



**Youngstown  
State  
University  
Bulletin**

**Graduate  
Edition  
1999-2000**

Effective September 1999  
Youngstown, Ohio

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GRADUATE CATALOG

ISSUE

EFFECTIVE SEPTEMBER 1999

YOUNGSTOWN, OHIO

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# The Academic Calendar 1999-2000

## Fall 1999

Date	Day	Time	Event
May 17	Mon.		Registration of current students begins
May 27	Thurs.		Registration of current students ends
Aug. 15	Sun.		Last day to apply for admission
			Registration of admitted new and former graduate students by appointment during summer
Sept. 6	Mon.		Legal holiday-University closed (Labor Day)
Sept. 18	Sat.		Change of registration begins
Sept. 16	Thurs.		Registration of admitted new and former graduate students
Sept. 17	Fri.		Late and final registration (payment due at registration)
Sept. 22	Wed.	8 a.m.	Classes begin
Sept. 28	Tues.	6 p.m.	Last day to add a class
Oct. 8	Fri.		Last day to apply for fall quarter graduation
Nov. 2	Tues.	6 p.m.	Last day to withdraw with a W
Nov. 11	Thurs.		Legal holiday-University closed (Veteran's Day)
Nov. 24	Wed.	11 p.m.	Thanksgiving academic break begins
Nov. 25	Thurs.		Legal holiday-University closed (Thanksgiving)
Nov. 26	Fri.		Legal holiday-University closed (observance of Columbus Day)
Nov. 29	Mon.	8 a.m.	Thanksgiving academic break ends
Dec. 6	Mon.	8 a.m.	Final examinations begin
			Deadline to submit theses to the School of Graduate Studies
Dec. 12	Sun.	5 p.m.	Final examinations end

## Winter 2000

Nov. 15	Mon.		Registration of current students begins
Nov. 15	Mon.		Last day to apply for admission
Nov. 30	Tues.		Registration of current students ends
Dec. 14	Tues.		Registration of admitted new and former graduate students (payment due at registration)
Dec. 23	Thurs.		Legal holiday-University closed (observance of President's Day)
Dec. 24	Fri.		Legal holiday-University closed (Christmas Day)
Dec. 29	Wed.		Late and final registration (payment due at registration)
Dec. 30	Thurs.		Change of registration begins
Dec. 31	Fri.		Legal holiday-University closed (New Year's Day)
Jan. 3	Mon.	8 a.m.	Classes begin
Jan. 8	Sat.	Noon	Last day to add a class
Jan. 14	Fri.		Last day to apply for winter quarter graduation
Jan. 17	Mon.		Legal holiday-University closed (Martin Luther King Day)
Feb. 12	Sat.	Noon	Last day to withdraw with a W
March 13	Mon.	8 a.m.	Final examinations begin
			Deadline to submit theses to the School of Graduate Studies
March 19	Sun.	5 p.m.	Final examinations end
March 25	Sat.	10 a.m.	Winter Commencement

## Spring 2000

Feb. 14	Mon.		Registration of current students begins
Feb. 15	Tues.		Last day to apply for admission
Feb. 24	Thurs.		Registration of current students ends
March 24	Fri.		Change of registration begins
March 15	Wed.		Registration of admitted new and former graduate students (payment due at registration)
March 22	Wed.		Late and final registration (payment due at registration)
March 27	Mon.	8 a.m.	Classes begin
April 1	Sat.	Noon	Last day to add a class
April 7	Fri.		Last day to apply for spring quarter graduation
May 6	Sat.	Noon	Last day to withdraw with a W
May 29	Mon.		Legal holiday-University closed (Memorial Day)
June 5	Mon.	8 a.m.	Final examinations begin
			Deadline to submit theses to the School of Graduate Studies
June 11	Sun.	5 p.m.	Final examinations end
June 17	Sat.	10 a.m.	Spring Commencement

## Summer 2000

Feb. 28	Mon.		Registration of current students begins
May 15	Mon.		Last day to apply for admission-Summer I
March 2	Thurs.		Registration of current students ends
June 13	Tues.		Registration of admitted new and former graduate students (payment due at registration)
June 15	Thurs.		Late and final registration (payment due at registration)
June 16	Fri.		Change of registration begins
June 19	Mon.	8 a.m.	Full-term and first-term classes begin
June 21	Wed.	5 p.m.	Last day to add a first-term class
June 23	Fri.	5 p.m.	Last day to add a full-term class
June 30	Fri.		Last day to apply for summer quarter graduation
May 15	Mon.		Last day to apply for admission-Summer II
July 4	Tues.		Legal holiday-University closed (Independence Day)
July 5	Wed.	5 p.m.	Last day to withdraw with a W-first-term classes
July 15	Sat.		First term ends (final examinations are given during last scheduled class period)
July 17	Mon.	8 a.m.	Second-term classes begin
July 19	Wed.	5 p.m.	Last day to add a second-term class
July 21	Fri.	5 p.m.	Last day to withdraw with a W-full-term classes
Aug. 1	Tues.	5 p.m.	Last day to withdraw with a W-second-term classes
Aug. 13	Sun.	5 p.m.	Second term and full term end (final examinations are given during the last scheduled class period)
Aug. 16	Mon.		Deadline to submit theses to the School of Graduate Studies
Aug. 19	Sat.	10 a.m.	Summer Commencement

All registration is by appointment only and concludes before classes begin each quarter.

# 1999-2000 Student Fees and Charges

## Tuition

### Instructional Fee (including audit)

Graduate Students, all credits (both graduate and undergraduate) .....	\$ 97	per credit
Master of Public Health, all credits .....	254	per credit

### General Fee

All Students .....	21	per credit
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### Nonresident Tuition Surcharge

The YSU Regional Service Area, for nonresident tuition surcharge purposes, includes the counties of Chautauqua, New York; Allegheny, Armstrong, Beaver, Butler, Clarion, Crawford, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, Mercer, Venango, Warren, Washington, and Westmoreland, Pennsylvania; and Brooke, Hancock, Marshall, and Ohio, West Virginia.

#### Regional Service Area:

Students registering for all credits .....	59	per credit
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#### Outside of Regional Service Area:

Students registering for all credits .....	122	per credit
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## Housing

Room and Board (per academic year) ..... 4695  
 (Payable \$1565 per quarter, except that an extra \$200 is collected the first quarter of residency and the spring quarter is reduced by \$200. If a resident does not stay through the spring quarter, the \$200 is forfeited.)

Break housing, Winter break .....	50	
Break housing, Other break .....	50	
Room per five-week summer session .....	415	
Security Deposit (paid first quarter) .....	100	
Single Room Surcharge .....	300	per quarter
Single Room Surcharge per five-week summer session .....	150	
Summer (room only, five weeks) .....	415	
University Apartments (room only, per person per academic year) .....	3000	

#### Voluntary Board Plan (students not living in University housing)

Nineteen-meal plan per week .....	655	per quarter
Fifteen-meal plan per week .....	560	per quarter
Ten-meal plan per week .....	450	per quarter
Five-meal plan per week .....	225	per quarter

## Special Purpose Fees and Service Charges

Academic Computing Fee .....	15	per quarter
Laboratory Materials Fee-Level 1 .....	20	per course
Laboratory Materials Fee-level 2 .....	30	per course
Laboratory Materials Fee-Level 3 .....	40	per course
Computer-Assisted Course Fee .....	25	per course
Computer-Intensive Course Fee .....	35	per course
Credit by Examination .....	10	per credit
Graduate Student Application Fee .....	30	
Health and Physical Education Locker and Towel:		
All authorized users .....	25	per quarter
I.D. Replacement .....	15	
International Student Credentials Evaluation .....	45	
Late Application for Graduation (after third week of the quarter) .....	25	
Late Payment .....	25	
Late Registration .....	25	
Maag Library Carrel Key Deposit (paid at Maag Library) .....	20	annual charge
Multi-service Fee:		
Students registered for 1-11 credit hours .....	16	per quarter
Students registered for 12+ credit hours .....	26	per quarter
Performance Music Fee .....	35	per credit
Parking Permit .....	41	per quarter
Parking Per Day Without Permit .....	3	
Proficiency Examination .....	30	per course
Returned Check or Credit Card Charge .....	30	
Student Locker Rental (paid at Kilcawley per academic year) .....	15	per year
Thesis Binding .....	25	per copy
Tuition Installment Payment Plan Application .....	25	per use
Tuition Installment Late Payment .....	14	

## Fines

### *Library/Curriculum Center*

Overdue book: 10 cents per day to a maximum of \$11, plus cost of book replacement, plus \$10 processing charge.

Overdue reserve book: 55 cents per day to a maximum of \$11, plus cost of book replacement, plus \$10 processing charge.

Unauthorized removal of closed reserve book: same as for overdue reserve, plus \$5.

### *Parking*

Class I-All violations except those in Class II: \$10

Class II-Parking in a handicap zone without proper permit, parking at a no parking sign, tow away zone, loading zone, official use only sign, fire lane, or in the campus core area: \$35

**THE UNIVERSITY RESERVES THE RIGHT TO CHANGE ANY FEE WITHOUT NOTICE  
FEES, SERVICE CHARGES, AND FINES**



## Payment of Tuition and Fees

Tuition and fees for the quarter are due on or before the date published in the *Schedule of Classes* (see "Important Dates"). You may pay your bill in person at the payment windows on the second floor of Meshel Hall or by mail to the Office of the Bursar. You may pay by check (payable to Youngstown State University), or with Visa, MasterCard, or Discover card. Several payment plans are also available that allow you to spread your payments out over a longer period. Registration is not complete until all tuition and fees are paid.

All outstanding charges, for example, library or parking fines, must be paid before you can pay your quarterly tuition and fees. Graduation and transcripts will also be held until all University bills are paid. Any balance owed must be sent to the Office of the Bursar no later than the payment notice due date in order for you registration process to be completed.

Your enrollment at the University creates an implied contract between you and YSU. If you choose not to attend the University, you must officially withdraw from all courses within the first week of classes or you must pay all charges in full. If no effort is made to pay the outstanding bill, collection measures will be implemented.

If you decide to withdraw from the University once you have enrolled, you must access the Complete Withdrawal Option on the Student On-Line Advisement and Registrar System (SOLAR) or come to the Office of the Registration in Meshel Hall. Withdrawal before the end of the first week of classes will cancel your obligation to the University. However, complete withdrawal from the University after the end of the first week of classes will not cancel an outstanding bill.

## Fees

*Tuition.* The sum of the Graduate Instructional Fee and the General Fee is the tuition for a student.

*Graduate Instructional Fee.* This fee is assessed all students each quarter. The rate is per academic quarter hour of credit of registration. This fee supplements the state subsidy and is a revenue of the University's Educational General Fund.

*General Fee.* This fee is also assessed all students each quarter; the rate depends upon the number of credits for which the student is registering. This fee is for noninstructional services such as Kilcawley Center, intercollegiate athletics, intramural sports, performing artists and lecture programs, Student Government, and Career Services.

*Auditing Courses.* Students may audit courses (i.e., register to take a course without receiving credit). The fees are the same as if the course was taken for credit.

*Nonresident Tuition Surcharge.* As noted above, all students pay the instructional fee and the general fee. Those students who are not legal residents of Ohio must also pay a surcharge. Students who are legal residents of the regional service area pay a lesser surcharge than do students who are legal residents of other areas. The regional service area includes 23 counties in New York, Pennsylvania, and West Virginia.

*Academic Computing Fee.* The Academic Computing Fee will be charged to all students and will provide increased on campus access to the Internet, establish and maintain an open lab in Maag Library, provide increased lab reliability and technical assistance, and provide infrastructure support (network services and electronics maintenance) for technology.

*Course Fee; Computer-Assisted Course Fee; Computer-Intensive Course Fee.* Many classes and laboratories require the use of consumable materials or supplies. Students enrolled in courses so identified are assessed a fee for these supply items. The fee is variable and approximately proportional to the cost of supplies used in class.

*Multi-service Fee.* This fee is assessed all students each quarter; the rate depends upon the number of credits for which the student is registered. This fee is designed to partially offset the expenses associated with various administrative services such as: career services credentials, graduation, transcript, add/drop, diploma mailing, diploma replacement, diploma cover, I.D. validation sticker replacement, withdrawal, and other miscellaneous services.

*Performance Music Fee.* This fee is in addition to the regular instructional fee. It is assessed students taking music lessons and applies on a per-credit basis.

## **Other Fees**

*Application Fee.* A nonrefundable application fee must accompany the initial application for admission to the School of Graduate Studies.

*Graduate Management Admission Test (GMAT) Fee.* The GMAT is an aptitude test designed to measure abilities important to the study of business at the graduate level. It is offered four times a year. Registration forms are available at the Special Admissions and Testing Office.

*Graduate Record Examination (GRE) Fee.* The aptitude portion of the Graduate Record Examination is administered on campus five times a year. Registration forms are available at the Special Admissions and Testing Office.

*Late Application for Graduation Fee.* There is a late application for graduation fee charged to anyone who applies after the third week of the quarter.

*Late Payment Fee.* Payment of a bill after the due date results in assessment of a late payment fee. All fees and charges billed must be paid in full or via the installment payment plan (information available at the Bursar's Office). This fee is also charged any student who registers after classes begin.

*Late Registration Fee.* A fee is charged a currently enrolled student who fails to register for the next term at the assigned time.

*Parking Permit Fee.* A permit to park in YSU parking facilities will be issued to students and employees of the University upon payment of the fee. The fee is for the academic quarter and does not guarantee an available space in any particular lot. Some facilities are restricted (e.g. for students only, for faculty and staff only, or resident hall residents only). The current *Driving and Parking Regulations* pamphlet and parking lot map should be consulted. A daily fee is charged anyone without a permit who wishes to park in facilities designated for cash business. Persons other than employees and students who are on campus for a short period of time to conduct business may park in one of the visitor's lots if space is available. The parking permit fee is refundable only if the student returns the permit and access card prior to the end of the tuition refund period (first six days of a regular term). If a student completely withdraws, the permit and access card must be returned within five days of either the withdrawal date or the last date of the tuition refund period—whichever is earlier—in order to obtain a refund for this fee.

*Proficiency Examination Fee.* A fee is charged for an examination provided by an academic department to determine a student's proficiency for some reason other than assignment of academic credit.

## Service Charges

*Locker and Towel Fee.* Students enrolled in an activity class requiring a locker, basket, or towel service in Beeghly Physical Education Center or the Sports Complex do not pay a fee. Other authorized persons pay a fee each academic quarter. Loss of or damage to the lock or towel will result in assessment of a replacement charge.

*Identification Card Replacement Charge.* A charge is made for replacement of an ID.

*Housing Charge.* University housing is available for the academic year and summer terms. The residence contract includes room and a flexible meal plan. A security deposit is required. Payment and refunds are as scheduled in the housing contract. Meal tickets are also available for students who are not residents of University-owned housing.

*Returned Check or Credit Card Charge.* A charge is made to anyone whose check or charge card is returned unpaid by the bank. Any late payment fee applicable is also assessed. Failure to pay billing of return check and/or charge within six days and/or a second check/charge return will result in the University's refusal to accept this type of payment at any of its collection points, and may subject the student to financial suspension for the term.

*Student Locker Charge.* A limited number of lockers are available in various buildings for the convenience of commuting students. Payment and assignments are made at the Kilcawley Information Center.

*Thesis Binding Charge.* A charge is made for each copy of a thesis bound by the Maag Library.

*Transcript of Credits Charge.* While no charge is made for each transcript issued, transcripts will not be issued for students or alumni with outstanding debts owed the University. Only a student may order a transcript; however, students are cautioned that most graduate and professional schools and many employers accept transcripts only if sent directly by the University. The multi-service fee replaces this individual fee.

## Fines

*Parking Violation Fine.* Parking without a permit, parking in such a manner as to impede regular traffic flow, occupancy of more than one identified space (assuming lines are not obscured), and other offenses as identified in the *Driving and Parking Regulations* will result in a citation issued to the student responsible for the vehicle (e.g., student driving parents' car). Payment of a fine removes the citation. Vehicles may be towed in certain cases. See the regulations.

*Library Fines.* Fines are assessed for failure to return books on time as stipulated or for the unauthorized removal of a reserved book. Willful damage or defacement of library materials or other property is a violation of state law and is punished as such.

## Reduction/Refund of Fee Charges Upon Withdrawal

To withdraw from all courses a student must process a Change of Registration form and present it to the Office of the Registrar, Meshel Hall. Nonattendance of class or notification to the instructor or department does not constitute official withdrawal.

A full reduction of the instructional, general, music performance, and laboratory materials fees and the nonresident surcharge will be provided for all withdrawals in conformity with the following schedule:

<i>Course Duration*</i>	<i>100% Refund**</i>	<i>No Refund</i>
10 weeks or more	6th day of term or earlier	7th day of term or later
5-9 weeks	5th day of term or earlier	6th day of term or later
less than 5 weeks	3rd day of term or earlier	4th day of term or later

\* Every day of the week is counted except Sunday.

\*\* For a complete withdrawal from any term, all applicable fees, fines, and penalties will be deducted from any refunds.

If fees were paid by scholarship, loan, or grant-in-aid, the appropriate credit is issued to the fund from which the initial payment was made. Pro-rata refunds are calculated for first-time, first-year Title IV recipients who completely withdraw during the first six weeks of the quarter. No refunds or adjustments are made on student accounts until after the tenth day of the term.

Any withdrawal or reduction in academic hours after the schedule outlined above will not be entitled to a reduction of charges and/or refund. Tuition charges are based on the total number of hours as of the last date of the tuition refund period plus any hours added after the refund period. Hours dropped after the refund period outlined above do not "exchange" for hours added after the refund period.

### **Application for Involuntary Withdrawal**

If a student withdraws for reasons beyond his/her control (e.g., illness, military service, job transfer, or shift change imposed by the employer that creates a direct conflict with the class schedule), the fee charges may be refunded in direct proportion to the number of weeks in attendance. An Application for Involuntary Withdrawal can only be processed for courses in which the student has already received a grade of W (withdrawn). Applications for Involuntary Withdrawal will only be considered for quarters falling within the immediately preceding year (four quarters). Appeals pertaining to quarters beyond this one-year time limit will not be accepted. All Applications for Involuntary Withdrawal must be documented and are processed only by mail on forms provided by the Bursar. Address such correspondence to the Fees & Charges Appeals Board, c/o Bursar, Youngstown State University, Youngstown, OH 44555. The decision of the Board is final and not subject to reappeal.

### **Revised Graduate Admission Types:**

Delete **Restricted/Workshop** Admission.

Retain **Regular, Provisional, and Special Non-Degree** Admission as listed in the Graduate Catalog.

### **New Non-Degree Admission:**

Non-Degree Admission provides an opportunity for individuals who hold a baccalaureate or higher degree to enroll in graduate classes for professional or personal development or personal enrichment, or to explore the possibility of entering a graduate degree program, without completion of the regular graduate admission process. Collegiate transcripts and other admissions materials are not required until the student decides to seek admission to a graduate degree or certificate program. Certain departments, because of accreditation standards or staffing issues may require prior approval for non-degree student registration in departmental courses.

A maximum of 12 graduate quarter hours (9 semester hours) taken as a Non-Degree Graduate Student may be applied toward a degree program if a student is subsequently admitted to a Master's or Graduate Certificate Program. The chairperson of the department offering the degree, with the approval of the Dean of Graduate Studies, will determine which classes are applicable to the degree.

Admission as a Non-Degree Graduate Student is not an admission to a School of Graduate Studies Degree Program. Non-Degree Graduate Student applicants are not required to submit transcripts, admission test scores, or letters of recommendation. Non-Degree Students must complete the standard application for graduate studies, which indicates their academic area of choice and includes a signed statement attesting that they have earned the baccalaureate degree.

Non-Degree Graduate Students are required to pay the regular application fee. If students decide to seek admission to a graduate program, no further application fees will be assessed.

Non-Degree Graduate Students are not eligible for scholarships or financial aid, including graduate assistantships through the School of Graduate Studies.

Non-Degree Graduate Students may seek advisement from the Chairperson or Program director in the academic area to which they have been admitted and/or the Graduate School.

When Non-Degree Students decide to enroll in a graduate degree program, they should contact the School of Graduate Studies to determine what additional materials are required to complete the admissions process.

### **Academic Standards**

*(Added to Satisfactory Academic Progress in 98-99 Bulletin)*

4) A non-degree graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale).

### **Graduate Student Grievance Procedure**

#### **Implementation**

*(Added to paragraph in 98-99 Bulletin)*

The committee shall have the power, as part of its decision, to mandate a grade change. This is possible only when the instructor materially deviates from the required grading policies indicated on the course syllabus, to the detriment of an individual student or an entire class.

# Health and Human Services, College of Health and Human Services

Carol Mikanowicz, Program Director  
1074 Cushwa Hall  
(330) 742-3327

## Degree Requirements

There are three areas of course work in the MHHS: an Academic Core (36 q.h.) with Tools (12 q.h.), Management Skills (8 q.h.), and Issues in Health and Human Services (16 q.h.); Concentration Areas (17-21 q.h.) in Health Promotion (9 q.h.) or Administration for Health and Human Service Professions (9 q.h.); and Thesis (8 q.h.) or Non-thesis (12 q.h.) option. Students with inadequate professional experience will be required to complete a 1-3 q.h. practicum. The thesis must be submitted according to the general requirements established by the School of Graduate Studies. The student is required to defend the thesis in an oral presentation before a committee of graduate faculty from a minimum of two academic disciplines. Students selecting the non-thesis option must successfully complete a comprehensive examination and additional courses for graduation.

The breakdown of the course requirements for all students is as follows:

### Academic Core (36 q.h. required)

#### Tools (12 q.h. required)

CRJUS 945 Research Methods in Human Services	4 q.h.
MGMT 917 Management Information Systems	4 q.h.
CRJUS 940 Statistical Techniques in Human Service Research	4 q.h.

Prerequisites for the "Tools" courses include: undergraduate methodology and statistics courses, and BIS 514 or equivalent.

#### Management Skills (8 q.h. required)

MGMT 961 Organizational Behavior	4 q.h.
MGMT 962 Organizational Staffing Process	4 q.h.

Prerequisite for the "Management Skills" component is Management 725 or equivalent.

#### Issues in Health and Human Services (16 q.h. required)

HSC 828 Grant Writing for Health Professions	4 q.h.
MHHS 953 Health Behavior	3 q.h.
MHHS 958 Issues in Health and Health Services	3 q.h.
MHHS 949 Principles of Community Health Practice	3 q.h.
MHHS 980 Seminar	3 q.h.

### Concentration Areas (17-21 q.h. with thesis/nonthesis option stated below)

Students must choose a concentration area from the following options:

#### 1. Health Promotion (9 q.h. required)

MHHS 959 Foundations of Health Promotion	3 q.h.
MHHS 960 Program Planning and Evaluation in Health Promotion	3 q.h.
HSC 961 Implementing Health Promotion Program	3 q.h.

OR

2. <u>Administration for HHS Professions</u> (9 q.h. required)	
MHHS 918 Program Planning and Evaluation for HHS	3 q.h.
MHHS 922 Strategic Analysis for Health and Human Services	3 q.h.
AHLTH 924 Fiscal Management for Health and Human Services	3 q.h.
AND	

Thesis Option (8 q.h. required):  
 MHHS 999 Thesis 1-8 q.h.

OR

<u>Non-Thesis Option:</u> Elective Courses (12 q.h. required):	
MGMT 971 Business and Society	3 q.h.
AHLTH 803 Current Issues in Health Care <b>Delete Course</b>	4 q.h.
AHLTH 807 Epidemiology for the Health Care Practitioner	4 q.h.
AHLTH 814 International Health Care Systems <b>Delete Course</b>	3 q.h.
COUNS 902 Introduction to Chemical Dependency	3 q.h.
HMEC 925 Current Concepts in Nutrition	4 q.h.
SOCIO 905 Social Gerontology	4 q.h.
FNUTR 873 Nutrition and Aging	4 q.h.
FNUTR 872 Maternal and Child Nutrition	4 q.h.
or other appropriate courses with prior approval of the faculty advisor.	

Swing Courses:

AHLTH 803	Current Issues in Health Care	<b>Delete course</b>
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## Health and Human Services, College of Master of Public Health

Kathy Akpom, YSU Campus Coordinator  
 1080 Cushwa Hall  
 (330) 742-1901

Amy Lee, NEOUMPH Program Director  
 Division of Community Health Sciences  
 NEOUCOM  
 (330) 747-2247 or  
 (330) 325-6164

### Program Description

The Master of Public Health (MPH) Program at Youngstown State University is part of the Northeast Ohio Universities Master in Public Health. The NEOUMPH is a multidisciplinary, interdepartmental, and inter-institutional program that provides opportunities for graduate studies in public health. It is housed in the Bitonte College of Health and Human Services. Although the MPH degree is awarded by Youngstown State University, the MPH Program is consortium-based. It draws its faculty from several departments at Youngstown State University, the Northeastern Ohio Universities College of Medicine (NEOUCOM), Cleveland State University, Kent State University, and The University of Akron.

The mission of the Northeastern Ohio Universities Master of Public Health program is to improve public health by the preparation of students for public health practice in the region through collaboration among the participating academic institutions, graduate students, public health practitioners, and the community. Graduates are prepared for significant health roles through practice, community-based research, and community service. Other unique features of the program include the use of distance learning, and Saturday course offerings accommodate the typical student's work schedule.

The program is structured as a weekend college program with core courses scheduled on Saturdays from 9:00 a.m. to 4:00 p.m. Alternate scheduling will be considered to accommodate students with special circumstances. Students will take core courses at any one of the distance learning sites on the participating campuses. Electives may be taken at YSU, The University of Akron, Cleveland State University, NEOUCOM, or Kent State University. Electives will be taken on the campus where they are being offered and may be taken anytime during the program. Faculty advising teams will guide the student on the electives to take, depending on the future career goals and interest. Students will move through the core course work as a cohort. However, withdrawal will be permitted from courses under unusual conditions.

#### **Faculty Research Interests:**

**Kathy Akpom**, Ph.D., M.P.H., Associate Professor, Department of Health Professions  
Health services administration in public health  
Youngstown State University

**Carolyn M. Anderson**, Ph.D., Associate Professor, School of Communications  
Social and behavioral sciences in public health  
The University of Akron

**Claire C. Bourguet**, Ph.D., M.S.P.H., Associate Professor of Epidemiology, Division of  
Community Health Sciences  
Epidemiology  
NEOUCOM

**T. Jean Byrne**, Ph.D., Associate Professor, Department of Health Education  
Social and behavioral sciences in public health  
Kent State University

**Penelope Curk**, D.N.Sc., Assistant Professor, School of Nursing  
Public health concepts  
Kent State University

**Marguerite Erme**, D.O., M.P.H., Assistant Professor of Community Medicine, Community  
Health Sciences  
Public health concepts  
NEOUCOM

**Alan M. Jacobs**, Ph.D., Associate Professor, Department of Geology and Environmental  
Studies Director  
Environmental health sciences in public health  
Youngstown State University



**C. William Keck, M.D., M.P.H.,** Professor, Community Health Sciences  
Public health concepts  
NEOUCOM

**Amy Lee, M.D., M.P.H., M.B.A.,** Assistant Professor of Community Medicine, Division  
of Community Health Sciences  
Public health concepts  
NEOUCOM

**Nancy Mosca, Ph.D., R.N.,** Associate Professor, Department of Nursing  
Epidemiology  
Youngstown State University

**DuWayne Porter, M.P.H.,** Registered Sanitarian  
Environmental health sciences in public health  
Portage County Health Department

**Nathan Ritchey, Ph.D.,** Professor, Department of Mathematics and Statistics  
Biostatistics  
Youngstown State University

**Richard Steiner, Ph.D., M.P.H.,** Associate Professor, Department of Mathematical Sciences  
Biostatistics  
The University of Akron

**Brenda Stevenson Marshall, Ph.D., M.P.H.,** Associate Professor, Health Administration  
Health services administration in public health  
Cleveland State University

**Mark A. Tumeo, Ph.D.,** Professor, Center for Environmental Science Technology and  
Policy  
Environmental health sciences in public health  
Cleveland State University

### **Admission Requirements**

In addition to the minimum School of Graduate Studies admissions requirements, applicants must hold a bachelor's degree from an accredited college or university, with a minimum GPA of 2.75. A minimum GPA of 3.0 is required for graduate course work. Applicants must have successfully completed a college-level mathematics or statistics course, and a college social science or natural science course, and have acceptable GRE scores within the last five years.

GRE scores may be waived if the applicant has a professional degree (master's or doctorate) in a relevant area. TOEFL is required from applicants from countries where English is not the language of instruction; the minimum score must be ESO. Two years of work experience in a relevant field is highly recommended. The applicant must provide three letters of recommendation from individuals familiar with the applicant's academic or professional background. If you have not been involved in an academic institution for two years or more, you may submit letters of recommendation by supervisors from your place of employment. The letters should include an assessment of your current work quality and ability to successfully complete graduate training. Letters are to be addressed to the MPH

Admissions Committee, NEOUCOM, Division of Community Health Sciences, 4209 State Route 44, PO Box 95, Rootstown, Ohio 44272.

## Degree Requirements

The curriculum consists of eight core courses and electives. In addition, one grant project, a capstone project, a portfolio, and an exit presentation will be required. Students should plan on taking the core courses as a cohort. Core courses will be offered on Saturdays, one course in the morning and one in the afternoon. You may take core courses in any one of the distance learning classrooms at the partner universities. Distance learning will involve interactive electronic technology and web-based learning. You may take electives at any time in the program. Students may select an elective from any of the partner universities from a list of approved electives. If the student is interested in an elective that is not on the approved list, an Elective Approval Form must be submitted, along with the course syllabus, for review by the NEOUMPH Curriculum Committee, MPH Program Office, NEOUCOM, Division of Community Health Sciences, 4209 State Route 44, PO Box 95, Rootstown, Ohio, 44272.

You will be assigned an advising team upon entering the program. The team will offer guidance on choosing electives appropriate to student career goals and interest. The program, which begins August of 1999, will be offered on a semester calendar, for semester-hour credits. Students must maintain a minimum GPA of 3.0.

### Core Courses: (24-36 s.h.)

MPH 901 Public Health Concepts	3 s.h.
MPH 902 Social and Behavioral Sciences in Public Health	3 s.h.
MPH 903 Epidemiology in Public Health	3 s.h.
MPH 904 Biostatistics in Public Health	3 s.h.
MPH 905 Health Services Administration in Public Health	3 s.h.
MPH 906 Environmental Health Sciences in Public Health	3 s.h.
MPH 996 Practicum	3-6 s.h.
MPH 997 MPH Capstone Project	3-6 s.h.
Electives	1-12 s.h.
Total hours for degree	39 s.h.

## Master of Science in Education Department of Counseling

Don Martin, Chair of the Department  
3305 Beechly College of Education  
(330) 742-3257

### Admission Requirements

In addition to the graduate admission policy, the Department of Counseling has adopted the following policies relative to non-degree admission:

1. Non-degree students must meet the minimum undergraduate GPA requirement of 2.7 or hold a master's degree.

2. Non-degree students must seek approval from the Department of Counseling Chairperson or his/her designee prior to registration for classes each quarter and may only enroll in courses specified as appropriate for non-degree study.
3. Non-degree students may not displace degree students when a class is closed.
4. Non-degree students who later wish to earn a degree must make formal application for admission to the degree program and meet all the requirements of the regular admission process including successful completion of the Miller Analogies Test (minimum score = 40) or the Graduate Record Examination (combined verbal and quantitative score = 950). Non-degree status performance information may be used in the decision process for degree admission, but in no way insures admission into the degree program. Non-degree students must keep in mind the maximum transferable hours stipulated in the graduate admission policy.
5. Non-degree students wishing to use course-work for certification and/or licensure procedures are responsible for assuring the appropriateness of the course-work for those purposes in advance with the appropriate accrediting or licensing body.
6. Students who request special non-degree status through the Dean of Graduate Studies must also seek approval to enroll in Counseling course-work as in #2 above.

## Department of Teacher Education

### Master Teacher Secondary Program

Philip E. Ginnetti, Chair of the Department  
 2405 Beeghly College of Education  
 (330) 742-3251

### Option C: Endorsement in Computer Education and Technology

Minimum Hours = 37

#### I. Program prerequisites:

In order to enter the Computer Education and Technology Endorsement program you must:

- A. Have completed the prerequisite courses listed below, or their equivalents (undergraduate courses are acceptable).

Prerequisite courses	10-12 q.h.
<b>EDTC 771 Technologies for Teaching</b> (Formerly FOUND 702 Instructional Media)	4 q.h. 2 q.h.)
<b>EDTC 899 Integration of Instructional Computing</b> (Formerly FOUND 889 Small Computer Applications in Education)	4 q.h. 3 q.h.)
<b>SPED 802 Education of Exceptional Children</b>	4 q.h.
	or
<b>SPED 731 Education of Young Handicapped Children</b>	4 q.h.

B. Students must have basic computer competence on either Macintosh or DOS/Windows computer systems in the following areas: operating systems, word processing, a general theoretical understanding of how computers work, and electronic mail. Competency in use of word processing, database management, and spreadsheets is prerequisite to entrance to the program. Use of all appropriate applications programs is incorporated in production of class projects throughout the program. These skills are necessary for successful completion of the endorsement courses.

C. Possess a valid teaching certificate.

II. Academic and Professional Concentration Required for Endorsement 27 q.h.

SEDUC 922	Principles of Instruction	3 q.h.
SEDUC 1036	Fundamentals of Curriculum Development	3 q.h.
EDTC 970	Educational Computing and Technology	4 q.h.
EDTC 971	Educational Applications of the Internet	3 q.h.
EDTC 972	Design and Production of Instructional Media	3 q.h.
EDTC 973	Organization and Management of Instructional Technology Programs	4 q.h.
EDTC 974	Design Principles for Technology in Instruction	4 q.h.
EDTC 975	Directed Field Experience Project in Technology	3 q.h.

Computer/Technology Endorsement

This endorsement program serves school personnel who hold a license in a teaching field and seek a multi-age endorsement in Computer/Technology as well as those seeking to add a Computer/Technology endorsement to their initial certification without completing requirements for a Master of Education degree. The courses included in the endorsement program were designed in keeping with the International Society for Technology in Education Standards for Basic Endorsement in Educational Computing and Technology Literacy. The program recognizes that (1) the educational use of computers needs to become an integral part of the total process of teaching and learning rather than operating in isolation, (2) teachers need professional preparation in educational computing and technology in order to teach computer/technology applications and integrate technology to support teaching and learning, and (3) all students graduating from the K-12 schools require computer/technology instruction in order to gain equal access to information.

III. Endorsement Requirements

Those seeking a Computer/Technology endorsement will complete the courses previously listed. The minimum total number of quarter hours (prerequisite courses + required courses) for the endorsement is 37 quarter hours. All students enrolled in the Endorsement program will complete EDTC 975, a Directed Field Experience Project in Technology. Because field placements such as this require the cooperation of various schools/agencies, students must notify their advisors three months in advance of placement.

The Computer/Technology Endorsement is administered through the Department of Teacher Education, Beeghly College of Education, Youngstown State University, Youngstown, Ohio 44555. An advisor will be assigned from the Teacher Education faculty.

# New Graduate Certificates

## Graduate Certificate in Environmental Studies Center for Environmental Studies

Alan M. Jacobs, Director  
Center for Environmental Studies  
2080 Engineering Sciences Building  
(330) 742-2933  
amjacobs@cc.ysu.edu

### Certificate Description

This sequence of 20 quarter hours is designed to meet the needs of students and working professionals preparing for leadership roles in environmental science or management. The graduate certificate is focused in two tracks, with specialization in risk management and industrial/institutional management. This is especially useful for careers with regulatory agencies, industries seeking compliance with environmental regulations, research facilities, and consulting firms providing state-of-the-art assessment, management, and remediation. The program will also prepare the student to continue graduate studies leading to higher degrees.

The student may choose one of two tracks currently being offered: Risk Management or Industrial/Institutional Management. To obtain the certificate, the student must complete 20 quarter hours (q.h.). Each student of either track will take the same two core graduate courses (8 q.h.), then two required graduate courses depending on track (8 q.h.), then one or two courses of graduate electives for an additional 4 quarter hours minimum. Additional background courses (undergraduate or graduate) may be required as prerequisites for some of the graduate courses.

### Certificate Requirements

To receive a certificate in environmental studies, all students must complete: ENST 900 *Advanced Environmental Studies* and ENST 901 *Sources of Contamination*; two prescribed courses in each of two tracks; and four additional quarter hours in courses from a prescribed list (see below). A grade-point average of 3.0 or above must be achieved for all twenty hours of credit.

*For the Risk Management Track*, students must complete ENST 930 *Risk Management* and ENST 931 *Ecological Risk Assessment*. Students who have not taken a general course in risk assessment comparable to ENST 830, are urged to take ENST 830.

*Alternately, for the Industry/Institutional Management Track*, students must complete ENST 920 *Environmental Compliance* and ENST 921 *Industrial/Institutional Management for the Environmental Professional*.

Additional courses may include: Risk Management Track: ENST 830 (Risk Assessment), ALHTH 807 (Epidemiology), CHEM 941 (Adv. Organic Chem. I), CHEM 801 (Elements of Physical Chemistry), CHEM 944 (Natural Products—prereq. CHEM 941 and 801), BIOL 803 (Population and Community Ecology), BIOL 804 (Aquatic Ecology), BIOL 804L (Aquatic Ecology Laboratory), BIOL 806 (Field Ecology), BIOL 996 (Environmental Biology Topics). Industry/Institutional Management Track: ENST 930 (Risk Management), ENGR 925 (Applied Environmental

Management), ENST 910A (Environmental Management Systems Standards (ISO 14001), CEEGR 968 (Industrial Waste Treatment— prereq. CEEGR 837 or equiv.), MGT 900 (The Foundation of Management), MGT 925 (Quality Management).

Core Courses will be taken by Certificate candidates in both tracks (8 q.h.):

ENST 900	Advanced Environmental Studies	4 q.h.
ENST 901	Sources of Contamination	4 q.h.

**Students may choose the Risk management or the Industrial/Institutional Management Track (12 q.h.)**

Both:

ENST 930	Risk Management	4 q.h.
ENST 931	Ecological Risk Assessment	4 q.h.

Choose:

ALHTH 807	Epidemiology	4 q.h.
CHEM 941	Adv. Organic Chem. I	3 q.h.
CHEM 801	Elements of Physical Chemistry	5 q.h.
CHEM 944	Natural Products	3 q.h.
BIOL 803	Population and Community Ecology	5 q.h.
BIOL 804	Aquatic Ecology	4 q.h.
BIOL 804L	Aquatic Ecology Laboratory	2 q.h.
BIOL 806	Field Ecology	5 q.h.
BIOL 996	Environmental Biology Topics	2-4 q.h.

**Industrial/Institutional Management Track (12 q.h.)**

Both:

ENST 920	Environmental Compliance	4 q.h.
ENST 921	Industry/Institutional Mgmt for the Env. Professional	4 q.h.

Choose:

ENST 830	Risk Assessment	4 q.h.
ENST 930	Risk Management	4 q.h.
ENGR 925	Applied Environmental Management	4 q.h.
ENST 910A	Environmental Management Systems Standards (ISO 14001)	2 q.h.
CEEGR 968	Industrial Waste Treatment	4 q.h.
MGT 900	The Foundation of Management	3 q.h.
MGT 925	Quality Management	4 q.h.

Undergraduate courses that will not qualify for the Certificate or graduate degrees, but which may be required as prerequisites to courses are:

ENST 800	Environmental Impact Assessment	4 q.h.
CHEM 764	Chemical Toxicology	4 q.h.
AHLTH 831	Intro. Industrial Hygiene	4 q.h.
CEEGR 837	Environ. Eng. 2	4 q.h.

# Certificate in Teaching English to Speakers of Other Languages (TESOL Certificate) Department of English

## Certificate Description

This four course sequence (16 q.h. total) is valuable in its own right for anyone who wishes to gain more knowledge of second/foreign language learning. It is also useful as a springboard to further graduate work in the field. It is designed to meet the needs of K-12 language arts instructors who want more information but not necessarily state validation; writing instructors at two-year colleges; and students who would like to enter doctorate programs in Applied Linguistics, English as a Second Language or Second Language Acquisition. Students gain an understanding of issues of language acquisition and language pedagogy. Prereq.: To be eligible for the Graduate Certificate in the Teaching of English to Speakers of Other Languages, students need not have an undergraduate degree in English or Linguistics, but must have a B. A. or B. S. and meet the requirements for admission to the School of Graduate Studies at YSU.

## Certificate Requirements

Four courses are required. Students who have not taken an introductory linguistics course at the undergraduate level will be expected to do extra readings to get an understanding of basic terms. English 855, Advanced Linguistics, may also serve to provide background. Students should see an advisor for the TESOL certificate program.

1. ENGL 856. *TESOL Methods*. Introduction to teaching English as a Second Language (ESL) reading, writing, listening and speaking. Focus will be on communicative methods with non-native speakers. 4 q.h.
2. ENGL 850. *Sociolinguistics*. An investigation of the relationship between language and society. Includes discussion of dialects and standard languages, language planning, linguistic identity, multi- and bilingualism, class, gender, ethnicity, and social interaction. 4 q.h.
3. ENGL 851. *Language Acquisition*. A study of research on the learning of first and second languages. Topics include developmental sequences, learner variables, critical periods and conditions for learning, and the roles of input and interaction. The course is designed for those planning to teach languages. 4 q.h.
4. ENGL 858. *English Grammar*. Descriptions and analysis of English language structure. 4 q.h.

## Graduate Certificate in the Teaching of Writing

### Department of English

#### Certificate Description

This four course sequence (16 q.h. total) is valuable in its own right as an enhancement for employment as a writing instructor, and also as a springboard to further graduate work in the field. It is designed to meet the needs of K-12 language arts teachers; writing instructors at two-year colleges; and YSU graduate students who would like to enter doctorate programs in rhetoric and composition. Students gain an understanding of issues in the field of rhetoric and composition such as current writing pedagogy, assessment of writing, language theory, language varieties, multi-cultural literacies, electronic literacies, and teaching strategies incorporating electronic media. Frequency of course offerings allow most students to finish the certificate in three to four quarters. Prereq.: To be eligible for the Graduate Certificate in the Teaching of Writing, students need not have an undergraduate degree in English or Linguistics, but must have a B. A. or B. S., must be admitted to the School of Graduate Studies before taking any of the required classes, and must complete the certificate course requirements with at least a 3.0 GPA.

#### Certificate Requirements

Students must complete four courses chosen from the following three groups.

1. Required: ENGL 907 *Teaching of Writing*; ENGL 993 *Discourse Theory*.
2. One from among: ENGL 820 *Advising Student Publications*; ENGL 901 *Methods of Composition Research*; ENGL 976 *Studies in English Education* (if the topic applies to rhetoric and composition); ENGL 990 *Special Topics* (if the topic applies to rhetoric and composition).
3. One from among: ENGL 850 *Sociolinguistics*; ENGL 858 *English Grammar*; ENGL 956 *Studies in Applied Linguistics* (if the topic applies to rhetoric and composition); ENGL 960 *Studies in Linguistics* (if the topic applies to rhetoric and composition).



# COURSES

## Biological Sciences

Paul C. Peterson, Chair of the Department  
4037 Ward Beecher Hall  
(330) 742-3601

811. *Ornithology*. (4 q.h.) **New Swing Course**

## Counseling

Don Martin, Chair of the Department  
3305 Beeghly College of Education  
(330) 742-3257

### Swing courses approved for graduate credit:

821, 822. *Seminar in Guidance and Counseling* (1-4 q.h.)

823. *Career Education and Career Guidance* (3 q.h.)

825. *Group Processes in the School* (3 q.h.)

862. *Principles of Interaction with Special Needs Students* (Sp. Ed. 862) (3 q.h.)

879. *Consultation with Gifted/Talented Students and Their Families* (4 q.h.)

895. *Counseling Workshop* (1-4 q.h.)

898. *Introduction to Professional Counseling in School and Community Contexts* (3 q.h.)

961. *Introduction to Pupil Personnel Services*. Introduction to purposes and practices of pupil-personnel services in elementary and secondary schools. History of pupil-personnel services and current developments. An analysis of the contribution of related disciplines, in particular psychology, sociology, and economics. The relationship of the services to community mental health and social agencies. **(Course incorrectly removed from the catalog.)** 3 q.h.

## Economics

Tod Porter, Chair of the Department  
321 DeBartolo Hall  
(330) 742-3428

900.\* *Statistical Problems*. A survey of the fundamental statistical concepts and techniques used in business and economics with special emphasis on the interpretation and uses of statistical analysis in business and economic decision-making. These statistical procedures include hypothesis testing and estimation, chi-square tests, and analysis of variance, correlation, and regression analysis, index numbers, economic time series, nonparametric statistics, and decision analysis. (Not applicable toward the M.A. in Economics degree.) **(Change in course description.)** 4 q.h.

901. *Basic Economic Analysis*. An analytical approach to the basic concepts of micro and macroeconomics with emphasis on the interpretation and application of these concepts to the firm and

\* additional fee required

to the economy. This course is especially designed for professionals in business and other related areas. (Not applicable toward the M.A. in Economics degree.) **(Change in course description.)**

5 q.h.

903.\* *Statistics for Executive Decision Making*. A survey of statistical techniques and their application in management. Emphasis is placed on problem formulation through the use of real-world business cases and databases and on interpreting the statistical results obtained from microcomputer statistical software. (Available to E.M.B.A. students only.) **(Change in course description.)**

4 q.h.

914. *Basic Economic Tools for Executive Decision Making*. An introduction to the concepts of supply and demand, the implications of different market structures, measures of macroeconomic performance, the effects of fiscal policy, and the effects of monetary policy. (Available to E.M.B.A. students only.) **(Change in course description.)**

4 q.h.

## Electrical Engineering

Jalal Jalali, Chair of the Department  
276 Engineering Science Building  
(330) 742-3012

805.\* *Quantum Electronics* (4 q.h.) **Delete Swing Course**

812.\* *Molecular Engineering* (4 q.h.) **Delete Swing Course**

819.\* *Plasma Dynamics* (4 q.h.) **Delete Swing Course**

825.\* *Sequential Logic Circuits Analysis and Design* (3 q.h.) **Delete Swing Course**

825L.\* *Combinational and Sequential Circuits Laboratory* (1 q.h.) **Delete Swing Course**

826. *Advanced Logic Circuits Analysis and Design* (3 q.h.) **Delete Swing Course**

826L.\* *Advanced Logic Circuits Laboratory* (1 q.h.) **Delete Swing Course**

832. *Digital Components and Systems* (5 q.h.) **New Swing Course**

832L.\* *Digital Components and Systems Laboratory* (1 q.h.) **New Swing Course**

## Environmental Studies

Alan M. Jacobs, Director  
Center for Environmental Studies  
2080 Engineering Sciences Building  
(330) 742-2933  
amjacobs@cc.ysu.edu

830. *Risk Assessment* (4 q.h.) **New swing course.**

900. *Advanced Environmental Studies*. The principles and issues of environmental science, health, technology, and affairs. Topics will include: contaminant chemistry, terrestrial and aquatic ecology, risks to human health, waste management, conservation, and sustainable development, energy, and pollution. Local, regional, global issues will be studied. Prereq.: Baccalaureate degree and entrance to Environmental Studies Program. **(New course.)**

4 q.h.

901. *Sources of Contamination*. The sources and fate and transport of air, water, soil contaminants that have potential to adversely affect human health and the environment. Topics will include: measurement of environmental parameters, data collection and reporting, interpretation of results,

\* additional fee required

compliance issues, and economic implications. Prereq.: Baccalaureate degree and entrance to Environmental Studies Program. (New course.) 4 q.h.

910. *Environmental Management Systems Standards (ISO 14001)*. Introduction to establishing a program to set internal industrial standards to identify, measure, and control the environmental impact of their activities, products and services. Including environmental policy, communication, legal requirements, training, documentation and emergency preparedness. (New course.) 2 q.h.

920. *Environmental Compliance*. Regulatory compliance concerning operations of environmental and health and safety departments. RCRA permitting (NPDES and air emissions), landfilling, Right-to-Know, waste generation, storage, shipping (manifests and placarding), disposal of wastes, MSDS, OSHA regulations, safe work practices, hiring consultants (technical and legal), writing requests for proposals, and documenting and report writing. Prereq.: ENST 900 or equivalent. (New course.) 4 q.h.

921. *Industry/Institutional Management for the Environmental Professional*. A comprehensive background in management principles and operations relating to the environmental professions. Topics include: budgeting, staffing, scheduling, leadership, and quality assurance/control. The student will learn to write, evaluate, and implement: technical and cost proposals for contracts and grants, scopes of work, operations plans, sampling and analysis plans, health and safety plans, job descriptions, resumes, statements of qualifications, mission statements, meeting agendas (for professionals and the general public), and other written and oral communications (reports, memoranda, memoranda of understanding, policy briefs, press releases, fact sheets, requests for information). Prereq.: ENST 900 or equivalent. (New course.) 4 q.h.

930. *Risk Management*. Using the principles of risk assessment, the student will learn to manage existing environmental risks in the workplace. Topics will include: workplace health hazards, product liability, toxic tort claims, cleaning strategies for risk reduction — such as brownfield redevelopment — voluntary action programs, alternative and regulatory actions. Economic importance, resource allocation, technical feasibility, and public opinion will be discussed. Prereq.: ENST 900 and ENST 830 or equivalent. (New course.) 4 q.h.

931. *Ecological Risk Assessment*. The student will examine environmental risks to non-human populations. Topics will include: measurements of adverse effects due to one or more stressors by examining population communities and ecosystems. Also, the class will study the following issues: threatened and endangered species, wetlands, endocrine disruption, multiple stressors, sediment and soil toxicity, conservative screening versus site specific studies, and natural resource damage claims. Prereq.: ENST 900 and ENST 830 or equivalent. (New course.) 4 q.h.

990. *Thesis*. Hours arranged. May be repeated. (New course.) 1-9 q.h.

## Geology

Ikram Khawaja, Chair of the Department  
213 Engineering Science Building  
(330) 742-3612

817. *Environmental Geochemistry*. (4 q.h.) **New Swing Course**

## Human Ecology

Louise Pavia, Chair of the Department  
3044 Cushwa Hall  
(330) 742-3344

860. *Coordination and Evaluation of Early Childhood Programs.* 4 q.h.  
(Change in swing course number, title, description, and prerequisite.)

## Management

Rammohan R. Kasuganti, Chair of the Department  
646 Williamson Hall  
(330) 742-3071

901. *Foundations of Management and Marketing* (same as Marketing 901). A study of the fundamental concepts and functions of management and marketing. (Available to E.M.B.A. students only; a pre-E.M.B.A. course.) **Delete Course** 4 q.h.

## Marketing

David J. Burns, Chair of the Department  
534 Williamson Hall  
(330) 742-3080

901. *Foundations of Management and Marketing* (same as Marketing 901). A study of the fundamental concepts and functions of management and marketing. (Available to E.M.B.A. students only; a pre-E.M.B.A. course.) **Delete Course** 4 q.h.

## Master of Public Health

Kathy Akpom, YSU Campus Coordinator  
1080 Cushwa Hall  
(330) 742-1901

Amy Lee, NEOUMPH Program Director  
Division of Community Health Sciences  
NEOUCOM  
(330) 747-2247 or  
(330) 325-6164

### Course Descriptions

MPH 901. *Public Health Concepts.* Organizational structure, history, law, ethics, essential services, global problems, and future of public health. Prereq.: graduate standing, permission of course director required for non-MPH students. **(New course.)** 3 s.h.

MPH 902. *Social and Behavioral Sciences in Public Health*. Theories of health education and promotion; Intervention (communication, collaboration, and strategies): socio-cultural, diversity, and regional issues as pertains to public health. Prereq.: graduate standing, permission of course director required for non-MPH students. (New course.) 3 s.h.

MPH 903. *Epidemiology in Public Health*. Epidemiological methods, including study design, legal/ethical aspects, and Epi Info, applications of methods including screening, disease surveillance, outbreak investigation, and community needs assessment. Student presentations to focus on special topics such as infectious diseases, chronic conditions, etc. Prereq.: graduate standing, permission of course director required for non-MPH students. (New course.) 3 s.h.

MPH 904. *Biostatistics in Public Health*. Principles of biostatistics in the context of multiple public health applications, Epi Info, SAS, and JMP statistical packages to be used. Prereq.: graduate standing, permission of course director required for non-MPH students. (New course.) 3 s.h.

MPH 905. *Health Services Administration in Public Health*. Management principles, including personnel administration, budgeting, financing, and continuous quality improvement as pertains to public health. Planning and evaluation principles, grant writing, public health economics, public health policy, and data sources. Prereq.: graduate standing, permission of course director required for non-MPH students. (New course.) 3 s.h.

MPH 906. *Environmental Health Sciences in Public Health*. Air quality, water quality, food hygiene, sanitation, solid waste management, hazardous materials management, vector-borne disease, other special topics, occupational health, legal issues, environmental hazard identification and response. Prereq.: graduate standing, permission of course director required for non-MPH students. (New course.) 3 s.h.

MPH 995. *MPH Special Topics*. Sections will focus on specific topics of current interest to public health workers. Fliers describing the section offering will be distributed prior to registration each semester. Prereq.: graduate standing, permission of program director required for non-MPH students. (New course.) 1-5 s.h.

MPH 996. *MPH Practicum*. Student is teamed with a faculty advisor and community preceptor(s) to work on a meaningful public health issue. For students who desire additional field experience. Prereq.: graduate standing, permission of program director required for non-MPH students. (New course.) 3 s.h.

MPH 997. *MPH Capstone Project*. A faculty advisor and community preceptor(s) are teamed with each student who will develop a paper (i.e. grant, study, proposal) on a meaningful public health issue learned from the core MPH courses. Prereq.: graduate standing; MPH 901, 902, 903, 904, 905, and 906. (New course.) 3-6 s.h.

## Nursing

Patricia A. McCarthy, Chair of the Department  
2045 Cushwa Hall  
(330) 742-3293

904. *Advanced Health Assessment*. Development of advanced clinical knowledge and skills assessment of clients and interactions with their environments. Emphasis is on research from nursing, biological,

behavioral, and social sciences. Prereq.: NURSG 901, 902, and 903. **(Change in course title and description.)** 3 q.h.

905.\* *Advanced Health Assessment Practicum*. Application of advanced nursing knowledge and skills from NURSG 904, focusing on the assessment of clients and interactions with their environments. To be taken concurrently with NURSG 904. Prereq.: NURSG 901, 902, and 903. **(Change in course title and description.)** 7 q.h.

1000. *Chronic Illness Care*. Advanced nursing management of chronic health care needs of clients and interactions with their environments. Prereq.: NURSG 904 and 905. **(Change in course title and description.)** 4 q.h.

1001.\* *Chronic Illness Care Practicum*. Application of knowledge and skills from NURSG 1000, focusing on advance nursing practice in the management of the chronic health care needs of clients and interactions with their environments. To be taken concurrently with NURSG 1000. Prereq.: NURSG 904 and 905. **(Change in course title and description.)** 7 q.h.

1004.\* *Role Practicum*. Application of concepts, theories and research from NURSG 1003 in a variety of nursing education, health care, and community settings. Prereq.: NURSG 1002 and 1003. **(Change in course title.)** 7 q.h.

1006. *Special Topics in Nursing*. Special interest nursing topics selected by faculty that reflect current trends and issues in nursing practice. May be repeated. **(New course.)** 1-7 q.h.

## Physics

Warren Young, Chair of the Department  
2014 Ward Beecher Science Hall  
(330) 742-3616

823. *Laser Physics and Photonics*. (4 q.h.) **New Swing Course**

## Department of Teacher Education

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### Early and Middle Childhood Education Program

909. *Collaborative Strategies for Professional Development*. Reflect on supervisory theories and performance-based licensure assessment of early and middle childhood student teachers, participate in simulations of clinical supervision, peer coaching, and team building techniques, and plan entry year mentor activities. Analyze videotapes to guide improved practice and keep reflective journals of professional development and collaborative problem solving. **(Change in course title and description.)** 3 q.h.

\* additional fee required

## Secondary Education Program--Computer Education and Technology

EDTC 970. *Educational Computing and Technology*. The design of courseware and the advancement of expertise in integrating computing into classroom instruction. Participants will design courseware and develop software integration projects for curricular areas, including educational uses of desktop publishing, desktop video, multimedia and record keeping. (New course.) 4 q.h.

EDTC 971. *Educational Applications of the Internet*. In-depth study of applications of telecommunications within the instructional environment. Topics include accessing global information resources, video conferencing, and publishing on-line. Learners will design instructional activities that integrate electronic communications with school curriculum. (New course.) 3 q.h.

EDTC 972. *Design and Production of Instructional Media*. Processes and procedures for developing and producing instructional media. Using an instructional design approach, participants develop and produce audio, video, multimedia, and print materials for instructional purposes. Major emphases on acquisition of basic technical competence in: producing instructional videos, authoring instructional multimedia, and creating instructional audio, visual, and print media presentations. (New course.) 4 q.h.

EDTC 973. *Organization and Management of Educational Technology Programs*. Problems and principles in establishing and maintaining the use of educational computer and technology facilities in educational institutions, including planning, organization, staffing, financing, coordinating, managing and evaluating facilities. Students will design a Computer Education and Technology program for an educational setting. (New course.) 4 q.h.

EDTC 974. *Design Principles for Technology in Instruction*. Standard approaches to designing computer-mediated instruction including recent frameworks for critical constructivist approaches to designing learning environments. Focuses on the application of theoretical principles of learning and instruction to the design of mediated instruction. Learners will construct computer-based mediated instruction applying instructional design principles in developing and evaluating an extensive instructional unit. Prereq.: SEDUC 922. (New course.) 4 q.h.

EDTC 975. *Directed Field Experience Project in Technology*. An opportunity for students to apply knowledge and skills through a directed field experience project in a working environment. The Directed Field Experience requires submission of a formal project, paper or research study. Successful completion of the requirement is requisite to graduating. Students selecting the thesis option will not be required to meet this condition. Prereq.: SEDUC 922, 1036; EDTC 970, 971, 972, 973, 974. (New course.) 3 q.h.

## Special Education Program

### Swing course title, description, and prerequisite changes:

828. *Characteristics and Needs of Seriously Emotionally Disturbed Children and Youth* (4 q.h.)

828L. *Education of Children and Youth with Severe Behavior Disorders Lab* (3 q.h.)

833. *Education of Children and Youth with Mild/Moderate Disabilities: Mental Retardation* (4 q.h.)

836. *Characteristics and Needs of Exceptional Children and Youth with Moderate/Intensive Disabilities* (4 q.h.)

851. *Developing Personal and Social Growth of Exceptional Children and Youth* (4 q.h.)

855. *Transition Planning* (4 q.h.)

862. *Service Coordination, Collaboration and Consultation for Intervention Specialists* (3 q.h.)
863. *Characteristics and Needs of Children and Youth with Mild/Moderate Disabilities: Learning Disabilities* (4 q.h.)
864. *Communication and Consultation Skills in Special Education* (4 q.h.)