM 515 Epidemiology of Cardiovascular Disease**

The pathophysiological basis of the major cardiovascular diseases is studied in relation to their clinical and epidemiological characteristics. Findings from major epidemiological studies and clinical trials are reviewed, and their implication for preventive measures are discussed. (Dorn)

Prerequisite: SPM 501

Fall Semester

**SPM 519 Principles of Measurement in Public Health**

An explanation of basic principles and methods of measurement and their application in epidemiologic research. These include development and use of different types of instruments and scales for measuring biological characteristics and behavioral and social constructs, questionnaire construction and validation, sampling, data collection methods, and fundamental principles underlying data analysis and interpretation. Students will gain practical experience developing a questionnaire relevant to an epidemiologic issue, role-playing interview techniques in class, and resolving issues related to other data collection methods, sampling, and preparing data for analysis. (Scheider)

Prerequisite: None

Fall Semester

**SPM 522 Selected Topics**

Special topics determined by individual faculty interest.

Fall/Spring/Summer Semesters

**SPM 523 Introduction to Program Planning and Evaluation**

Models and principles of program planning and evaluation are presented and contrasted. Data gathering techniques, design considerations and implementation strategies are covered. Other topics include systems theory applications, strategic planning methods, proposal development and report writing. (Li)

Prerequisite: None

Fall Semester

**PTR 525 Cancer Epidemiology**

Provides an in depth overview of the epidemiology on various cancer sites. Standard methodologies and analytic techniques used in cancer epidemiology will be covered. Attention given to critical review of known or suspected cancer risk factors. (Moysich)

Prerequisite: None

Spring Semester

**SPM 529 Field Experience in Program Planning and Evaluation**

Focuses on the application of program planning and evaluation principles within a field setting chosen by instructor and student. Supervised field experiences and seminars focus on applied and hypothetical problems. (Staff)

Prerequisite: SPM 523

Spring Semester

**SPM 530 Administrative Theory and Practice**

Provides students with an overview of health care administration and the historical and contemporary strategic/policy issues (access, financing, provision of care, integration) driving health care at the federal, state and local levels. Also, the impact these challenges have had on the evolution of professional competencies and technical skills needed to be an effective healthcare administrator. (DiPasquale)

Prerequisite: None

Fall Semester

**RPN 530 Oncology for Scientists (4 credits)**

Provides non-clinical cancer scientists with a background in clinical aspects of oncology to better collaborate with clinicians and clinical investigators in conducting cancer research. Incorporates basic biology and clinical aspects of cancer, history of oncology, basic biology of cancer, and current concepts relative to disease etiology, pathogenesis, prevention, detection, staging, treatment, rehabilitation and evaluation of end results. (Block)

Prerequisite: None

Fall Semester

**SPM 533 Principles of Public Health**

Provides an introduction to the concepts and practice of public health at the community, state, and national levels. Addresses the philosophy, purpose, history, organization, function, tools, activities and results of public health practice along with a number of important health issues and problems facing the public health system. (Bertram & Li)

Prerequisite: None

Spring Semester

**SPM 534 Global Health**

Provides an overview of compelling public health problems among the world's poor. Topics addressed will include infectious diseases such as malaria, HIV/AIDS, and tuberculosis; the rise of tobacco-related disease; the role of water, hygiene, and sanitation in the prevention of disease; maternal and neonatal mortality; surveillance; and disaster response in the resource-poor setting. Students will gain practical experience in developing and presenting strategies for the implementation and evaluation of public health programs in the resource-poor setting. (Ram)

Prerequisite: SPM 501

Spring Semester

**SPM 535 Biological Basis of Public Health**

Intended for students with little or no background in the biological sciences and health professions. The course provides a broad overview of public health topics related to human health and disease focusing on disease etiology with particular emphasis on parasitic and microbial infections plus a review of the anatomy, physiology, and pathology of selected major organ systems and associated diseases of public health importance. (Rowe)

Prerequisite: None

Fall Semester

**SPM 536 Management for Public Health Practitioners**

Provides students with an overview and knowledge of various management topics relevant to operating the management role in public health organizations. Provides knowledge and skills to better understand the role of finance and accounting in public health management, the principles and techniques of supervision in the public health setting, and approaches to quality management and quality improvement in health care and public health practice. (Noe, Marcus)

Prerequisite: None

Spring Semester

**SPM 537 Public Health Law**

Provides an understanding of how the law serves as a tool in advancing a public health agenda. The class is interdisciplinary, including law students and students from public health-related fields. The course examines the history of public health law, the tension between state and federal governments in the regulation of the public's health, and the conflicts between governmental powers and individual autonomy. The course considers the standard practice of public health professionals to prevent disease and promote healthy behaviors in the wake of emerging public health challenges such as racial disparities in health care, a potential flu pandemic, the obesity epidemic, and the abortion debate. (Yearby)

Prerequisite: None

Fall Semester

**SPM 538 Community Health Assessment and Surveillance**

Identifies elements in a community responsible for modifying the health behavior of the individual. Provides the needed information for designing plans to improve the health status of the community and its members. The course will help to identify quantitative and qualitative methods to conduct community health assessment, evaluation of community intervention programs, and the utilization of public health surveillance data to understand community health profiles. Case-studies and a practical experience will provide the students with training on how to work as a group with members of the community. (Rowe & Tumiel-Berhalter)

Prerequisite: None

Spring Semester

**SPM 539/MGH 633 Introduction to Health Economics**

Provides the ability to apply economic reasoning to health care markets. Topics include: organization of the hospital, payment systems, costs and charges, the market for physician services, cost-effectiveness analysis, outcomes research, and health care reform. (Ludwig)

Prerequisite: None

Spring Semester

**RPN 541 Responsible Conduct of Research (1 credit)**

Introduces future researchers to the issues of responsibility in conducting experiments. Topics include: reporting misconduct, conflict of interest and commitment, peer review, publication practices and responsible authorship, ethical issues in animal research, data acquisition, plagiarism and effective writing, clinical trials and ethical dilemmas, international research, use of impugned research, etc. This course satisfies all requirements for graduate research ethics training as mandated by the University at Buffalo as well as by the Public Health Service and other federal agencies. (Michalek)

Prerequisites: None

**SPM 542/MGH 634/LAW 719 Health Policy in the United States**

Introductory course that explores the U.S. public policymaking process and its impacts upon the determinants of the population's health status including environmental, socio-cultural, ethnic, demographic, economic, lifestyle, service access and other factors. The course provides an historical overview of benchmark developments in U.S. health care, highlighting significant influences that transformed the industry into its current form. With the incremental evolution of U.S. health policy as the context, the course discusses individual and societal values concerning health and the operation of the political system. Each step of the policymaking process highlights the roles of key players in the legislative, judiciary and executive branches of government. The course identifies and characterizes health care system stakeholders ranging from private citizens to powerful industry lobbying organizations and the means and methods used to influence the formulation, implementation and modification of health policy. The course concludes with a discussion of the characteristics and role of political competence in the U.S. policymaking process. (Young)

Prerequisite: None

Spring Semester

**SPM 543 Public Health Practice**

Designed to provide students with the practice-based knowledge and skills necessary for the functional management of local, state, and federal health agencies. Topics include: administrative structure, governance, management issues, financing of public health programs, public budgetary development and approval process, political and medial influence on public health programs, intergovernmental relations, public sector-private sector collaboration, application of legislative and regulatory principles, public health program planning, and media relations and risk communication. (Rowe)

Prerequisite: None

Spring Semester

**SPM 544 MPH Field Training (1-6 credits)**

Allows students to synthesize the knowledge and skills developed during the academic portion of their program in a practical application setting. Field training experiences will be of various types depending upon the student's interest and concentration area. (Staff)

Prerequisite: None

Fall/Spring/Summer Semesters



**SPM 545 History and Philosophy of Public Health (1 credit)**

Covers the primary historical documents that had significant impact on the development of public health philosophy and theory from ancient times to the present. (Bertram)

Prerequisite: None

Spring Semester

**SPM 549 Environmental Health**

Introductory course that explores the role of environmental factors in health with an emphasis on characterization, assessment, and control of environmental hazards. Topics include application of toxicologic and epidemiologic methods in assessing risk and setting exposure limits; the nature of and control of hazards associated with food, water, air, solid and liquid waste, occupation, and radiation; risk communication and management, environmental justice; and environmental laws. The course concludes by examining the impact of human activity, such as energy use and pollution, on the environment and how human-induced environmental change, in turn, impacts public health and that of the planet as a whole. (Scheider)

Prerequisites: None

Spring Semester

**SPM 551 Epidemiologic Applications to Environmental Health**

Provides epidemiology and environmental health students with a working knowledge of epidemiologic theory and practice applied to issues of environmental health. Case studies and specific environmental issues will be used to illustrate the application of epidemiologic theory to understand the role of environmental factors in the etiology of disease. (Mu)

Prerequisites: SPM 501, SPM 505 or STA 527

Fall Semester

**SPM 552 Epidemiologic Applications to Occupational Health**

Introduction to the role of occupational factors in the etiology of diseases. Includes an overview of the occupational health problem and an introductory understanding of the biology, epidemiology and detection of occupational disease. Selected occupational health problems and issues are presented. Epidemiologic applications are emphasized, including data sources, agency and organizational resources, industrial hygiene and research methodology. (Bonner)

Prerequisites: SPM 501, SPM 502, SPM 505 or STA 527

Spring Semester

**SPM 553 Fundamentals of Grant Development**

Designed for advanced doctoral students who are committed to obtaining extramural support to begin or continue their research interests. The major emphasis will be on learning skills to obtain extramural support through the various grant mechanisms. The course will cover the use of electronic databases to facilitate grant announcements, as well as planning and writing grants in today's competitive environment. Strong methodological and statistical skills are required. A seminar format will be utilized with students critiquing and evaluating the work of their fellow classmates. A final grant application will be the major output. (Donahue)

Prerequisite: SPM 501, SPM 502, SPM 506

Spring Semester

**SPM 554 Introduction to Occupational Health**

Survey course designed to familiarize students with the field of occupational health and the professional disciplines that contribute to the field, including medicine, nursing, industrial hygiene and safety, law, and epidemiology. Students are expected to become familiar with the nature of research in occupational health in all the disciplines listed above, gain competency in skills needed to conduct basic assessments of workers and work sites, and become conversant in various policy issues. (Kuettel)

Prerequisite: SPM 501 or permission of instructor

Fall Semester

**SPM 561 Advanced Cancer Epidemiology and Prevention**

Seminar course focused on an understanding of and critical evaluation of research in cancer biology and epidemiology including an in-depth examination of methodological issues. (Freudenheim)

Prerequisites: SPM 501, SPM 502, SPM 505 or STA 527, PTR 525

Spring Semester

**SPM 590 Departmental Seminar**

Intended to inform faculty and students in SPM about new and continuing areas of research and public policy issues in public health and epidemiology. Invited speakers will include SPM and Roswell Park faculty, graduate students, faculty from other departments at the University at Buffalo, and nationally and internationally recognized experts in public health and epidemiology from outside the University.

Prerequisite: None

Fall/Spring Semesters

**SPM 591 Public Health Seminar**

Seminar series addressing practice oriented public health topics for MPH students.

Prerequisite: None

Fall/Spring Semesters

**SPM 599 Independent Study**

For students with special interests not satisfied through the formal course work, there is an opportunity to pursue independent study under the direction of a faculty member.

Prerequisite: Permission of instructor

Fall/Spring/Summer Semesters

**SPM 602 Advanced Epidemiologic Study Designs**

Advanced course on developing and designing studies using the three major study designs in epidemiologic and public health research: cohort studies, case-control studies, and clinical trials. Topics covered will include developing the study question; identifying, recruiting, and enrolling the study population; exposure assessment; ascertaining valid outcomes; bias and confounding; analytic considerations; randomization and blinding; monitoring adverse events; participants well-being and ethical considerations; and reporting and interpreting study findings. Students will gain practical experience in critiquing published research that uses each of the study designs, and in developing a research question and designing an appropriate study to address the question. (Freudenheim, Wactawski-Wende, Donahue)

Prerequisites: SPM 501, SPM 502

Fall Semester

**SPM 604 Fundamentals of Genetic Epidemiology**

An overview of the field of genetic epidemiology including how to study the genetic causes of phenotypic variation. Topics include human genetics, molecular genetics, and population genetics as they apply to the conduct of a genetic epidemiology study. The concepts of heritability and linkage disequilibrium are covered. The course covers more detailed aspects of segregation, linkage, and association as they are used in family- and population-based studies to search for disease-causing genes. Current concepts in the genetics of complex traits as well as an exploration of online databases used in genetic epidemiology are included. The course includes in-class computer laboratory exercises using standard software tools to analyze genetic data. (Ochs-Balcom)

Prerequisites: SPM 501, SPM 502, SPM 505 or STA 527

Fall

**SPM 605 Epidemiology of Type 2 Diabetes and Related Conditions**

Provides a description of the epidemiology characteristics of type 2 diabetes mellitus and its major complications (coronary heart disease, cerebrovascular disease, lower extremity arterial disease). Emphasis will be placed on the epidemiology of major risk factors for type 2 diabetes as well as novel risk factors including c-reactive protein, PAI-1 and other new biomarkers. (Donahue)

Prerequisites: SPM 501, SPM 502

Spring

**SPM 614 Molecular Epidemiology**

Molecular epidemiology deals with the contribution of potential genetic and environmental risk factors, identified at the molecular and biochemical level, to the etiology, distribution and control of disease in populations. An understanding of molecular mechanisms involved in disease etiology, and their potential uses in epidemiology, will be the focus of the course. This course will lay the groundwork for reading, interpreting, and critically appraising molecular epidemiologic studies, as well as incorporating molecular methodology into one's own research designs. (Bonner)

Prerequisite: SPM 501, SPM 502, SPM 505 or STA 527

Fall Semester

**SPM 615/APY 710/MED 871 Geographic Medicine**

An introduction to medical anthropology and geography and an intensive review of the communicable and nutritional diseases found in isolated populations, in developing countries, and among the disadvantaged. (Lee& McElroy)

Prerequisite: None

Spring Semester

**SPM 618 Perinatal Epidemiology**

Course will familiarize students with the current field of perinatal epidemiology and increase their understanding of various perinatal events in human populations. Will introduce students to methodological complexities particularly relevant to the field. Topics will include terminology and methods; early pregnancy losses; measures of fetal growth and development; metabolic disorders of pregnancy; birth defects; and perinatal and infant morbidity and mortality. (Rudra)

Prerequisites: SPM 501, SPM 505 or STA 527

Fall Semester

**SPM 621 Advanced Topics in Cardiovascular Disease Epidemiology and Prevention**

Designed for advanced students who are interested in focusing their research or clinical work on the epidemiology and prevention of cardiovascular diseases. Major emphasis will be on methodological issues in CVD, disease etiology, and primary and secondary prevention of CVD. Intended to develop critical skills for independent CVD researchers and clinicians. (Dorn)

Prerequisite: SPM 515

Spring Semester

**SPM 622 The Role of Physical Activity in the Etiology, Treatment and Prevention of Chronic Disease**

Designed for students who are interested in expanding their knowledge and understanding of physical activity research and the public health implications of an active or inactive lifestyle. The major emphasis will be on methodological issues in physical activity research, and the role of physical activity in health and chronic disease. The course is intended to develop critical thinking, research, and decision-making skills for independent researchers and clinicians. (LaMonte)

Prerequisite: SPM 501

Spring Semester

**SPM 623 General Preventive Medicine Seminar Series (2 credits)**

Designed to provide a broad education in general preventive medicine. Seminars complement the content of course offerings in the postgraduate (PGY 2) year and provide guided exposure to each resident to subject matter basic to the field of preventive medicine and medical management. (Li)

Prerequisite: General Preventive Medicine Resident

Fall/Spring Semesters

**SPM 625 Translating Research into Practice and Community**

Designed for students interested in conducting health services research. Describes community-based participatory research and practice-based research networks as approaches to research and how they are applied to traditional research methods. Provides insight into the development and integration of physician-based interventions and patient-centered behavior change to improve the delivery of healthcare.

(Tumiel-Berhalter)

Prerequisite: SPM 501

Spring Semester

**SPM 630 MPH Integrative Project (2-3)**

The purpose of the integrative projects is for MPH students to integrate core public health knowledge and skills. It will take the form of a paper prepared during the concluding semester of the student's program. (Staff)

Prerequisite: Permission of instructor

Fall/Spring/Summer Semesters

**SPM 632/MGT 632 Strategic and Operations Management in Health Care Systems**

Application of management knowledge and skills in the strategic guidance and operational direction of health care systems service organization. Attention is given to unique aspects of the challenge of managing the delivery of health services, particularly to managing relationships with medical staff, regulatory relationships with medical staff, regulatory bodies, other professional groups and third party payers. The integration of management functions such as finance and accounting, marketing, human resources, and service production, amidst rapidly changing expectations will also be covered in assigned case analyses. (Rogers)

Prerequisite: None

Spring Semester

**SPM 634 Public Health and Managed Health Care**

Designed to teach students the principles and practices of public health and managed care, with a specific focus on how managed care organizations use advanced medical management systems to promote population health and manage medical expense. Students will learn basic business models for health plans and gain understanding of payments systems and provider risk arrangements. The course will review the current performance of the US health care system and analyze the current and future role of managed health care. (Horrigan)

Prerequisites: None

Spring Semester

**SPM 635 Designing and Evaluating Advanced Medical Management Systems**

Designed to teach public health students the knowledge and skills necessary to design advanced medical management systems. Will provide students with in-depth business analysis of medical management programs; understanding of operational competence necessary to design high performing medical management systems; skills in negotiation of medical management contracts; and understanding of how consumer-directed health care and pay-for-performance can be integrated into medical management programs. The curriculum will provide the concepts and operational knowledge needed by managed care and public health professionals and organizations to improve population health in a variety of organizations. (Horrigan)

Prerequisites: SPM 634

Fall Semester

**PHI 640 Graduate Research Ethics (2 credits)**

This course provides a comprehensive introduction to the field of the ethics of scientific research and will satisfy all Federal requirements for the education of graduate students and postdoctoral fellows. The course will deal with the following topics: fraud, plagiarism and other unacceptable behaviors, scientific publication and the rules of the road, the role of whistleblowers in science, human subjects research and clinical matters, animals in research, cultural issues in research, biotechnology and the new medicine, intellectual property and who owns what.

Prerequisites: None

Spring Semester

**SPM 649 Advanced Environmental Health Sciences**

Advanced course designed to provide students with the latest knowledge and an in-depth discussion of how the environment interacts with human biological systems and potentiates various health effects over the life cycle. The course includes a detailed examination of environmental hazards, exposure assessment, human susceptibility, biological response pathways, application of biomarkers in environmental health studies and the disease burden of environmental exposure. The course focuses on three major environmental topics: air pollution, water pollution and food safety. (Mu)

Prerequisites: SPM 501, SPM 549

Fall Semester

**SPM 650 Environmental Toxicology and Risk Assessment (2 credits)**

Provides students with advanced level education in the physical and chemical properties of common environmental contaminants of public health importance, environmental fate of these compounds, the primary exposure routes, and the mechanisms of action. The course will also educate students on synthesizing relevant scientific evidence to conduct risk characterization and assessment to inform risk management, communication, and policy actions to mitigate environmental health hazards. (Olson)

Prerequisites: PMY 626/627

**(For a complete list of Statistics courses and course descriptions see <http://sphhp.buffalo.edu/biostat>)**

**STA 503 Regression Analysis**

Regression analysis and introduction to linear models. Topics: Multiple regression, analysis of covariance, least square means, logistic regression, and non-linear regression. This course includes a one hour computer lab and emphasizes hands-on applications to datasets from the health sciences. LEC

*Prerequisite:* Knowledge of calculus and basic statistics

**STA 504 Statistical Comparisons and Associations**

Advanced presentation of statistical methods for comparing populations and estimating and testing associations between variables. Topics: Point estimation, confidence intervals, hypothesis testing, ANOVA models for 1, 2, and k way classifications, multiple comparisons, chi-square test of homogeneity, Fisher's exact test, McNemar's test, measures of association, including odds ratio, relative risks, Mantel-Haenszel tests of association, and standardized rates, repeated measures ANOVA, simple regression and correlation. This course includes a one hour computing lab and emphasizes hands-on applications to datasets from the health related sciences. LEC

Prerequisite: MTH 142 or second course in calculus or permission of instructor.

**STA 506 Introduction to Statistical Computing**

Familiarizes students with PC-based statistical computing applications for public health. It is a companion course for STA 527: Introduction to Medical Statistics. The course will develop basic skills in the use of a statistical package through classroom demonstrations and independent lab assignments that will complement the material covered in STA 527. The course will emphasize data definition, verification, descriptive and inferential statistics and graphical presentation. The course will familiarize the students with the use of a statistical package and give them the skills needed for effective data management, data manipulation, and data analysis at a basic level. LEC

Prerequisite: STA 527

**STA 509 Statistical Genomics**

Statistical tools for analyzing experiments involving genomic data. Topics: Basic genetics and statistics, linkage analysis and map construction using genetic markers, association studies, Quantitative Trait Loci analysis with ANOVA, variance components analysis and marker regression (including multiple and partial regression), QTL mapping with interval mapping and composite interval mapping, LOD test, supervised and unsupervised methods for gene expression microarray data across multiple conditions. LEC

Prerequisites: STA 521 or STA 527 or PI

**STA 517 Categorical Data Analysis**

Provides students with useful methods for analyzing categorical data. Topics: Cross-classification tables, tests for independence, log-linear models, Poisson regression, ordinal logistic regression, and multinomial regression for the logistic model. LEC

Prerequisite: STA 504 and STA 522. Concurrent registration in prerequisites is admissible.

**STA 526 Design and Analysis of Clinical Experiments**

Introduction to fundamental principles and planning techniques for designing and analyzing statistical experiments. Recommended for students in applied fields. Topics: Justification for randomized controlled clinical trials, methods of randomization, blinding and placebos, ethical issues, parallel groups design, crossover trials, inclusion of covariates, determining sample size, sequential designs, interim analyses, repeated measures studies. LEC

Prerequisite: STA 505 and STA 506, or STA 504 or permission of instructor.

**STA 527 Introduction to Medical Statistics (4 credits)**

Topics: Descriptive statistics, probability concepts (independence, conditional probability), probability distributions of random variables, sampling distributions, estimation, confidence intervals, hypothesis testing, analysis of variance procedures, linear regression, nonparametric methods. Computers and statistical packages will be used throughout the course. No extensive computer experience is required. LEC/REC

Prerequisite: None

**STA 531 Theory and Methods of Sample Surveys**

Introduction to theory and practice of sample surveys involving collection of statistical data from planned surveys. LEC

Prerequisite: STA 503 or permission of instructor

**STA 575 Survival Analysis**

Provides an advanced course on the use of life tables and analysis of failure time data. Topics: Use of Kaplan-Meier survival curves, use of log rank test, Cox proportional hazards model, evaluating the proportionality assumption, dealing with non-proportionality, stratified Cox procedure, extension to time-dependent variables, and comparison with logistic regression approaches. LEC

Prerequisite: STA 504 and 522

Concurrent registration in prerequisites is admissible.

**STA 581 Multivariate Data Analysis**

Presents methods for analyzing multiple outcome variables simultaneously, and for classification and variable reduction. Topics: Multivariate normal distribution, simple, partial, and multiple correlation; Hotelling's T-squared, multivariate analysis of variance, and general linear hypothesis, and discriminant analysis, cluster analysis, principal components analysis, and factor analysis. LEC

Prerequisite: MTH 142 (second course in calculus) and STA 505 or STA 527, or STA 504

**STA 617 Advanced Categorical Data Analysis**

Presents useful methods for analyzing categorical data that are not covered in STA 517. Topics: exact conditional inference, conditional logistic regression, models for matched pairs, repeated measures, and multinomial regression based on general response functions, latent class models analysis, and mixed models for categorical data. LEC

Prerequisite: STA 517

**NUR 695 Multivariate Data Analysis**

Focuses on the analysis and interpretation of multivariate data taking into consideration the design of the research and the theoretical reasoning involved. Includes a review of multiple regression, matrix algebra, multivariate ANOVA, discriminant function analysis, repeated measures (including Hierarchical Linear Modeling) and categorical data analysis. (Wu)

Prerequisite: basic descriptive and inferential statistics

Fall Semester

## **SOCIAL AND PREVENTIVE MEDICINE TEACHING FACULTY**

**Christine Ambrosone**, Ph.D., University at Buffalo. Chair, Department of Cancer Prevention and Control, Division of Cancer Prevention and Population Sciences, Roswell Park Cancer Institute; Research Professor, Department of Social and Preventive Medicine. Major interests: cancer, molecular epidemiology, genetic susceptibility, nutrition, oxidative stress, genetic determinants of prognosis after treatment.

**Dennis Bertram**, M.D., Washington University (St. Louis); M.P.H., Sc.D. The Johns Hopkins University. Director M.P.H. Program, School of Public Health and Health Professions. Major interest: public health.

**AnneMarie Block**, Ph.D., University at Buffalo. Assistant Research Professor, Department of Physiology, Roswell Park Cancer Institute. Major interest: cytogenetics and sister chromatid exchange.

**Matthew Bonner**, Ph.D., University of Buffalo. Assistant Professor, Department of Social and Preventive Medicine. Major interests: environmental and occupational epidemiology, molecular epidemiology, cancer epidemiology.

**K. Michael Cummings**, Ph.D., M.P.H., University of Michigan. Chair, Department of Health Behavior, Division of Cancer Prevention and Population Sciences, Roswell Park Cancer Institute; Professor, Department of Social and Preventive Medicine. Major interest: prevention and cessation of cigarette smoking.

**Sandra DiPasquale**, Dr.P.H., University of Pittsburgh, Adjunct Instructor, Department of Social and Preventive Medicine. Major interest: healthcare quality improvement utilizing lean six sigma methodologies and integrated delivery systems for special populations.

**Richard Donahue**, Ph.D., University of Pittsburgh; M.P.H., University of Michigan. Professor, Department of Social and Preventive Medicine. Major interests: diabetes and cardiovascular disease.

**Joan Dorn**, Ph.D., University at Buffalo. Chair, Department of Exercise and Nutrition Sciences. Professor, Department of Social and Preventive Medicine. Major interest: cardiovascular disease epidemiology, physical activity and worksite health promotion.

**Jo Freudenheim**, Ph.D., University of Wisconsin-Madison. UB Distinguished Professor and Chair, Department of Social and Preventive Medicine. Major interests: nutritional and cancer epidemiology, particularly breast cancer, molecular epidemiology, genetic susceptibility.

**Wayne Gall**, Ph.D., University of Toronto. Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interest: entomology.

**Gary Giovino**, Ph.D., University at Buffalo. Professor and Acting Chair, Department of Health Behavior; Major interest: patterns, determinants, consequences and control of tobacco use.

**Saxon Graham**, Ph.D., Yale University. Professor Emeritus, Departments of Social and Preventive Medicine, and Sociology. Major interests: social epidemiology and cancer epidemiology.

**Dennis Horrigan**, M.S., University at Buffalo. Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interest: managed care.

**Andrew Hyland**, Ph.D., University at Buffalo. Research Scientist, Department of Health Behavior, Division of Cancer Prevention and Population Sciences, Roswell Park Cancer Institute; Research Associate Professor, Department of Social and Preventive Medicine. Major interests: biostatistics, tobacco control, and public health.

**Andrea Kuettel**, J.D., Georgetown University Law Center; M.P.H. Johns Hopkins School of Public Health. Adjunct Instructor, Department of Social and Preventive Medicine. Major interest(s): occupational and environmental health, public health law, and regulation of health care.

**Michael LaMonte**, Ph.D., University of Utah; M.P.H., University of South Carolina. Assistant Professor, Department of Social and Preventive Medicine. Major interests: health benefits of physical activity and functional capacity; cardiovascular disease.

**Carl Li**, M.D., St. Louis University School of Medicine; M.P.H., University of Michigan School of Public Health. Associate Director, Preventive Medicine Residency Program; Research Assistant Professor and Director of Graduate Studies, Department of Social and Preventive Medicine. Major interests: preventive medicine, public health, teaching methods.

**Walter Ludwig**, M.B.A., University at Buffalo. Research Instructor, School of Public Health and Health Professions. Major interests: health care management, payment methodologies, health care quality assurance programs.

**Martin Mahoney**, M.D., Ph.D., University at Buffalo. Director, Cancer Training Track, General Preventive Medicine Residency Program; Research Associate Professor, Department of Health Behavior, Division of Cancer Prevention and Population Sciences; Research Associate Professor, Department of Social and Preventive Medicine. Major interests: cancer epidemiology, clinical research studies, interventions in high risk populations.

**Patricia Marcus**, M.B.A., University at Buffalo. Adjunct Instructor, Department of Social and Preventive Medicine. Major interest: human resource management.

**James Marshall**, Ph.D., University of California at Los Angeles. Senior Vice President, Cancer Prevention and Population Sciences, and Chair, Department of Cancer Prevention and Population Sciences, Roswell Park Cancer Institute; Research Professor, Department of Social and Preventive Medicine. Major interests: chemoprevention strategies in human populations, diet and breast cancer recurrence; epidemiologic analysis of predictors of genetic mutation in adenomatous polyps, familial colon cancer registries; and independent associations between breast and endometrial cancers and metabolic factors among multi-ethnic populations.

**Susan McCann**, Ph.D., University at Buffalo. Associate Professor of Oncology, Department of Cancer Control and Prevention, Roswell Park Cancer Institute; Research Associate Professor, Department of Social and Preventive Medicine. Major interests: nutritional epidemiology, phytoestrogens, phytochemicals, hormone-related cancers, dietary patterns, data reduction methods.

**Arthur Michalek**, Ph.D., University at Buffalo. Professor of Oncology; Senior Vice President of Educational Affairs, and Dean, Roswell Park Graduate Division; Professor, Department of Social and Preventive Medicine. Major interests: international health, education and training, cancer epidemiology, and clinical epidemiology.

**Amy Millen**, Ph.D. University of Wisconsin-Madison. Assistant Professor, Department of Social and Preventive Medicine. Major interests: dietary intake and chronic disease (cancer, age-related eye disease); with emphasis on micronutrient intake, specifically vitamin D.

**Kirsten Moysich**, Ph.D., University at Buffalo. Research Professor, Department Cancer Prevention and Control, Roswell Park Cancer Institute; Professor, Department of Social and Preventive Medicine. Major interests: cancer epidemiology, molecular epidemiology, immunosuppression in cancer etiology and prognosis, common exposures and cancer etiology.

**Lina Mu**, M.D., Shanxi Medical University; Ph.D., Fudan University. Assistant Professor, Department of Social and Preventive Medicine. Major interests: molecular epidemiology, environmental exposures in relation to cancer.

**Michael Noe**, M.D., SUNY Upstate Medical Center; M.P.H., Tulane University. Associate Dean for Community Relations and Clinical Affairs, School of Public Health and Health Professions; Director, Preventive Medicine Residency Program; Clinical Professor, Department of Social and Preventive Medicine. Major interests: health services administration and epidemiology, quality improvement, and preventive medicine.

**Heather Ochs-Balcom**, Ph.D., University at Buffalo. Assistant Professor, Department of Social and Preventive Medicine. Major interest: genetic factors in chronic disease epidemiology.



**James Olson**, Ph.D., Medical College of Wisconsin. Professor, Pharmacology and Toxicology; Clinical Professor, Department of Social and Preventive Medicine. Major interest: assessing health risks of exposures to organophosphate pesticides, pharmacokinetic/pharmacodynamic models.

**Robert O'Shea**, Ph.D., Catholic University of America. Associate Professor Emeritus, Departments of Social and Preventive Medicine, Sociology, Experimental Pathology. Major interests: medical sociology, social organization.

**Pavani Ram**, M.D., Mount Sinai School of Medicine. Assistant Professor, Department of Social and Preventive Medicine. Major interest: global health, infectious diseases.

**Kenneth Rogers**, M.B.A., University at Buffalo. Clinical Instructor, Department of Social and Preventive Medicine. Major interest: strategic management and marketing.

**Donald Rowe**, Ph.D. University at Buffalo. Director, Office of Public Health Practice, and Public Health Liaison, School of Public Health and Health Professions; Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interest: public health.

**Carole Rudra**, Ph.D., University of Washington, M.P.H., Emory University. Assistant Professor, Department of Social and Preventive Medicine. Major interests: air pollutant exposures and risk of preeclampsia and preterm delivery, impact of physical activity on pregnancy complications and maternal wellness.

**William Scheider**, Ph.D., University at Buffalo. Research Assistant Professor, Department of Social and Preventive Medicine. Major interests: risk assessment and communication in environmental health, impact of the food system on environmental health, food safety.

**Frank Schimpfhauser**, Ph.D., Ohio State University. Assistant Dean for Medical Education, School of Medicine and Biomedical Sciences; Associate Professor, Department of Social and Preventive Medicine. Major interests: program planning and evaluation, research in medical education.

**Maurizio Trevisan**, M.D., University of Naples, Italy; M.S., University at Buffalo. UB Distinguished Professor, Department of Social and Preventive Medicine Major interest: cardiovascular disease.

**Laurene Tumiel-Berhalter**, Ph.D., University at Buffalo. Associate Professor, Departments of Family Medicine, and Social and Preventive Medicine. Major interest: community-based participatory research and health services research.

**John Violanti**, Ph.D., University at Buffalo. Research Associate Professor, Department of Social and Preventive Medicine. Major interest: stress and health status of policemen.

**Jean Wactawski-Wende**, Ph.D., University at Buffalo. Professor and Associate Chair, Department of Social and Preventive Medicine. Vice Provost for Strategic Initiatives, University at Buffalo. Major interests: menopause, osteoporosis, women's health, cancer, chronic disease prevention, periodontal disease, reproductive epidemiology, clinical trials.

**William Wieczorek**, Ph.D., University at Buffalo. Director, Center for Health and Social Research, and Research Professor, Natural and Social Sciences, Buffalo State College; Research Assistant Professor, Department of Social and Preventive Medicine. Major interest: alcohol, drug and geographic aspects of health.

**Ruqaiyah Yearby**, J.D., Georgetown University, M.P.H., Johns Hopkins School of Public Health. Associate Professor, University at Buffalo Law School. Major interest: public health law, racial disparities in health care, health policy, bioethics.

**Kristina Young**, M.S., University at Buffalo. Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interest: health services delivery systems, health policy and health services research.

**Maria Zielezny**, Ph.D., University of Warsaw. Associate Professor Emeritus, Department of Social and Preventive Medicine. Major interest: biostatistics.

*Marcia Wopperer, 9/9/10*