

**DEPARTMENT OF
SOCIAL AND PREVENTIVE
MEDICINE**

**GRADUATE STUDENT
HANDBOOK**

2004-2005



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MISSION OF THE DEPARTMENT

The primary missions of the Department of Social and Preventive Medicine (SPM) are research and the education of students and the surrounding community in epidemiology and preventive medicine (including, but not limited to diet and nutrition, occupational and environmental, cardiovascular, cancer, women's health, urban health and risk factors). Epidemiologists play a fundamental role in preventive medicine and public health by understanding which variables in human situations may have an influence on the determination and distribution of diseases as well as the prevention of diseases. Our educational program involves teaching graduate and medical students and provides training in the understanding of disease etiology and prevention and in the conduct and design of epidemiologic research.

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 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/grad-docs/) and the Health Sciences Divisional Committee guidelines.

Generally, 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 are provided departmental email accounts and student mailboxes (located in the Graduate Student Room, 265 Farber Hall). Notices, announcements and cancellations are routinely posted through the Department's listserv. 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 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 a faculty advisor to assist in planning a program to meet their educational goals, and to answer questions relating to graduate studies. The advisor will assist the student until all course work is completed and he/she chooses a major professor to chair their M.S. or Ph.D. thesis/project/dissertation 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's program not meeting the requirements necessary for graduation which may delay degree conferral. Although it is the faculty's responsibility to be available for students, students should be respectful of faculty's time and schedule appointments whenever possible.

If for any reason a student wishes to change advisors, he/she should submit their request in writing to the Director of Graduate Studies (a copy should 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.



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.")

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(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>)

[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>)

TUITION SCHOLARSHIPS

Doctoral students receiving a graduate assistantship, or doctoral students appointed as graduate assistants on grant funds paid through UB or the Research Foundation, may be eligible for a tuition scholarship. Tuition scholarships cover a maximum of 72 credit hours with a time limit of eight 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. The scholarship covers only those courses submitted for the degree. 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. 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.

TAP (Tuition Assistance Program) Award. New York State residents who are eligible for a tuition scholarship must file for the Tuition Assistance Program (TAP) award. NYS residents whose income is in excess of \$20,000/family or \$5,666/single with no dependents must complete and submit a notarized **Excess Income Affidavit** along with the **Graduate Student Scholarship Verification Form**. Students who do not file for TAP will be responsible for the TAP portion of their tuition.

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**
- ✓ **forward to the funding supervisor to complete and sign Section C**
- ✓ attach completed **and notarized Excess Income Affidavit** (if required)
- ✓ forward to the Department within the required deadline
- ✓ enroll in SEHP (if applicable)

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 annually at the commencement ceremony 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 (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. Only those students who have defended their dissertations by April 1 will be considered for the current academic year. 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 the Department's Education Committee.

GRADUATE STUDENT REQUEST FOR ABSTRACT SUBMISSION

Students intending to submit abstracts to professional meetings must obtain written approval from their advisor prior to submission.

Students requesting financial assistance must first seek funding from their advisor or faculty mentor. If funding is not available through their advisor or faculty mentor, students may submit a written request to the Department's Finance Committee for a **Robert O'Shea Student Travel Award** to support travel to meetings in order to present their research findings. The award was established to honor Robert O'Shea, Ph.D., Associate Professor Emeritus, who served as the first Director of Graduate Studies in the Department of Social and Preventive Medicine from 1977-1997.

Requests must be made prior to abstract submission. If an abstract is submitted without prior approval of funds, the student will be responsible to cover all costs incurred in presenting their work. Funds are not available for student travel to international meetings (outside of North America). Since funds for student travel are limited, it is important to submit requests for funding well in advance of abstract deadlines. Students who are supported by a faculty member for travel to present research may also be eligible for a **Robert O'Shea Student Travel Award** to support part of their travel expenses.

PROGRAM REGULATIONS

TRANSFER CREDIT

Each graduate program determines the applicability of graduate courses offered for transfer credit. Only those graduate courses completed with a minimum grade of 'B' (3.0) are eligible as transfer credit. Courses with 'S' or 'P' grades are not transferable unless the transcript specifically states they are equivalent to a 'B' grade or higher. Transcripts must also include the number of credit hours earned for each course. Credits earned in correspondence or undergraduate courses may not be transferred.

Students requesting approval for transfer credit should make their request in writing to the Director of Graduate Studies and provide a brief rationale of applicability for each course requested at the first opportunity after admission to the program and within the first semester of study. A copy of the course outline and description should also be provided. A maximum of 6 credit hours of graduate work may be transferred for the MS, 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 training may be transferred to the Ph.D. Thesis guidance and research credits are not transferable. The University's 10-year time limit will be considered for each request. Courses taken outside the department during matriculation in the program must also 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 indicated

Policy on Transfer of Credit for Required Courses: Students requesting transfer credit for required courses taken outside the University (SPM 501, SPM 502, SPM 506, STA 505, STA 506) must take and pass (B or better grade) an examination in order to have these course credits transferred.

AGE LIMIT FOR PRIOR COURSEWORK

All coursework (whether transfer or UB credits) more than 10 years old must be petitioned at the time of admission to the program (in addition to being approved by the Director of Graduate Studies). If these credits were 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** located on the web at www.grad.buffalo.edu/grad-docs/. 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 (type) Section 1.G. Reason for Petition: Other
- ✓ complete Section 2. Justification
- ✓ sign Section 3
- ✓ forward to the Department (do not send directly to the Graduate School)

REGISTRATION

All students are required to consult their advisor prior to registration, and to register at the beginning of each Fall and Spring semester while matriculated in the program according to the procedures and within the deadlines established by the Student Response Center. This includes semesters in which formal courses are taken, and also 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. 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.

Registration Deadlines. The registration timetable, course offerings and class schedules are posted on the Student Response Center's (SRC) web site at 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 the third week in December (for Spring). Check the SRC website for dates.

Registration Checklist:

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

Requirements for Full-Time Registration. Full-time registration is defined as 12 credit hours per semester for students without an assistantship or grant support, or 9 credit hours per semester for those students with an assistantship or grant support.

- 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).

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, such as SPM 590 Departmental Seminar, does not fulfill the requirement for continuous registration.

- 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. 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

If continuous registration is not possible at any time, the student must secure a leave of absence at least two weeks prior to the start of the semester in which the leave is to begin. Approval for a leave of absence must be petitioned through the Graduate School by completing the **Graduate Student Petition Form** located on the web at www.grad.buffalo.edu/grad-docs/.

- 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 in the department in order to register (see section on Re-Entry).

It should be noted that, normally, leaves are approved for a maximum of one year. A total of more than two years will not be approved. Students who are not on a leave of absence and fail to register for a semester are considered having left the University and must reapply to the program. The application should include a detailed timeline for completion of their degree. The Department reserves the right to accept or deny readmission, and to decide what prior course work can be applied to the degree. Therefore, it is important to maintain continuous registration. Re-entering students are subject to all policies in effect at the time of reapplication.

Leave of Absence Checklist:

- ✓ complete (type) Section 1.A. Reason for Petition: Leave of Absence
- ✓ complete Section 2. Justification
- ✓ sign Section 3
- ✓ forward to the Department (do not send directly to the Graduate School)

RE-ENTRY

When a student returns from an approved leave of absence, he/she must request to have their status reactivated by the Department. This request should be made a minimum of two weeks before the start of the semester.

Re-entry Checklist:

- ✓ request the Department forward a *Returning Graduate and Professional Student Semester Record Activation Form* to the Student Response Center

GRADUATE COURSE CREDIT

Graduate Courses for Graduate 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 at www.grad.buffalo.edu/grad-docs/. 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 (type) Section 1.D. Reason for Petition: Undergraduate Course for Graduate Credit
- ✓ provide description of additional work required of the student
- ✓ obtain signature of course instructor
- ✓ complete Section 2. Justification
- ✓ sign Section 3
- ✓ forward to the Department (do not send directly to the Graduate School)

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 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.

The required courses that are common to both the M.S. and M.P.H. degree programs include: SPM 501 Principles of Epidemiology (4 credits), SPM 502 (for MPH students on the Epidemiology and Biostatistics track), STA 505 Introduction to Biostatistics or STA 527 Introduction to Medical Statistics (4 credits), and STA 506 Introduction to Statistical Computing (3 credits). These courses may be counted toward both degree programs.

ACADEMIC PROGRESS

Students must maintain at minimum a '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.

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 better grade
- may continue to take courses, including required courses with permission of the instructor

Students who achieve a B- or less grade in **more than one** required course:

- 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 better grade in each course
- may continue to take courses, including required courses with permission of the instructor

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

Students who have two consecutive semesters with less than a B average (3.0) will be dismissed from the program.

Students receiving two or more 'C' (or lower) grades will be dismissed from the program.

Grades:

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

Grade Options:

- Students electing to receive an S/U grade for a course 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 should 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' grades are not acceptable for required courses.
- 'L' grades are assigned for thesis/dissertation guidance courses where continuing work is to be indicated instead of a final grade. 'L' grades automatically convert to 'S' grades at degree conferral.
- 'J' grades denote an invalid grade. Students should immediately consult with the professor to validate their grade or the 'J' will revert to a grade of 'F' at the end of the following semester.

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 waiver.
- The initial grade will remain on the student's transcript and be used in calculating the grade point average (GPA). The grade and semester from the repeated course will be reported on the ***Application to Candidacy Form***. The student's official transcript will record all courses attempted (including repeated courses) and all resulting grades will be used in calculating the GPA reflected on the transcript.

- The repeated course grade will be used in the process of certifying that a student is qualified to graduate, i.e. the Application to Candidacy (ATC) form.

Incomplete Grades:

- A grade of 'Incomplete' ('I') 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.
- An incomplete grade cannot be assigned when a student has not attended the class.
- A grade of 'Incomplete' ('I') is not available to students who have not performed a "C" or better in the course material completed.
- A grade of "Incomplete" ('I') can not be assigned for thesis/dissertation guidance.
- If an 'I' is given, a letter grade must be assigned within two semesters (May 15 for the Spring semester and December 15 for the Fall semester.) If the course requirements are not completed by the deadline, the 'Incomplete' will automatically default to an 'Unsatisfactory' 'U' or 'F' 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** located on the web at www.grad.buffalo.edu/grad-docs/.

Incomplete Grade Checklist:

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

STUDENT GENERAL PROGRESS REPORTS

Students are required to schedule a meeting with their advisor at the end of the Spring semester 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. Students receive a copy of their progress report for their review and signature. (See Appendix **General Progress Report**.)

ACADEMIC PROBATION

Students who receive a grade of 'U', 'D' or 'F' in any course required for their degree, who receive a B- or less in more than one required course, or whose cumulative GPA falls below 3.0 will have immediate academic review and will be placed on academic probation. Students placed on probation will be notified in writing the terms of the probation and its removal. Students not meeting the written terms of their academic probation will be dismissed from the Program.

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** located on the web at www.grad.buffalo.edu/grad-docs/.

Course Resignation Checklist:

- ✓ complete the **Exception Registration Change Form**
- ✓ obtain signature of course instructor(s) indicating approval of the addition(s)/resignation(s)
- ✓ forward to the Department (do not send directly to the Graduate School)

AUDITING COURSES

A student wishing an "Audit" (N) grade in 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.

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 before registering. Students must provide their supervising faculty with a copy of the **Description of Informal Course Work Form** (available from the Department) which includes information in the checklist below. The form is signed by both faculty and student and forwarded to the Director of Graduate Studies for approval. A copy of the approved form is placed in the student's file and the original 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:

- ✓ brief summary of the goals and objectives of the independent study
- ✓ syllabus outlining activities to be carried out
- ✓ 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.

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 registering for less than 12 graduate credit hours (or 9 if receiving a graduate assistantship or grant support) 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** has been completed and signed by all committee members

NOTE: It is not required that the proposal be defended at this time. A *PHOTOCOPY* of the signed ATC should be attached to the **Certification of Full-Time Status Form** and forwarded to the Department. Do not submit the original copy of the ATC. The student should retain the original ATC until the proposal has been successfully defended and the committee has approved the abstract form. (See section on Application to Candidacy.)

The **Certification of Full-Time Status** form is located on the web at www.grad.buffalo.edu/grad-docs/. Students must be registered for the semester in which they are filing.

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 credit hours increase or decrease from the previous semester, the student must refile. M.S./M.P.H. students must file each semester (two semester maximum) in order to be considered full time.

Certification of Full-time Status Checklist:

- ✓ complete (type) the **Certification of Full-Time Status Form**
- ✓ obtain signature of academic advisor
- ✓ attach a PHOTOCOPY of the ATC form signed by all committee members
(IMPORTANT: The ATC must show continuous registration until the date of degree conferral as indicated on Page 1 Q. 10 of the ATC)
- ✓ forward to the Department (do not send directly to the Graduate School)

COURSE REQUIREMENTS

MASTER OF PUBLIC HEALTH (M.P.H.)

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

Required Courses:

- SPM 501 Principles of Epidemiology (4 credits)
- SPM 502 Advanced Methods (3 credits) (required only for the Epidemiology/Biostatistics concentration)
- STA 505 Introduction to Biostatistics (4 credits), or STA 527 Introduction to Medical Statistics (4 credits) (students may not receive credit for both courses)
- STA 506 Introduction to Statistical Computing (3 credits)
- SPM 506 Application of Statistics to Epidemiology (3 credits) (required only for the Epidemiology/ Biostatistics concentration)
- SPM 507 Health Care Organization (3 credits)
- SPM 527 Study of Health Behaviors (3 credits)
- SPM 533 Principles of Public Health (3 credits)
- SPM 535 Biological Basis of Public Health (3 credits) or PTR 536 Pathophysiology (3 credits) (*waived for students with a health professions background*)
- SPM 551 Epidemiologic Applications to Environmental Health (3 credits)
- SPM 590 Graduate Seminar (0)
- SPM 544 Master of Public Health Field Training (6 credits)
- SPM 630 Master of Public Health Integrative Project (3 credits)

The remaining 15 credit hours are fulfilled in program concentration courses in either Epidemiology and Biostatistics (includes courses listed under "Research Methods and Principles" of the Graduate Courses section of the Handbook) or Health Services Administration. With permission of their faculty advisor, students may take a course outside their concentration area if relevant to their future career plans

MPH Recommended Two-Year Course Sequences by Concentration Area for Basic Full-Time, 2-Year Program (with no summer instruction)

EPIDEMIOLOGY AND BIOSTATISTICS	
Year 1: Fall Semester	Year 1: Spring Semester
<p>Core Courses SPM 501 Epidemiology Principles (4) STA 505 & STA 505-R Introduction to Biostatistics or STA 527 Introduction to Medical Statistics (4) STA 506 Introduction to Statistical Computing SPM 533 Principles of Public Health (3) SPM 590 Graduate Seminar (0) <i>For non-health professionals, recommend do in Year 1:</i> SPM 535 Biological Basis of Public Health (3) or in Spring semester, PTR 536 Pathophysiology</p> <p>Concentration Area Courses</p>	<p>Core Courses SPM 502 Advanced Methodology (3) SPM 506 Application of Statistics to Epidemiology (3) SPM 551 Epidemiologic Applications to Environmental Health (3) SPM 590 Graduate Seminar (0) <i>For non-health professionals, recommend do in Year 1:</i> PTR 536 Pathophysiology (3) [or SPM 535 in Fall semester]</p> <p>Concentration Area Courses Epidemiology/biostatistics electives (enough to bring total credits to 12)</p>
Year 2: Fall Semester	Year 2: Spring Semester
<p>Core Courses SPM 590 Graduate Seminar (0)</p> <p>Concentration Area Courses Epidemiology/biostatistics electives (enough to bring total credits to 12)</p> <p>Field training (SPM 544/STA 544; 20 hrs/week) (6)</p>	<p>Core Courses SPM 507 Introduction to Health Care Organization (3) SPM 527 Study of Health Behaviors (3) SPM 590 Graduate Seminar (0)</p> <p>Concentration Area Courses Epidemiology/biostatistics electives (enough to bring total credits to 12)</p> <p>Integrative Project (SPM 630/STA 630) (2-3)*</p>

HEALTH SERVICES ADMINISTRATION	
Year 1: Fall Semester	Year 1: Spring Semester
<p>Core Courses SPM 501 Epidemiology Principles (4) STA 505 & STA 505-R Introduction to Biostatistics or STA 527 Introduction to Medical Statistics(4) STA 506 Introduction to Statistical Computing SPM 533 Principles of Public Health (3) SPM 590 Graduate Seminar (0) <i>For non-health professionals, recommend do in Year 1:</i> SPM 535 Biological Basis of Public Health (3) or in Spring semester, PTR 536 Pathophysiology</p> <p>Concentration Area Courses <i>Recommended:</i> SPM 523 Introduction to Program Planning and Evaluation (3)</p>	<p>Core Courses SPM 507 Introduction to Health Care Organization (3) SPM 551 Epidemiologic Applications to Environmental Health (3) SPM 590 Graduate Seminar (0) <i>For non-health professionals, recommend do in Year 1:</i> PTR 536 Pathophysiology (3) [or SPM 535 in Fall semester]</p> <p>Concentration Area Courses Health administration electives (enough to bring total credits to 12)</p>
Year 2: Fall Semester	Year 2: Spring Semester
<p>Core Courses SPM 590 Graduate Seminar (0)</p> <p>Concentration Area Courses <i>Recommended:</i> SPM 523 Introduction to Program Planning and Evaluation (3) Health administration electives (enough to bring total credits to 12)</p> <p>Field training (SPM 544/STA 544; 20 hrs/week) (6)</p>	<p>Core Courses SPM 527 Study of Health Behaviors (3) SPM 590 Graduate Seminar (0)</p> <p>Concentration Area Courses Health administration electives (enough to bring total credits to 12)</p> <p>Integrative Project (SPM 630/STA 630) (2-3)*</p>

*Students who took STA 505 for 3 credits, take 3 credits of SPM 630; students who took STA 505 for 4 credits, take 2 credits of SPM 630.

MPH Recommended THREE SEMESTER Course Sequence by Concentration Area

EPIDEMIOLOGY AND BIOSTATISTICS	
<p>Year 1: Fall Semester</p> <p>Core Courses SPM 501 Epidemiology Principles (4) STA 505 & STA 505-R Introduction to Biostatistics or STA 527 Introduction to Medical Statistics(4) STA 506 Introduction to Statistical Computing SPM 533 Principles of Public Health (3) SPM 535 Biological Basis of Public Health (3) [or PTR 536 in Spring semester] SPM 590 Departmental Seminar (0)</p>	<p>Year 1: Spring Semester</p> <p>Core Courses SPM 502 Advanced Methods (3) SPM 506 Application of Statistics to Epidemiology (3) SPM 507 Introduction to Health Care Organization (3) SPM 527/PTR 529 Study of Health Behaviors (3) SPM 551 Epidemiologic Applications to Environmental Health (3) SPM 590 Departmental Seminar (0) <i>For non-health professionals:</i> PTR 536 Pathophysiology (3) [or SPM 535 in Fall semester]</p> <p>Concentration Area Courses</p>
Year 1: Summer Semester	
<p>Field Training SPM 544 Field training (20 hrs/week) (6)</p>	
Year 2: Fall Semester	
<p>Core Courses SPM 590 Departmental Seminar (0)</p> <p>Integrative Project SPM 630 Integrative Project (3)</p> <p>Concentration Area Courses Advanced epidemiology/biostatistics course (3) Advanced epidemiology/biostatistics course (3) Advanced epidemiology/biostatistics course (3)</p>	

HEALTH SERVICES ADMINISTRATION	
<p style="text-align: center;">Year 1: Fall Semester</p> <p>Core Courses SPM 501 Epidemiology Principles (4) STA 505 & STA 505-R Introduction to Biostatistics or STA 527 Introduction to Medical Statistics(4) STA 506 Introduction to Statistical Computing SPM 533 Principles of Public Health (3)</p> <p>Concentration Area Courses <i>Recommended as an additional course:</i> SPM 523 Introduction to Program Planning and Evaluation (3)</p>	<p style="text-align: center;">Year 1: Spring Semester</p> <p>Core Courses SPM 507 Introduction to Health Care Organization (3) SPM 527 Study of Health Behaviors (3) SPM 551 Epidemiologic Applications to Environmental Health (3) <i>For non-health professionals:</i> PTR 536 Pathophysiology (3) [or SPM 535 in Fall semester]</p> <p>Concentration Area Courses Health administration elective (3)</p>
Year 1: Summer Semester	
<p>Field Training SPM 544 Field training (20 hrs/week) (6)</p>	
Year 2: Fall Semester	
<p>Core Courses <i>For non-health professionals:</i> SPM 535 Biological Basis of Public Health (3) [or PTR 536 in Spring semester]</p> <p>Integrative Project SPM 630 Integrative Project (1-3)</p> <p>Concentration Area Courses Health administration elective (3) Health administration elective (3)</p>	

MASTERS OF SCIENCE (M.S.)

Candidates for the M.S. degree must complete 33 credits for degree conferral.

Required Courses:

- SPM 501 Principles of Epidemiology (4 credits)
- SPM 502 Advanced Methods (3 credits)
- STA 505 Introduction to Biostatistics (4 credits), or STA 527 Introduction to Medical Statistics (4 credits) (students may not receive credit for both courses)
- STA 506 Introduction to Statistical Computing (3 credits)
- SPM 506 Application of Statistics to Epidemiology (3 credits)
- SPM 590 Graduate Seminar (0 Credits)
- One advanced course in epidemiology: SPM 509, 511, 513, 514, 515, 551, 552, 561, 614, 620, 621, 622, 624 & RPN 525

Concentration Area Course Requirements:

Administrative/health services:

SPM 507, 523, and 530 or 539, and do a practicum in program planning and evaluation by taking SPM 529.

Epidemiological research:

two additional advanced courses in one of the following sequences:

Epidemiology:

SPM 509, 511, 513, 514, 515, 551, 552, 561, 614, 620, 621, 622, 624 & RPN 525

Research Methods:

SPM 517, 538, 553, 560, 606, 611, 612, 615, SOC 518

Biostatistics/Statistics:

STA 509, 517, 526, 581 or any STA course with a 500 or above number, e.g. 503 or 575

Clinical Epidemiology:

two additional courses in clinical epidemiology from the following: SPM 560, 606, 613, 620, 624

Preventive Medicine Residents:

fulfill their requirements by including SPM 507, SPM 551, SPM 552, and PTR 529 as their required courses.

Primary Care Research Fellows:

fulfill their requirements by including SPM 625 in addition to their concentration area courses

The balance of hours remaining will be divided between electives and the thesis/project. Up to six hours will be granted for SPM 700 Thesis Guidance. Courses taken outside the Department of SPM/Biostatistics must first be approved by the Director of Graduate Studies. All students must demonstrate a minimum level of computer literacy during their training, showing the ability to process and analyze typical epidemiological/health services research data.

MS Recommended THREE SEMESTER Course Sequence by Concentration Area

EPIDEMIOLOGY	
Year 1: Fall Semester	Year 1: Spring Semester
<p>Core Courses SPM 501 Epidemiology Principles (4) STA 505 & STA 505-R Introduction to Biostatistics or STA 527 Introduction to Medical Statistics (4) STA 506 Introduction to Statistical Computing SPM 590 Departmental Seminar (0)</p> <p>Concentration Courses Elective course (3)</p>	<p>Core Courses SPM 502 Advanced Methodology (3) SPM 506 Application of Statistics to Epidemiology (3) SPM 590 Departmental Seminar (0) Advanced Epidemiology Course (3)</p> <p>Concentration Courses Advanced Epidemiology Course (3) Advanced Epidemiology Course (3)</p>
Year 2: Fall Semester	
<p>Core Courses Thesis Guidance (6)</p>	

HEALTH SERVICES ADMINISTRATION	
Year 1: Fall Semester	Year 1: Spring Semester
<p>Core Courses SPM 501 Epidemiology Principles (4) STA 505 & STA 505-R Introduction to Biostatistics or STA 527 Introduction to Medical Statistics (4) STA 506 Introduction to Statistical Computing SPM 590 Departmental Seminar (0)</p> <p>Concentration Courses SPM 523 Introduction to Program Planning & Evaluation (3)</p>	<p>Core Courses SPM 502 Advanced Methods (3) SPM 506 Application of Statistics to Epidemiology (3) Advanced Epidemiology Course (3) SPM 590 Departmental Seminar (0)</p> <p>Concentration Courses SPM 507 Intro to Health Care Organization (3) SPM 529 Field Experience in Program Planning & Evaluation (3) SPM 539 Health Economics (3) (or SPM 530 in Fall semester)</p>
Year 2: Fall Semester	
<p>Core Courses Thesis Guidance (3)</p> <p>Concentration Courses SPM 530 Administrative Theory & Practice (3) (or SPM 539 in Spring semester)</p>	

DOCTOR OF PHILOSOPHY (Ph.D.)

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

- STA 505 Introduction to Biostatistics (4 credits) or STA 527 Introduction to Medical Statistics (4 credits) (students may not receive credit for both courses)
- STA 506 Introduction to Statistical Computing (3 credits)
- SPM 506 Application of Statistics to Epidemiology (3 credits)
- STA 575 Survival Data Analysis (3 credits)

Advanced Epidemiology

Students are required to take **four** of the following advanced epidemiology courses: SPM 509, 511, 513, 514, 515, 551, 552, 560, 561, 606, 611, 614, 620, 621, 622, 624 & RPN 525

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

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 Department of SPM/Biostatistics must first be approved by the Director of Graduate Studies.

PHD Recommended Sequence : First Two Years

Year 1: Fall Semester	Year 1: Spring Semester
Core Courses SPM 501 Epidemiology Principles (4) STA 505 & STA 505-R Introduction to Biostatistics or STA 527 Introduction to Medical Statistics (4) STA 506 Introduction to Statistical Computing SPM 590 Departmental Seminar (0) Elective course (3)	Core Courses SPM 502 Advanced Methodology (3) SPM 506 Application of Statistics to Epidemiology (3) SPM 590 Departmental Seminar (0) Advanced Epidemiology Course (3) Advanced Epidemiology Course (3)
Year 2: Fall Semester	Year 2: Spring Semester
Core Courses SPM 590 Departmental Seminar Advanced Epidemiology Course (3) Advanced Epidemiology Course (3) Elective course (3) Elective course (3)	Core Courses SPM 590 Departmental Seminar STA 575 Survival Analysis (3) Elective course (3) Elective course (3) Elective course (3)

DEGREE REQUIREMENTS

MASTER OF PUBLIC HEALTH (M.P.H.)

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.

Departmental Seminar. SPM 590 Departmental Seminar is a required course for all full-time students. All full-time 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 require the permission of the Director of Graduate Studies. Part-time students are strongly encouraged to attend the seminars.

Time Limit to Complete the Degree. The time limit for obtaining the M.P.H. degree is four years from the date of matriculation in the department, excluding official leaves of absence. 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. Students must provide a detailed description of work completed to date as well as a timeline for completion of the project/degree. Normally, extensions are approved for a maximum of one year. A total of more than two years will not be approved. 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/grad-docs. Be sure to indicate the dates of the extension, the reason for the request, and the intended date of degree completion. The Graduate School will not approve an extension for 'personal reasons,' you must be specific and provide strong justification for your request.

Extension of Time Checklist:

- ✓ complete (type) Section 1.B. Reason for Petition: Extension of Time
- ✓ complete Section 2. Justification (including a detailed description and timeline)
- ✓ sign Section 3
- ✓ forward to the Department (do not send directly to the Graduate School)

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/grad-docs. Once the ATC has been approved, a student is not required to enroll for 12 credits to be considered full time. To be certified full-time a student must submit a **Certification of Full-Time Status Form**. (See section on Certification of Full-Time Status).

Application to Candidacy Checklist:

- ✓ Complete (type) Part I-V with required signatures of two committee members. (Name and signatures for Academic Dean and Divisional Committee do not need to be completed.) (NOTE: answer to Q 10 is Health Sciences Divisional Committee)
- ✓ Courses must be listed in chronological order.
- ✓ Asterisk all required courses.
- ✓ Indicate total credits.
- ✓ Include all courses to be completed until degree conferral. Students must indicate continuous registration until the degree conferral date indicated on Page 1 Q. 11 of the ATC. If an intended course(s) and/or credit hours change, the student must complete a **Graduate Student Petition Form** correcting the original ATC (www.grad.buffalo.edu/grad-docs).
- ✓ Include required courses which were formally waived.
- ✓ Attach **Abstract Form**. Be sure to follow the example format.
- ✓ Attach UB unofficial transcript (obtained on the web through SOAR). Your report must show registration for the current semester.
- ✓ Attach original transcripts for all transfer credit (the Department will supply original transcripts for the baccalaureate degree)
- ✓ If required, attach **Description of Informal Graduate Course Work Form(s)** signed by the student, course instructor and Director of Graduate Studies for all independent study course work (e.g. SPM 599)
- ✓ 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 official deadline.** Official 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, the Dean of the School and the HSDC 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 paper 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 on their integrative project.

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 must be signed by the major professor, committee member and Director of Graduate Studies to certify that the project has been approved by the Department in partial fulfillment of the requirements for the degree. The **M-Form** is submitted to the Graduate School and a copy is placed in the student's file. The **M-Form** must 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

M Form Checklist:

- ✓ notify the Graduate Program Coordinator of the date for the integrative project presentation (a copy of the prepared **M-Form** will be placed in the student's mailbox). If the title of the integrative project has changed from the title indicated on the ATC, notify the Graduate Program Coordinator.
- ✓ present the **M-Form** at the integrative project presentation for signature of committee members
- ✓ submit to the Graduate Program Coordinator for signature of the Director of Graduate Studies
- ✓ submit to the Graduate School within the deadlines established by the Graduate School

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 while considered full time.
- 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 petition 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.
- Successful completion and presentation of the integrative project.
- M Form** submitted to the Graduate School within the established deadlines (the Graduate School does not require copies of a project).

MASTER OF SCIENCE (M.S.)

The M.S. degree requires a minimum of 27 credit hours of graduate courses plus six credit hours of thesis credit. 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 M.S. and Ph.D. students. Re-entering students must take the exam after their first year of re-entering the program or, if preferred, prior to re-entering.

1. The exam must be taken immediately following successful completion (B or better) of the five core required courses or the equivalent: SPM 501, SPM 502, SPM 506, STA 505/527, STA 506.
 - Full-time students must take the exam after the 1st year of classes.
 - Part-time students must take the exam by the Spring semester immediately following completion of the required courses (see above).
2. 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.
3. The exam will include any material from these required courses:
 - SPM 501 – Principles of Epidemiology
 - SPM 502 – Advanced Methodology
 - SPM 506 – Application of Statistics to Epidemiology
 - STA 505 – Introduction to Biostatistics/STA 527 Introduction to Medical Statistics
 - STA 506 – Introduction to Statistical Computing
 - The exam will consist of multiple choice, true false, and short answer questions. The exam will not be open book.
 - The exam will be a full day exam given in two parts – morning and afternoon.
4. Students must successfully complete this exam before proceeding with additional coursework.
 - Minimum passing grades: 70% for the M.S., 80% for the Ph.D.
 - 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 at the M.S. level twice will not be allowed to continue in the M.S. or Ph.D. program.
- Students who fail at the Ph.D. level but pass at the M.S. level will be allowed to complete the requirements for an M.S.

Departmental Seminar. SPM 590 Departmental Seminar is a required course for all full-time students, and those students who have completed their course work and are registered for a minimum of one credit hour of thesis guidance or 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 require the permission of the Director of Graduate Studies. 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 matriculation in the department, excluding official leaves of absence, regardless of full- or part-time status. 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. Students must provide a detailed description of work completed to date as well as a timeline for completion of the thesis/degree. Normally, extensions are approved for a maximum of one year. A total of more than two years will not be approved. 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/grad-docs. Be sure to indicate the dates of the extension, the reason for the request, and the intended date of degree completion. The Graduate School will not approve an extension for 'personal reasons,' you must be specific and present strong justification for your request.

Extension of Time Checklist:

- ✓ complete (type) Section 1.B. Reason for Petition: Extension of Time
- ✓ complete Section 2. Justification (including a detailed description and timeline)
- ✓ sign Section 3
- ✓ forward to the Department (do not send directly to the Graduate School)

Thesis/Project Committee and Proposal Defense. 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 graduate faculty and whose primary appointment is in the Department of SPM or Roswell Park Cancer Institute; and at least two other faculty members who hold the rank of assistant, associate or professor in the University. A list of eligible graduate faculty is available at the Graduate School website (www.provost.buffalo.edu/grad/faculty_roster/qfrdatabase.asp). If a student wishes to include a faculty member from another university, they must petition the Graduate School using the **Graduate Student Petition form** (www.grad.buffalo.edu/grad-docs/) and supply a copy of the faculty member's CV with their request. Requests are limited to one committee member. A faculty member from outside the University must hold an equivalent rank at their respective institution.

Thesis/Project Committee and Proposal Defense Checklist:

- ✓ Select a major professor and two additional committee members.
- ✓ With guidance from the major professor, 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.
- ✓ Schedule the proposal defense.
- ✓ Reserve a room for the defense through the Graduate Program Coordinator.
- ✓ Distribute to the committee copies of the proposal in *final* form at least two weeks prior to the date of the proposal defense.
- ✓ Formally defend the proposal with all committee members present. The proposal must be approved by the committee before a student may proceed.
- ✓ Present the completed **Application to Candidacy Form** (see section on ATC) for signature of committee members.
- ✓ Submit the completed ATC to the Graduate Program Coordinator for signature of the Director of Graduate Studies and processing.

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 when all formal course work has been completed and after the student has successfully defended the proposal. All ATC forms must include an abstract of their research which has been formally defended by the student in the presence of his/her committee. The ATC Form is available at www.grad.buffalo.edu/grad-docs. Once the ATC has been approved, a student is not required to enroll for 12 credits (9 credits if receiving a graduate assistantship or grant support) to be considered full-time for tuition scholarship or student loan purposes. To be certified full time a student must submit a ***Certification of Full-Time Status Form***. (See section on Certification of Full-Time Status).

Application to Candidacy Checklist:

- ✓ Complete (type) Part I-V with required signatures of all committee members. The committee signs the ATC at the proposal defense (unless previously signed for certification of full-time status). (Name and signatures for Academic Dean and Divisional Committee do not need to be completed) (NOTE: answer to Q 10 is Health Sciences Divisional Committee)
- ✓ Courses must be listed in chronological order.
- ✓ Asterisk all required courses.
- ✓ Indicate total credits
- ✓ Include all courses to be completed *until degree conferral*. Students must indicate continuous registration until the degree conferral date indicated on Page 1 Q. 11 of the ATC. If an intended course(s) and/or credit hours change, the student must complete a **Graduate Student Petition Form** correcting the original ATC (www.grad.buffalo.edu/grad-docs).
- ✓ Attach **Abstract Form**. Be sure to follow the HSDC example format.
- ✓ Attach **Human Subjects Form** (if required). Forms can be found on the web at www.wings.buffalo.edu/smb/HSIRB
- ✓ Attach UB unofficial transcript (obtained on the web through SOAR). Your report must show registration for the current semester.
- ✓ Attach original transcripts for all transfer credit (the Department will supply original transcripts for the baccalaureate degree)
- ✓ If required, attach **Description of Informal Graduate Course Work Form(s)** signed by the student, course instructor and Director of Graduate Studies for all independent study course work (e.g. SPM 599)
- ✓ 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 official deadline**. Official 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, the Dean of the School and the HSDC 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/Project Defense. All M.S. students must complete and formally defend a thesis/project approved by the student's three-member committee:

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, analyze, and discuss data with the purpose of developing or testing theory.

The project is a demonstration of expertise in a field of interest which can be identified as either contributing new knowledge to the field, or as applying knowledge in a creative or unique manner. The purpose of a project is to afford the student a concentrated learning experience in independent scholarly inquiry and communication with the guidance of faculty. It may range widely in subject matter depending on the imagination and creativity of the student and the resources available in the University community to provide consultation, advice and critical support. Examples of appropriate projects include: planning/evaluating a health services program; development of a research tool; or critically evaluating a body of research literature.

Students are urged to examine previous theses/projects on file in the Department's graduate office. Note that the Department does not differentiate between the thesis and project in terms of rigor, length, effort, or scholarly value. Transfer from a thesis option to a project option is permissible subject to the approval of both the major professor and the Director of Graduate Studies. This must also be approved by the Graduate School by filing a **Graduate Student Petition Form** available on the Graduate School website: www.grad.buffalo.edu/grad-docs/

Thesis/Project Defense Checklist:

- ✓ With the approval of the committee, schedule an oral defense of the completed thesis/project:
 - check with committee members for available dates
 - check for available room
 - check for availability of a laptop and/or projector used with laptop (if needed)

- ✓ Notify the Graduate Program Coordinator of your defense date. A room will be reserved and a public notice will be posted for the defense. A minimum of two weeks notice must be allowed for the posting of the defense. An **M-Form** will be prepared for your defense (see section on **M-Form**).

- ✓ If laptop and/or projector equipment is needed, reserve (via email) through the Department Computer Programmer.

- ✓ Distribute to the committee copies of the thesis/project in *final* form at least two weeks prior to the date of the defense (unless committee members agree otherwise).

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 must be signed by the major professor, committee members, and Director of Graduate Studies to certify that the defense of the thesis/project was satisfactorily completed in partial fulfillment of the requirements for the degree. The ***M-Form*** is submitted to the Graduate School and a copy is placed in the student's file. The ***M-Form*** must 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

M Form Checklist:

- ✓ if the title of the thesis/project has changed from the title indicated on the ATC, notify the Graduate Program Coordinator.
- ✓ present the ***M-Form*** at the thesis/project defense for signature of committee members
- ✓ submit to the Graduate Program Coordinator for signature of the Director of Graduate Studies
- ✓ submit to the Graduate School within the deadline established by the Graduate School

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 six credit hours of thesis 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 while considered full time or registered for a minimum of one credit hour of thesis guidance or natural sciences research.
- ❑ 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 petition 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.
- ❑ Successful completion and defense of a thesis/project.
- ❑ ***M Form*** and two bound copies of the thesis submitted to the Graduate School within the established deadlines (the Graduate School does not require copies of a project)
- ❑ One bound copy of the thesis/project submitted to the Department and to each member of the student's committee

DOCTOR OF PHILOSOPHY (Ph.D.)

The Ph.D. degree requires a minimum of 60 hours of graduate courses plus 12 hours of dissertation credit. 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 M.S. and Ph.D. students. Re-entering students must take the exam after their first year of re-entering the program or, if preferred, prior to re-entering.

1. The exam must be taken immediately following successful completion (B or better) of the five core required courses or the equivalent: SPM 501, SPM 502, SPM 506; STA 505/527, STA 506.
 - Full-time students must take the exam after the 1st year of classes.
 - Part-time students must take the exam by the Spring semester immediately following completion of the required courses (see above).
2. 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.
3. The exam will include any material from these required courses:
 - SPM 501 – Principles of Epidemiology
 - SPM 502 – Advanced Methodology
 - SPM 506 – Application of Statistics to Epidemiology
 - STA 505 – Introduction to Biostatistics/STA 527 Introduction to Medical Statistics
 - STA 506 – Introduction to Statistical Computing
 - The exam will consist of multiple choice, true false, and short answer questions. The exam will not be open book.
 - The exam will be a full day exam given in two parts – morning and afternoon.
4. Students must successfully complete this exam before proceeding with additional coursework.
 - Minimum passing grades: 70% for the M.S., 80% for the Ph.D.
 - 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 at the M.S. level twice will not be allowed to continue in the M.S. or Ph.D. program.
- Students who fail at the Ph.D. level but pass at the M.S. level will be allowed to complete the requirements for an M.S.

Residency Requirement. All Ph.D. students must fulfill a residency requirement of at least two consecutive semesters where full-time registration is maintained (not including the summer semester). Full-time registration is defined as 12 credit hours per semester (or 9 credit hours for those students who are supported by a research grant or graduate assistantship).

Departmental Seminar. SPM 590 Departmental Seminar is a required course for all full-time students, and those students who have completed their course work and are registered for a minimum of one credit hour of thesis/dissertation guidance or 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 require the permission of the Director of Graduate Studies. 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. For those doctoral students who have successfully defended their proposal and filed their ATC (with abstract), a minimum of 50 percent attendance of the seminars is required for each semester until degree completion. Part-time students are strongly encouraged to attend the seminars.

Departmental Seminar Checklist:

- ✓ meet the requirement of presenting a departmental seminar before scheduling the dissertation defense

NOTE: The proposal must be successfully defended and the ATC must be submitted before the 50% attendance rule applies.

Time Limit to Complete the Degree. The time limit for completing the Ph.D. degree is seven years from the date of matriculation in the department, 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 time they matriculated into the M.S./M.P.H. program. 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. Students must provide a detailed description of work completed to date as well as a timeline for completion of the dissertation/degree. Normally, extensions are approved for a maximum of one year. A total of more than two years will not be approved. 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/grad-docs. Be sure to indicate the dates of the extension, the reason for the request, and the intended date of degree completion. The Graduate School will not approve an extension for 'personal reasons,' you must be specific and present strong justification for your request.

Extension of Time Checklist:

- ✓ complete (type) Section 1.B. Reason for Petition: Extension of Time
- ✓ complete Section 2. Justification (including a detailed description and timeline)
- ✓ sign Section 3
- ✓ forward to the Department (do not send directly to the Graduate School)

Preliminary Exam. Students are eligible to sit for the preliminary exam after 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 prelim exam. The purpose of the exam is to determine whether the student has sufficient knowledge essential for conducting advanced research toward a doctoral degree. The preliminary exam is offered in January and May. Students interested in taking the exam should submit their request in writing to the Director and Graduate Studies and include their specialty concentration. Specialty concentrations include and are limited to: epidemiology of cardiovascular disease, epidemiology of cancer, occupational epidemiology, environmental epidemiology, oral epidemiology, nutritional epidemiology, epidemiologic applications of public health, and epidemiology of women's health.

Procedures for the preliminary exam include:

- The Chair of the Prelim Committee will assemble a six-member prelim committee for each student taking the exam: three faculty members for the general epidemiology and biostatistics section, and three faculty members for the student's research specialty concentration section. The student's prelim committee will develop and submit questions and grade the exam.
- The exam will consist of two parts: written and oral examinations, and will test general knowledge of epidemiology and biostatistics and the student's research specialty concentration. All prelim exams will require students to answer one database question as part of the general epidemiology/biostatistics section. The question will be provided in both SPSS and SAS.
- Students will have seven (7) days to complete the written exam. The exam consists of three general epidemiology/biostatistics questions, and two research specialty concentration questions. Students are required to answer all questions.
- Each exam question is graded as pass/low pass/fail. General questions will be graded anonymously.
- A pass/low pass grade on each question is required to pass the written exam.
- Students must first pass the written exam in order to qualify for the oral prelim exam. Students will be notified of their grades prior to the oral exam. No faculty comments will be provided to the student.
- The oral examination is held 4 weeks after successful completion of the written exam. The oral exam will consist of questions to probe further the written answers and questions to help evaluate a student's potential for conducting research at the doctoral level.
- Students who fail the oral exam must retake both the written and oral examinations. A majority of the committee for the second exam will consist of members from the committee of the student's first exam.
- Students who fail the exam may either resign from the graduate program or opt to retake the examination. A student is allowed to retake the examination only once. Students who fail the second examination are not allowed to continue the Ph.D. program. Students have the option of completing the thesis requirements and earning an M.S., or retake the additional required courses and complete an integrative project for the M.P.H.

Prelim Exam Checklist:

- ✓ receive permission of advisor
- ✓ notify the Director of Graduate Studies in writing and indicate the specialty concentration of epidemiology (exams are offered in January and May)

Dissertation Committee and Proposal Defense. 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 graduate faculty and whose primary appointment is in the Department of SPM or Roswell Park Cancer Institute; and two other faculty members who hold the rank of assistant, associate, or professor in the University. A list of eligible graduate faculty is available at the Graduate School website (www.provost.buffalo.edu/grad/faculty_roster/qfrdatabase.asp). All doctoral students are strongly encouraged to include a biostatistician or methods faculty on their committee. Students who do not have a biostatistician or methods faculty must first have their committee approved by the Education Committee. If a student wishes to include a faculty member from another university, they must petition the Graduate School using the **Graduate Student Petition Form** (www.grad.buffalo.edu/grad-docs/) and supply a copy of the faculty member's CV with their request. Requests are limited to one committee member. A faculty member from outside the University must hold an equivalent rank at their respective institution.

Dissertation Committee and Proposal Defense Checklist:

- ✓ Select a major professor and two additional committee members.
- ✓ With guidance from the major professor, 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.
- ✓ Schedule the proposal defense.
- ✓ Reserve a room for the proposal defense through the Graduate Program Coordinator.
- ✓ Distribute to the committee copies of the proposal in *final* form at least two weeks prior to the date of the proposal defense.
- ✓ Formally defend the proposal with all committee members present. The proposal must be approved by the committee before a student may proceed.
- ✓ Present the completed **Application to Candidacy Form** (see section on ATC) for signature of committee members.
- ✓ Submit the completed ATC to the Graduate Program Coordinator for signature of the Director of Graduate Studies and processing

Application to Candidacy. The ***Application to Candidacy*** 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 defended the proposal. All ATC forms must include an abstract of their research which has been formally defended by the student in the presence of his/her committee. The ATC is available at www.grad.buffalo.edu/grad-docs. Once the ATC has been approved, a student is not required to enroll for 12 credits (9 credits if receiving a graduate assistantship or grant support) to be considered full-time for tuition scholarship or student loan purposes. To be certified full time a student must submit a ***Certification of Full-Time Status Form***. (See section on Certification of Full-Time Status).

Application to Candidacy Checklist:

- ✓ Complete (type) Part I-V with required signatures of all committee members. The committee signs the ATC at the proposal defense (unless previously signed for certification of full-time status). (Name and signatures for Academic Dean and Divisional Committee do not need to be completed) (NOTE: answer to Q. 10 is Health Sciences Divisional Committee)
- ✓ Courses must be listed in chronological order.
- ✓ Asterisk all required courses.
- ✓ Indicate total credits.
- ✓ Include all courses to be completed until degree conferral. Students must indicate continuous registration until the degree conferral date indicated on Page 1 Q. 11 of the ATC). If an intended course(s) and/or credit hours change, the student must complete a **Graduate Student Petition Form** correcting the original ATC (www.grad.buffalo.edu/grad-docs).
- ✓ Attach **Abstract Form**. Be sure to follow the HSDC example format.
- ✓ Attach **Human Subject Form** (if required). Forms can be found on the web at www.wings.buffalo.edu/smb/HSIRB
- ✓ Attach UB unofficial transcript (obtained on the web through SOAR). Your report must show registration for the current semester.
- ✓ Attach original transcripts for all transfer credit (the Department will supply original transcripts for the baccalaureate degree).
- ✓ If required, attach **Description of Informal Graduate Course Work Form(s)** signed by the student, course instructor and Director of Graduate Studies for all independent study course work (e.g. SPM 599)
- ✓ 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 official deadline.** Official 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, the Dean of the School and the HSDC 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.

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 committee of three graduate faculty selected by the candidate.

Outside Reader. In addition to the required three member committee, an outside reader must examine the doctoral dissertation. An outside reader is a qualified individual from outside the student's department who normally holds a Ph.D. in his or her respective field, holds a tenured/tenture-track faculty appointment (or comparable research appointment) and has completed significant independent research/scholarship. Before an outside reader is appointed, the Director of Graduate Studies must sign and approve the **Outside Reader Appointment Form** (available at www.grad.buffalo.edu/grad-docs/). This form is forwarded to the Graduate School for approval along with any relevant information concerning a potential conflict of interest. The dissertation should not be given to the outside reader before he/she has been approved by the Graduate School.

Outside Reader Appointment Checklist:

- ✓ complete **Outside Reader Appointment Form**
- ✓ forward to the Department

After the **Outside Reader Appointment Form** as been approved by the Graduate School, notification will be sent to the student and his/her major professor

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 use *the* **Outside Reader Response Form** (available at www.grad.buffalo.edu/grad-docs/). The completed form should be returned directly to the Dean of the Graduate School along with a copy faxed to the department. The Graduate School must receive the **Outsider Reader Response Form** before the dissertation defense can be scheduled. Permission for the defense comes from the Graduate School and is contingent in part on the receipt of written approval by the outside reader.

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 three-member committee:

Dissertation Defense Checklist:

- ✓ With the approval of the committee, schedule an oral defense of the completed dissertation:
 - check with committee members for available dates
 - check for available room
 - check for availability of a laptop and/or projector used with laptop (if needed)
- ✓ Notify the Graduate Program Coordinator of your defense date. A room will be reserved and a public notice will be posted for the defense. A minimum of two weeks notice must be allowed for the posting of the defense. An **M-Form** will be prepared for your defense (see section on **M-Form**).
- ✓ If a laptop and/or projector equipment is needed, reserve (via email) through the Department Computer Programmer.
- ✓ Distribute to the committee copies of the thesis/project in *final form* at least two weeks prior to the date of the defense (unless committee members agree otherwise).

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 Graduate School and a copy is placed in the student's file. The **M-Form** must 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

M Form Checklist:

- ✓ If the title of the thesis/project has changed from the title indicated on the ATC, notify the Graduate Program Coordinator.
- ✓ present the **M-Form** at the dissertation defense for signature of committee members
- ✓ submit to the Graduate Program Coordinator for signature of the Director of Graduate Studies
- ✓ submit to the Graduate School within the deadline established by the Graduate School

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 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 while considered full time or registered for a minimum of one credit hour of thesis guidance or natural sciences research.
- Continuous registration from the date of matriculation (unless on an approved leave of absence).
- If beyond the seven-year time limit for completion of degree, an approved petition for extension of time to complete the degree is on file in the Graduate School.
- 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.
- Submission of the **Outside Reader Appointment Form** and **Outside Reader Response Form**.
- Successful completion and defense of the dissertation.
- M Form** and one unbound copy of the dissertation submitted to the Graduate School within the established deadlines
- One bound copy of the dissertation delivered to the Department and to each member of the student's committee
- Survey of Earned Doctorates Form** and **Microfilm and Copyright Billing Form** (obtained from the Department) submitted to the Graduate School

GUIDELINES FOR THE THESIS/PROJECT/DISSERTATION

A booklet entitled ***Guidelines for Graduation and Thesis and Dissertation Preparation*** is available on the web at www.grad.buffalo.edu or from the Graduate School Office of Student Services. Be sure to refer to this document before preparing your thesis/project/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.

Acme Nebrich Bookbindery, 1285 Main Street, Buffalo (885-2999) is one company which does binding. (The Office of Graduate Education provides this information as a service to students and neither endorses nor supports use of this company.) 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).

Thesis: two bound copies must be submitted to the Graduate School, and one bound copy must be submitted to the Department.

Project: one bound copy must be submitted to the Department (the Graduate School does not require copies of the project).

Dissertation: one unbound copy must be submitted to the Graduate School, and one bound copy to the Department.

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

Copies of the thesis/dissertation must be received by the Graduate School and Department 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

OTHER SOURCES OF INFORMATION

Graduate School Web Site: www.grad.buffalo.edu

Forms (*Application to Candidacy, Graduate Student Petition Form, Certification of Full-Time Status Form, Outside Reader Appointment, Outside Reader Response Form*)

Graduate School Policy and Procedures Manual

Guidelines for Graduation and Theses and Dissertation Preparation

Student Response Center Web Site: www.src.buffalo.edu

Degree Conferral Timetable			
For Degree Conferral on:	February 1	June 1	September 1
Application to Candidacy due to the Department	August 1	January 1	May 1
Application to Candidacy due to the Health Sciences Divisional Committee	September 1*	February 1*	June 1*
Student Submits ALL required materials to the Graduate School by	Friday Before Spring Classes	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 HSDC. This will allow time to be reviewed by the Director of Graduate Studies and the Dean of the School before it is forwarded to the HSDC. 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

Research Methods and Principles

SPM 501 Principles of Epidemiology
SPM 502 Advanced Methods
SPM 517/SOC 578 Methods of Survey Research
SOC 518 Demography
SPM 553 Fundamentals of Grant Development
SPM 606 Design & Analysis of Clinical Trials
SPM 611 Case-Control Studies
SPM 612 Development of Research Strategies and Designs
SPM 613 Issues in Preventive Medicine
SPM 615/APY 710/MED 871 Geographic Medicine

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

STA 503 Statistical Comparisons and Associations
STA 504 Regression Analysis
STA 505 Introduction to Biostatistics
STA 506 Introduction to Statistical Computing
SPM 506 Application of Statistics to Epidemiology
STA 509 Statistical Genomics
STA 517 Categorical Data Analysis
STA 526 Design and Analysis of Clinical Experiments
STA 527 Introduction to Medical Statistics
STA 531 Theory and Methods of Sample Surveys
STA 575 Survival Analysis
STA 581 Multivariate Data Analysis
STA 617 Advanced Categorical Data Analysis

Epidemiology of Diseases and Conditions

SPM 509 Alcohol Epidemiology
SPM 511 Nutritional Epidemiology
SPM 513 Epidemiology of Infectious Diseases
SPM 514 Epidemiology of Mental Disorders
SPM 515 Epidemiology of Cardiovascular Disease
RPN 525 Cancer Epidemiology
RPN 530 Oncology for Scientists
SPM 551 Epidemiologic Applications to Environmental Health
SPM 552/Law 648 Epidemiologic Applications to Occupational health
SPM 560 Principles of Medical Screening
SPM 561 Advanced Cancer Epidemiology and Prevention
SPM 614 Molecular 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
SPM 624 Introduction to Evidence-Based Medicine and Clinical Epidemiology
SPM 625 Principals of Primary Care Research
SPM 626 Arthropods of Public Health Importance

Health Care Administration

SPM 507/MGH 631/Law 718 Introduction to Health Care Organization
SPM 523 Introduction to Program Planning and Evaluation
SPM 528/PTR 528 The Public Health Practice of Tobacco Control
SPM 529 Field Experience in Program Planning and Evaluation
SPM 530 Administrative Theory and Practice
SPM 532/LAW 620 Bridging Law, Science and Public Health
SPM 536 Management for Public Health Practitioners
SPM 537 Public Health Law
SPM 539/MGH 633 Introduction to Health Economics
SPM 540/MGH 634 Epidemiology and Health Policy
SPM 543 Public Health Practice
SPM 632/MGH 632 Strategic and Operations Management in Health Care Systems
SPM 633 Managed Health Care: Current and Future Practices

Other Courses

SPM 522 Selected Topics
SPM 527/PTR 529 Health Behavior
SPM 533 Principles of Public Health
SPM 535 Biological Basis of Public Health
PTR 536 Pathophysiology
SPM 538 Community Health Assessment and Surveillance
SPM 541/SOC 541 Medical Sociology
RPN 541 Natural Sciences Seminar: Responsible Conduct of Research
SPM 544 MPH Field Training
SPM 545 History and Philosophy of Public Health
SPM 590 Departmental Seminar
SPM 599 Independent Study
SPM 623 General Preventive Medicine Seminar Series
SPM 630 MPH Integrative Project

GRADUATE COURSES/SEMINAR DESCRIPTIONS

(all courses are 3 credit hours unless otherwise indicated)

*Please note new course numbers: STA 505 (formerly SPM 505); STA 506 (formerly SPM 604)

Department of Social and Preventive Medicine

Includes courses offered by Roswell Park Cancer Institute (RPN & PTR):

SPM 501 Principles of Epidemiology (4 credits)

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

Prerequisite: None

SPM 502 Advanced Methodology

Provides information on advanced topics in epidemiological methods. Emphasis is on epidemiologic methods. This course extends on topics beyond that presented in SPM 501 (Wactawski-Wende)

Prerequisite: SPM 501

SPM 506 Application of Statistics to Epidemiology

This course will cover two-way and three-way contingency tables with emphasis on evaluating confounding variables and effect-modification in epidemiologic studies. Tests for trend in proportions will also be demonstrated. A logistic regression approach to multivariate modeling will be emphasized. (Donahue)

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

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

Broad introduction to health care delivery in the US. Examines topics such as health manpower, ambulatory care, hospitals, long-term care, managed care, financing, cost containment, and quality of care. (Young)

Prerequisite: None

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

SPM 511 Nutritional Epidemiology

Methodological issues in nutritional epidemiology, including the collection of dietary and nutritional exposure data, and major threats to the validity of nutritional epidemiologic finding. Strengths and weaknesses of different epidemiologic study designs as sources of evidence in contributing to our understanding of the roles of diet and nutrition in disease etiology will be evaluated. Diet and nutrition in relation to chronic disease and to growth and development. (Freudenheim)

Prerequisite: SPM 501 or permission of instructor

SPM 513 Epidemiology of Infectious Diseases

Focuses on theory and epidemiologic methods used in infectious disease investigations. Emphasis is on the immunologic response, pathogenicity and major diseases impacting on maternal child health and chronic disease. Specific topics include pediatric AIDS, respiratory and enteric infections, immunization and control, balanced pathogenicity and modeling newly emerging infectious diseases. (Berlin)

Prerequisite: SPM 501

SPM 514 Epidemiology of Mental Disorders

Provides a critical review of research methodologies, measures, and findings of major psychiatric epidemiological studies. Specific topics include: depression in community and primary care populations, substance use disorder, anxiety disorders, antisocial personality, stress-related disorders, schizophrenia, children's mental health, dementia, disasters, suicide and utilization of mental health services. (Moscato)

Prerequisite: SPM 501

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

SPM 517/SOC 578 Methods of Survey Research

Introduction to survey research techniques including: sampling, question construction, field methods, interviewing, coding, data processing, data analysis with standard computer programs. (Staff)

Prerequisite: None

SPM 522 Selected Topics

Special topics determined by individual faculty interest.

Prerequisite: None

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. (Schimpfhauser)

Prerequisite: None

RPN 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

SPM 527/PTR 529 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. (Cummings)

Prerequisite: None

SPM 528/PTR 528 Public Health Policy of Tobacco Control

Designed to prepare students to confront the practical problems of controlling tobacco use through local, state, and national public health agencies. In addition to providing core knowledge on tobacco-related issues, the course will include skills-based training that may be useful in future employment. (Giovino)

Prerequisite: None

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. (Schimpfhauser)

Prerequisite: SPM 523

SPM 530 Administrative Theory and Practice

Designed for non-management majors to explore the essential functions of management (i.e., in the public health setting, including: planning, organization, controlling, and evaluating. (Lyons)

Prerequisite: None

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

SPM 532/LAW 620 Bridging Law, Science, and Public Health

Examines case law and a range of other materials relating to how the courts and regulatory agencies are dealing with a range of issues. Other topics include developments in the field of reproductive technology; cloning; genetic testing and the implications for access to employment and insurance coverage; medical privacy and confidentiality against the backdrop of electronic communications and record-keeping; telemedicine; the National Practitioner Databank; False Claims Act prosecutions for quality of care violations; and the unionization of physicians. The course also will cover recent changes in the rules governing human subject research that protect the ultimate integrity of the research enterprise, with a focus on the involvement of children and pregnant women. (Shulman)

Prerequisite: None

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

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

SPM 536 Management for Public Health Practitioners

Provides students with an overview and knowledge of various management topics relevant to operating 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 the application of continuous quality improvement in public health. (Noe, Beach, Fentner)

Prerequisite: None

PTR 536 Pathophysiology

Introduces students to the concepts of disease processes. (Leong)

Prerequisite: None

SPM 537 Public Health Law

Through the use of relevant case examples, this course examines how the law advances and guides the implementation of public health policies. Provides an introduction to the legal system and looks at ways in which state and federal governments intervene at all levels of the health care sector. (Shulman)

Prerequisite: None

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. (Crespo)

Prerequisite: SPM 533

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. (Lyons)

Prerequisite: None

PM 540/MGH 634 Epidemiology and Health Policy

Examines the potential role and recent uses of epidemiological findings in formulating public health policy related to treatment and prevention of diseases, and health manpower issues. Focuses on epidemiological evidence for and against specific policy positions and implementations of public health measures. (Young)

Prerequisite: None

SPM 541/SOC 541 Medical Sociology

Provides an introduction to research and theories on social features of health and illness, and on the organization and institutions of health care. (Staff)

Prerequisite: None

RPN 541 Responsible Conduct of Research (1 credit)

Introduces future researchers to the issues of responsibility in conducting experiments. Topics include: clinical research/clinical trails; authorship; data management, evaluation and scientific presentation; scientific writing; peer review; genetic research; institutional research protocols; animals in research; pain management at a comprehensive cancer center; psychosocial care of the critically ill; and the right to die. This course satisfies all requirements for graduate research ethics training as mandated by the Public Health Service and other federal agencies. (Michalek & Johnson)

Prerequisites: None

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

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

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

SPM 551 Epidemiologic Applications to Environmental Health

Provides advanced epidemiology students with skills needed to conduct an environmental epidemiology study and instills a thorough knowledge of current environmental epidemiologic findings, problems and research methodology. Case studies and specific environmental problems illustrate the application of epidemiologic methods to understand the role of environmental risk factors in the etiology of diseases. (Scheider)

Prerequisite: SPM 501

SPM 552/Law 648 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. (Stubeusz & Kuettel)

Prerequisite: SPM 501

SPM 553 Fundamentals of Grant Development

Designed for advanced students (e.g. Ph.D., advanced MPH or those already holding a terminal degree) who are committed to obtaining extramural support to begin or continue their research interests. 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. (Donahue)

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

SPM 560 Principles of Medical Screening

Examines principles underlying medical and public health screening interventions. Particular emphasis devoted to screening for early disease detection and mortality reduction. Applications to cancer, heart disease, mental health, prenatal and neonatal disorders, and other conditions will be studied. Screening modalities covered include imaging, biochemical markers, cytology, and self-examination. Methodological, behavioral, public policy, and cost-effectiveness issues will be examined. (Mettlin)

Prerequisites: None

SPM 561 Advanced Cancer Epidemiology and Prevention

Designed for advanced students who are interested in focusing their research or clinical work on the epidemiology and prevention of neoplastic diseases. Major emphasis will be on methodological issues in the epidemiology of benign and malignant neoplastic lesions, their etiology and prevention. The course is intended to develop critical skills for independent cancer epidemiology researchers and clinicians. (Muti)

Prerequisites: SPM 501, SPM 502, STA 505 or STA 527, SPM 506, RPN 525

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 a mixture of 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

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

SPM 606 Design and Analysis of Clinical Trials

This course is a review of pertinent methods in the design and analysis of clinical and community trials. The purpose, scope and limitation of these methods will be discussed in detail. (Donahue)

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

SPM 611 Case-Control Studies

Designed for graduate students in epidemiology and clinicians interested in the theory and practice of the use of case-control studies in medical research. The purpose of this course is to examine the methodologic issues in planning, executing and interpreting the results of epidemiologic research using a case-control design. Practical examples as well as discussion of theoretical issues will be the focus. (Freudenheim)

Prerequisite: SPM 501

SPM 612 Development of Research Strategies & Designs

Designed to introduce information science techniques for effective analysis and utilization of ideas from the scientific literature. The student will acquire understanding and skill in identification, extraction, organization and utilization of ideas necessary in construction of concept structures and development of research strategies. (Staff)

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

SPM 613 Issues in Preventive Medicine

Examines in detail current controversies in preventive health care. Topics address vaccines (influenza, pneumonia, diphtheria-tetanus), cancer screening (cervical cancer, mammography, hemocult) and societal issues (passive smoking, electromagnetic radiation, genetically modified foods, vitamin supplementation). (Hershey)

Prerequisite: completion of first year of study

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. (Muti)

Prerequisite: SPM 501

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)

Prerequisite: None

SPM 620 Epidemics and Outbreaks

Advanced course studying recent outbreaks of infectious disease. Each session will deal with an individual agent, review recent outbreaks, and discuss public health implications. Emphasis will be placed on epidemiologic principles, maneuvers by public health authorities to investigate and contain outbreaks, and relationships to the media. Topics and outbreaks will be selected with immediacy and relevance to public health. (Hershey)

Prerequisite: SPM 513

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

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. (Dorn)

Prerequisite: SPM 501

SPM 623 General Preventive Medicine Seminar Series

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

SPM 624 Introduction to Evidence-Based Medicine and Clinical Epidemiology

This course provides a broad overview of basic epidemiologic concepts necessary for evidence-based studies of medicine and in clinical research. The course has the following objectives: a) familiarize students with techniques for critical appraisal of the medical literature, b) teach students how to apply critical appraisal techniques and c) familiarize students with new strategies and tactics in clinical epidemiology research (including the evaluation of diagnostic tests, clinical course and prognosis of disease, disease etiology or causation, therapy, quality of clinical care, economic evaluation, and meta-analysis). The spectrum of expected students includes, but is not limited to physicians, nurses and other health care professionals who are obtaining advanced training in epidemiology or public health with an interest in clinical research. (Schuenemann)

Prerequisite: SPM 501, STA 505 or STA 527

SPM 625 Principles of Primary Care Research

Provides the skills to apply traditional research methods to primary care settings. Provides insight not only in the design of disease-based studies in an uncontrolled clinic or community setting, but also in the depth and diversity of doctor-patient relationships and the determinants of physician behaviors. (Tumiel)

Prerequisite: SPM 501

SPM 630 MPH Integrative Project (1-3)

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

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

SPM 633 Managed Health Care: Current and Future Practices

Addresses public health practices that are embedded in organizations that manage the delivery of health care (e.g., health maintenance organizations) including: prevention and outreach, practice guidelines, payment methods, utilization management, diabetes/asthma disease management, quality management, member education programs, and the systems that provide valid and relevant measures of clinical performance. Students will examine these practices against the background of rising costs, quality gaps, and the needs of the population. (Horrigan)

Prerequisite: None

Department of Biostatistics

STA 503 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 504 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: STA 503.

STA 505 Introduction to Biostatistics (4 credits)

Basic concepts of statistical reasoning, data description, and fundamental methods of statistical inference applicable to epidemiology with an overview of special topics. Concurrent registration in STA 506 is strongly recommended LEC/REC

Prerequisite: Enrollment limited to students in SPM Graduate Program

STA 506 Introduction to Statistical Computing

The purpose of this course is to familiarize students with PC-based statistical computing applications for public health. It is a companion course for STA 505: Introduction to Biostatistics. 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 505. 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: Concurrent registration in STA 505 or 527 is admissible or permission of instructor

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

This course 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

SOCIAL AND PREVENTIVE MEDICINE TEACHING FACULTY

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

Jeffrey Beach, B.A., State University of New York at Fredonia. Clinical Instructor, Department of Social and Preventive Medicine. Major interest: accounting.

Jacques Berlin, Ph.D., University of Texas at Galveston. Adjunct Associate Professor, State University College at Buffalo; Visiting Associate Professor, Department of Social and Preventive Medicine. Major interest: infectious diseases.

Dennis Bertram, M.D., Washington University (St. Louis); M.P.H., Sc.D. The Johns Hopkins University. Director M.P.H. Program, and Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interests: 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.

Brian Bundy, Ph.D., University at Buffalo. Deputy Director, Statistics, Gynecology Oncology Group, Roswell Park Cancer Institute; Research Associate Professor, Department of Biostatistics; Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interest: clinical trials, cancer epidemiology, biostatistics.

Carlos Crespo, Dr.P.H., Loma Linda University. Associate Professor, Department of Social and Preventive Medicine. Major interests: minority health issues, urban health and epidemiology, physical activity.

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

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. Associate Professor, Department of Social and Preventive Medicine. Major interest: cardiovascular disease epidemiology and physical activity.

Thomas Fentner, M.A., Graduate School of Finance and Management. Adjunct Instructor, Department of Social and Preventive Medicine. Major interest: business administration, human resource management.

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

Gary Giovino, Ph.D., University at Buffalo. Senior Research Scientist, Department of Cancer Prevention Epidemiology and Biostatistics, Roswell Park Cancer Institute; Research Professor, Department of Social and Preventive Medicine. Major interest - tobacco control.

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

Brydon Grant, M.D., University of London. Professor, Departments of Medicine, Physiology and Biophysics, and Social and Preventive Medicine. Major interest: respiratory pathophysiology.

Charles Hershey, M.D., Washington University (St. Louis). Professor, Departments of Medicine; and Social and Preventive Medicine; Chief, Division of Internal Medicine. Major interests: health care services delivery, clinical trials.

Dennis Horrigan, M.S., University at Buffalo. Vice President, Managed Care Development, Independent Health; Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interest: managed care.

Andrew Hyland, Ph.D., University at Buffalo. Research Scientist, Department of Cancer Prevention Epidemiology and Biostatistics, Roswell Park Cancer Institute; Research Assistant Professor, Department of Social and Preventive Medicine. Major interests: biostatistics, tobacco control, and public health.

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; Assistant Professor, Department of Social and Preventive Medicine. Major interests: preventive medicine and public health.

Joseph Lyons, Sc.D., Johns Hopkins University. Associate Professor Emeritus, Industrial Engineering. Major interest - health care management.

Martin Mahoney, M.D., Ph.D., University at Buffalo. Director, Cancer Training Track, General Preventive Medicine Residency Program; Associate Research Professor, Department of Cancer Prevention Epidemiology and Biostatistics, Roswell Park Cancer Institute; Clinical Associate Professor, Department of Social and Preventive Medicine, and Family Medicine. Major interests: cancer prevention and control, cancer epidemiology, clinical studies.

Susan McCann, Ph.D., University at Buffalo. Assistant Member, Department of Cancer Prevention and Population Sciences; and Research Assistant Professor, Department of Social and Preventive Medicine. Major interest: nutritional epidemiology.

Curtis Mettlin, Ph.D., Ph.D., University of Illinois, Urbana. Senior Research Scientist, Roswell Park Cancer Institute. Major interests: cancer cause and prevention, early detection, prostate cancer, nutrition.

Arthur Michalek, Ph.D., University at Buffalo. Professor and Director of Education, and Dean, Roswell Park Graduate Division; Professor, Department of Social and Preventive Medicine. Major interests: cancer epidemiology, cancer screening, and clinical epidemiology.

Beth Moscato, Ph.D., University at Buffalo. Adjunct Assistant Professor, Department of Psychiatry, SUNY Upstate Medical University; Associate Research Scientist; Research Institution on Addictions; Research Assistant Professor, Department of Social and Preventive Medicine. Major interest: psychiatric epidemiology.

Kirsten Moysich, Ph.D., University at Buffalo. Research Assistant Professor, Department of Cancer Prevention Epidemiology and Biostatistics, Roswell Park Cancer Institute; Assistant Professor, Department of Social and Preventive Medicine. Major interests: environmental cancer epidemiology, molecular epidemiology.

Paola Muti, M.D., University of Pisa, Italy. Professor, Department of Social and Preventive Medicine. Major interest: chronic disease epidemiology in women's health.

Nachimuthu Natarajan, M.S., University at Buffalo. Senior Biostatistician, Department of Cancer Prevention Epidemiology and Biostatistics, Roswell Park Cancer Institute. Major interest: biostatistics.

Michael Noe, M.D., SUNY Upstate Medical Center; M.P.H., Tulane University. Interim Chair, Rehabilitation Sciences; Associate Dean, 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, Clinical Associate Professor, Department of Medicine. Major interests: health services administration and epidemiology, quality improvement, and preventive medicine

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.

Roger Priore, Sc.D., Johns Hopkins University. Research Professor, Department of Biostatistics; Clinical Professor, Department of Social and Preventive Medicine. Major interest: statistical methods for study design, modeling, and failure time analysis; applications in neurology, oncology, geriatrics, and epidemiology.

Kenneth Rogers, M.B.A., University at Buffalo. Adjunct Assistant Professor, School of Management. Major interest: strategic management and marketing.

Donald Rowe, Ph.D. University at Buffalo. Clinical Assistant Professor, Department of Social and Preventive Medicine. Major interest: public health.

William Scheider, Ph.D., University at Buffalo. Research Assistant Professor, Department of Social and Preventive Medicine. Major interests: nutritional epidemiology, health behavior.

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.

Holger Schuenemann, M.D., Medical School of Hannover; Ph.D., University at Buffalo. Associate Professor, Departments of Medicine, and Social and Preventive Medicine. Major interests: clinical and pulmonary function epidemiology, evidence-based health care, practice guidelines.

Sheila Shulman, J.D., University of British Columbia. Clinical Associate Professor, University at Buffalo Law School, and Department of Social and Preventive Medicine. Major interests: public health law and health care law.

Ellen Smit, Ph.D., Johns Hopkins University. Assistant Professor, Department of Social and Preventive Medicine. Major interests: nutritional epidemiology, chronic diseases and HIV.

Harry Sultz, D.D.S., University at Buffalo. M.P.H., Columbia University. Professor Emeritus, Department of Social and Preventive Medicine. Major interest: community services research and development.

Maurizio Trevisan, M.D., University of Naples, Italy; M.S., University at Buffalo. Interim Dean, School of Public Health and Health Professions; Professor, Departments of Social and Preventive Medicine and Family Medicine; Clinical Professor, Nutrition Program. Major interest: cardiovascular disease.

Laurene Tumiel, Ph.D., University at Buffalo. Assistant Professor, Departments of Family Medicine, and Social and Preventive Medicine. Major interest: primary care 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. Assistant Professor, Departments of Social and Preventive Medicine; and Gynecology and Obstetrics. Major interests: menopause, osteoporosis, women's health, periodontal disease, reproductive epidemiology.

William Wiczorek, Ph.D., University at Buffalo. Director and Research Professor, Natural and Social Sciences, Buffalo State College; Research Assistant Professor, Department of Social and Preventive Medicine; Adjunct Assistant Professor, Department of Geography and Planning. Major interest: alcohol, drug and geographic aspects of health.

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

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

BIOSTATISTICS FACULTY

Chair and Associate Professor

Alan D. Hutson, Ph.D.

University of Rochester

(Biostatistics, clinical trials design, epidemiological modeling, Bioinformatics, computational methods and order statistics)

Associate Chair and Professor, Director, Graduate Program

Randolph L. Carter, Ph.D.

Iowa State University

(Longitudinal data methods, measurement errors models, risk assessment, biostatistics, epidemiological modeling, maternal and child health epidemiology, radiation effects)

Professor

James L. Kepner, Ph.D.

University of Iowa

(Nonparametric methods for data analysis, exact group sequential methods for sample size and design determination, general theory of rank transformation statistics, permutation tests, relationships between randomization and non parametric tests)

Research Professors

John Blessing, Ph.D.

University at Buffalo

(Clinical trials, Biostatistics Data Center Administration)

Linda Duffy, Ph.D.

(Bioinformatics, clinical trials)

Kenneth Manly, Ph.D.

Massachusetts Institute of Technology

(Genetics, Genetic mapping, Complex trait analysis, Bioinformatics, Software development)

Roger Priore, Ph.D.

Johns Hopkins University

(Statistical methods for study design, modeling, and failure time analysis; applications in neurology, oncology, geriatrics, and epidemiology)

Tenko Raykov, Ph.D.

Humboldt University

(Structural equations, measurement error models, addiction research)

Research Associate Professors

Brady, Mark, Ph.D.

University at Buffalo

(Clinical trials, drug development, time to failure analyses, screening trials)

Brian Bundy, Ph.D.

University at Buffalo

(Clinical trials, cancer epidemiology, biostatistics)

Assistant Professors

Yulan Liang , Ph.D.

University of Memphis

(Statistical genetics/Genomics [including population genetics, QTL and microarray-gene expression] and Bioinformatics; Statistical Learning Theory, Statistical Pattern Recognition; Neural Networks, Data Mining and Machine Learning; Multivariate Analysis, Bayesian Risk Analysis, Statistical Computing and Simulation, Time Series Analysis, Decision-Making and Optimization for data intensive mathematical modeling, reasoning and Meta Analysis)

Gregory E. Wilding, Ph.D.

University of Rochester

(Resampling techniques, Goodness-of-Fit Tests, distributional characterizations, permutation tests, copulas, tests of independence, Biostatistics)

Research Assistant Professors

Daniel P. Gaile, Ph.D.

Texas A&M University

(QTL mapping, Peeling, Radiation Hybrid Mapping, Bootstrap Methods, Analysis of Microarray Data, Biostatistics)

Arpad Kelemen, Ph.D.

University of Memphis

(Bioinformatics and Computational Biology; Medical, Computational and Artificial Intelligence; Biometrics' Neural Networks and Machine Learning; Pattern Recognition, Decision Making, Optimization; Intelligent Agents and Cognitive Modeling)

Michael Sill, Ph.D.

University of Pittsburgh

(Adaptive designs and inference, Phase I and II clinical trial development, exact methods for small sample sizes, translational research, differences between Bayesian and frequentist methods.

Jihnhee Yu, Ph.D.

Texas A & M University

(Stochastic Population Models and Saddlepoint Approximation)

Instructor – Lecturer

James R. Wienckowski, M.A.,

University at Buffalo

(Biostatistics, statistical computing)

Professors Emeriti

M. M. Desu, Ph.D.

University of Minnesota

(Nonparametric statistical methods and sample size methodology)

Peter Enis, Ph.D.

George Washington University

(Group testing methods, mathematical statistics)

Richard N. Schmidt, Ph.D.

University of Michigan

(Statistical Computing)

Adjunct Professor

Peter Rogerson, Ph.D.
University at Buffalo
(Spatial Statistics and GIS Analysis)

APPENDIX

General Progress Report Form

Graduate Student Petition Form

Certification of Full-Time Status Form

Application to Candidacy Form

Instructions to the Student

Checklist for Application to Candidacy

Abstract of Proposed Research Form

Sample: Abstract of Proposed Research Form

Description of Informal Course Work Form

Sample: Description of Informal Course Work Form

Outside Reader Appointment Form

Outside Reader Response Form