



College of Public Health Student Handbook 2013-2014



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College of Public Health General Information Section



UNIVERSITY GOVERNANCE

THE BOARD OF REGENTS

TERM EXPIRES

Timothy F. Clare	Lincoln	January 2015
Jim Pillen	Columbus	January 2019
Lavon Heideman	Elk Creek	January 2019
Bob Whitehouse	Papillion	January 2019
Howard L. Hawks	Omaha	January 2015
Kent Schroeder, J.D.	Kearney	January 2017
Hal Daub	Omaha	January 2019
Bob Phares	North Platte	January 2017
Jeremy Hosein	UNMC	December 2013
Eric Kamler	UNL	March 2013
Devin Bertelsen	UNO	March 2013
Cameron Deter	UNK	March 2013

UNIVERSITY ADMINISTRATION

Varner Hall 3835 Holdrege Street Lincoln, Nebraska 68583

James B. Milliken	President
Susan Fritz	Interim Executive Vice President and Provost
Carmen K. Maurer	Corporation Secretary
David E. Lechner	Vice President for Business and Finance
Sharon Stephan	Vice President for University Affairs
Joel D. Pedersen	Vice President and General Counsel
Harvey S. Perlman	Vice President and Chancellor of UNL
Ronnie D. Green	Vice President and Vice Chancellor of ANR
John E. Christensen	Vice President and Chancellor of UNO
Harold M. Maurer	Vice President and Chancellor of UNMC
Douglas A. Kristensen	Vice President and Chancellor of UNK

UNMC ADMINISTRATION

CHANCELLOR'S OFFICE

		LOCATION	PHONE
Chancellor	Harold M. Maurer, M.D.	WHM 5001	559-4200
Vice Chancellor for Research	Jennifer L. Larsen, M.D.	ARS 2050	559-4837
Vice Chancellor for Academic Affairs	H. Dele Davies, M.D.	ARS 2022	559-5131
Vice Chancellor for External Affairs	Robert D. Bartee, M.A.	WHM 5001	559-5105



Vice Chancellor for Business and Finance Donald S. Leuenberger, M.A. WHM 5001 559-6300

STUDENT AFFAIRS

Assistant Vice Chancellor for Academic Affairs/Student Affairs and Chief Student Affairs Officer	Cheryl Bagley Thompson, Ph.D., RN	SLC 2047A	559-4437
Registrar	Janet McLaughlin	SCL 2038	559 4207
Financial Aid	Judi Walker, B.A., Director	SLC 2046	559-6409
Student Financial Services	Joan Hill, M.A., Director	SLC 2037	559-8086
Student Loan Accounting	Karen Freeman, B.S.	SLC 2045	559-5832
Director for Recruitment and Student Engagement	Channing Bunch	SLC 2065	559-3928
Office of Special Projects	Lisa Jewell-Hardesty, M.A., Coordinator	Annex 14	559-6357

ACADEMIC RESOURCES

Leon S. McGoogan Library of Medicine Center for Continuing Education	Nancy Woelfl, Ph.D., Director	WHM 6004A	559-7078
Department of Public Relations	Lois Colburn, M.A., Executive Director	ESH 3022	559-2824
Information Technology Services	Bill O'Neill, M.A. Director	AX10 3006	559-9152
	Yvette Holly, B.S., Assistant Vice Chancellor	BSC 2084	559-5683

COMPLIANCE OFFICER

Sheila A. Wrobel, J.D.	SLC 2058	559-6767
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COLLEGE OF PUBLIC HEALTH DIRECTORY

College of Public Health Dean's Office
University of Nebraska Medical Center
984355 Nebraska Medical Center
Omaha, NE 68198-4355
Phone: 402-559-4960
FAX: 402-559-4961

	<u>Location</u>	<u>Phone</u>
Jane Meza, PhD – Interim Dean	MCPH 2 nd Floor	559-4960
Alice Schumaker, PhD – Associate Dean for Academic Affairs	MCPH 2 nd Floor	552-6583
James Anderson, PhD – Associate Dean for Research	MCPH 2 nd Floor	559-6226
Shawn Gibbs, PhD- Associate Dean for Student Affairs	MCPH 2 nd Floor	559-4789
Preethy Nayar PhD– Director, Doctoral Programs	MCPH 1 st Floor	559-1981
Kendra Schmid, PhD – Director, Master's Programs	MCPH 3 rd Floor	559-8117
Ruth Margalit, MD – Director, Service Learning Academy	MCPH 2 nd Floor	559-7458
Sergio Costa, PhD – Director, Distance Learning by Remote Communication and Scholarship	MCPH 2 nd Floor	559-1061
Jessica Tschirren, MPA – Director, Office of Educational Services	MCPH 2 nd Floor	552-9870
Tymaree Sing – Coordinator, Office of Educational Services	MCPH 2 nd Floor	552-9869
Tiffany Brunt – Admissions and Recruitment Specialist	MCPH 2 nd Floor	552-9867
Aleta Gaertner, MPH – Administrative Program Coordinator	MCPH 2 nd Floor	559-4960
Laura Bashus – Administrator, Finance and Human Resources	MCPH 2 nd Floor	559-4473



<u>Department</u>	<u>Department Chair</u>	<u>Location</u>	<u>Phone</u>
Biostatistics	Gleb Haynatzki(Acting), PhD	MCPH 3 rd Floor	559-4112
Epidemiology	Amr Soliman, MD PhD	MCPH 3 rd Floor	559-4248
Environmental, Agricultural and Occupational Health Sciences	Eleanor Rogan, PhD	MCPH 3 rd Floor	559-8924
Health Promotion, Social and Behavioral Health Sciences	Terry Huang, PhD	MCPH 2 nd Floor	559-4325
Health Services Research and Administration	Li-Wu Chen, PhD	MCPH 1 st Floor	559-5260

<u>Graduate Programs</u>	<u>Graduate Program Chair</u>	<u>Location</u>	<u>Phone</u>
Biostatistics	Gleb Haynatzki, PhD	MCPH 3 rd Floor	559-4112
Environmental Health, Occupational Health, and Toxicology	Todd Wyatt, PhD	DRC II room 1068	559-3817
Epidemiology	Lorena Baccaglini, DDS, MS, PhD	MCPH 3 rd Floor	552-6634
Health Services Research, Administration and Policy	James Stimpson, PhD	MCPH 1 st Floor	559-1981
Health Promotion and Disease Prevention Research	Mohammad Siahpush, PhD	MCPH 2 nd Floor	559-3437

College of Public Health (COPH) OFFICE OF EDUCATIONAL SERVICES
MCPH 2050
984359 Nebraska Medical Center
Omaha NE. 68198-4359
1-402-552-9867

University of Nebraska Medical Center (UNMC) STUDENT SERVICES
Student Life Center
1-800-626-8431



MISSION & VALUES

Mission

The Mission of the College of Public Health is to promote optimal health and well-being through robust education, research, and service in collaboration with communities in Nebraska, across the country, and around the world.

Vision

The UNMC College of Public Health will be a place of innovation, growth and excellence, to foster sustainably healthy populations and environments.

Values

As members of the College of Public Health, we:

- Honor intellectually and scientifically innovative scholarship
- Promote collaboration across disciplines and across communities
- Share readily our knowledge and skills
- Encourage life-long and experiential learning in teaching, practice, and research
- Recognize sustainability as an essential element of sound public health practice
- Embrace diversity in ideas, disciplines, convictions and people
- Champion equity and social justice
- Commit to integrity and ethical behaviors



STUDENT GOVERNANCE

The COPH student body is represented on three COPH Governing Faculty standing committees: the Curriculum Committee, the Research and Development Committee and the Student Recruitment and Admissions Committee. One MPH student member and one MS/PhD student hold a seat on each committee. The students are representatives of the student body interests, perspectives, and concerns. Eligibility for election is determined by the successful completion of at least two (6 credit hours) courses. Nominations are secured by self-nominating, or by peer and faculty nomination. The Assistant Dean for Student Affairs administers the electronic nomination and election. The student members retain full voting privileges except in matters pertaining to individual student issues. The student members are excluded from participation in discussions regarding student disciplinary actions or other matters pertaining to individual students. Students must be in good standing in the program to be elected and to remain on the committees. The COPH student body participates in student governance in the UNMC Student Senate and the College of Public Health Student Association.

The COPH student body has appointed advisory members on the following COPH non-standing committees: the Doctoral Programs Committee, the Evaluation Committee, and the Community Engagement Coordinating Council.

COPH STUDENT GOVERNANCE COMMITTEES

Curriculum Committee – meets each month

I. Charge

The Curriculum Committee was established as a Standing Committee by vote of the governing faculty of the College of Public Health at the University of Nebraska Medical Center through the College of Public Health Bylaws, which was ratified July 2010.

- A. Formal Charge. From the College of Public Health at the University of Nebraska Medical Center Bylaws Section 1.D.1c.ii. The Committee's charge includes:
 - i. Recommend to the College of Public Health Faculty policies and plans regarding student curriculum, in consultation with the appropriate department(s).
 - ii. Develop and implement a system for curriculum evaluation.
 - iii. Recommend curriculum changes.
 - iv. Develop and recommend policies relating to the continuing education programs of the College of Public Health.
 - v. Review and approve all newly-developed courses and any newly-developed areas of specialization at the master and doctoral level.

- B. Curriculum Committee Initiated Charge. As decided upon by vote of the Curriculum Committee Membership, the Committee will additionally:
 - i. Provide guidance to students requesting evaluation and approval of their remediation plans in order to regain good academic standing.



- ii. Evaluation and judgment of student related academic issues, to include, but not be limited to transferring credit, exceptions to policy, dismissals, etc.
- iii. Dutifully accomplish any additional responsibilities as outlined in the College of Public Health Student Handbook.

Current Committee Membership

Voting Members	Representation
Kendra Schmid	Chair
Baojiang Chen	Biostatistics
Chandran Achutan	Environmental, Agricultural and Occupational Health
Amr Soliman	Epidemiology
Asia Sikora	Health Promotion, Social and Behavioral Health
Hongmei Wang	Health Services Research and Administration
Raul Rakhmatullin	MPH Student
Lisa Weissenburger-Moser	PhD Student
Nonvoting Members	Representation
Aleta Gaertner	Administrative Program Coordinator
Alice Schumaker	Associate Dean for Academic Affairs
Shawn Gibbs	Associate Dean for Student Affairs
Tymaree Sing	Coordinator, Office of Educational Services
Jessica Tschirren	Director, Office of Educational Services

Student Recruitment and Admissions Committee - meets monthly

The Committee's charge states it will:

- Recommend to the Governing Faculty policies, and procedures regarding admissions standards for public health student applicants.
- Assist in selecting the entering class, in consultation with program representatives.
- Develop and evaluate initiatives to enhance student recruitment in the College of Public Health for master's and doctoral level training.
- Work in collaboration with the Assistant Dean for Student Affairs and the Office of Educational Services to implement the above.

Current Committee Membership

Voting Members	Representation
Patrick Johannson	Chair
Gleb Haynatzki	Biostatistics
Ghada Soliman	Health Promotion, Social, and Behavioral Health Sciences
Shinobu Watanabe-Galloway	Epidemiology
TBA	PhD Student
TBA	MPH Student



Nizar Wehbi	Health Services Research and Administration
Chandran Achutan	Environmental, Agricultural and Occupational Health
Nonvoting Members	Representation
Alice Schumaker	Associate Dean for Academic Affairs
Shawn Gibbs	Associate Dean for Student Affairs
Aleta Gaertner	Administrative Program Coordinator
Jessica Tschirren	Director, Office of Educational Services
Tiffany Brunt	Admission and Recruitment Specialist
Kendra Schmid	Master's Program Director

Research and Development Committee

The Committee's charge includes:

- Assist the Dean and the Associate Dean for Research in developing a strategic plan to promote the growth and productivity of research in the College of Public Health.
- Assist the Dean and the Associate Dean for Research in special initiatives to develop new College of Public Health research and development programs, including joint programs with other colleges of the University of Nebraska.
- Monitor the initiatives within the College of Public Health to recruit and support student participation in ongoing research activities.

Current Committee Current Membership

Voting Members	Representation
Ge Lin	Health Services Research and Administration
Jane Meza	Biostatistics
Shireen Rajaram	Health Promotion, Social and Behavioral Health
Risto Rautiainen	Chair - Environmental, Agricultural, and Occupational Health
Melissa Tibbits	Health Promotion, Social and Behavioral Health
Shinobu Watanabe-Galloway	Epidemiology
	MPH Student Representative
	PhD Student Representative
Nonvoting Members	Representation
James Anderson	Associate Dean for Research

College of Public Health Student Association

Goal Statement

The purpose of UNMC's College of Public Health Student Association is to maintain a body representative of COPH students to the college leadership and external entities; advance the academic and social needs of COPH students; provide and sustain vehicles for communication between students, faculty, administration, alumni, and the community-at-large; create and promote opportunities for



community involvement; disseminate educational and professional development resources; support a positive educational experience; and stimulate interest in and advance the profession of public health.

Officers

President: Caryn Vincent

Vice-President: Jiajun Wen

Treasurer: Katie Stern

Secretary: Ketki Patel

Student Senate Representative: Austin Person

The Medical Center Student Senate is the campus-wide student government body for the University of Nebraska Medical Center. The purpose of the MCSS is to provide student input and leadership on issues related to campus life and student development. MCSS also sponsors philanthropic events and social activities.

Senate members serve on a variety of UNMC committees and meet regularly with the Chancellor and other senior administrators. The President of the MCSS also serves as a nonvoting member of the University of Nebraska Board of Regents.

MCSS business meetings are held on the first Wednesday of each month from September through May and are open to all students. Elections for the Graduate Studies senate seats and MCSS officers (President and Vice President) are held each November.

The MCSS administrative office is located in the Student Life Center, Room 3015. Students with questions about MCSS are encouraged to contact David Carver, PhD at 559-7276.



SCHOLARSHIPS & AWARDS

The following competitive scholarships are potentially available to COPH students who are currently enrolled and to new applicants.

- Regents Scholarship is offered annually to outstanding professional students that are resident of the State of Nebraska. These scholarships are awarded competitively on the basis of scholarship and academic performance to incoming students.
- Carruth J. Wagner Foundation offers \$1,000 scholarships, annually, to UNMC MPH Students. For more information, contact the Assistant Dean for Student Affairs. The number of scholarships may vary from year to year.
- The Robert D. Sparks Student Research Award is a \$1,500 award offered annually to MPH and College of Public Health M.S. and PhD students to support outstanding research that impacts public health in the state of Nebraska. For more information, contact the Assistant Dean for Student Affairs.
- The College of Public Health has a limited number of Non-Resident Tuition Scholarships to award to students who are not residents of Nebraska. These scholarships are awarded competitively on the basis of scholarship and academic performance. Please contact the Office of Educations services for more information.
- The Public Health Association of Nebraska offers scholarships annually for Nebraska residents pursuing post secondary education in public health. For more information, see the association's website: <http://www.publichealthne.org/>.
- UNMC Scholarship Opportunities. Scholarships are available to degree-seeking students enrolled in one of the graduate degrees offered at UNMC; preference is given to PhD students. For more information about UNMC scholarships, contact the Graduate Studies Office at (402) 559-6531.



DISTANCE EDUCATION

The College of Public Health provides education to individuals who seek formal training in public health or envision a career in public health. The College recognizes that offering distance education is important in order to make its programs accessible to students.

The College of Public Health offers distance education in several modalities for the following programs and courses:

Certificate of Public Health Courses – The CPH and CEP certificates can be completed both online and on campus. For the online option, the core courses are entirely online and asynchronous (no scheduled time for live meetings). For the on-campus option, classes are offered in synchronous (live class time) delivery.

Online MPH Concentration Courses – The MPH concentrations in biostatistics, environmental and occupational health and public health practice are offered online.

Doctoral Courses – Students should consult their individual departments.

Elective Courses – The College of Public Health does not guarantee offering elective courses via a distance education modality. Students participating in the MPH Program via distance are advised to discuss elective options with their academic advisors.

Distance Delivery Modalities

1. IP (Internet Protocol) Videoconferencing

This modality requires distance students to meet in an IP video classroom approved by UNMC. These IP video rooms are typically located far from the UNMC campus. This modality is a real time video/audio class or meeting between two or more users or between two or more locations. Videoconferencing for educational applications (classes) are full motion video and complete audio in real time. Video and audio are transmitted through the network with little loss of quality. The University of Nebraska distance learning system connects the four main campuses and several University facilities throughout the state. Primary locations are the University of Nebraska-Lincoln, the University Nebraska at Kearney, and the Panhandle Research and Extension Center in Scottsbluff.

2. Live Video Streaming

This modality allows students to watch and listen to classroom proceedings from any computer with a reliable internet connection. Students may communicate with the class by calling a phone bridge line. Students are not required to stay on the phone for the duration of the class; phone is used only when the student needs to speak. The live video stream ends when the class concludes.

3. Archived Video Streaming and Echo360



Classroom lectures may be recorded in two ways:

(1) Archived streaming video is made available within 24 hours and is uploaded by the instructor to a folder in the Blackboard course. The archived recording consists of all the audio captured during the classroom proceeding as well as the computer screen. If the computer was not active during the classroom proceedings, then the classroom (presenter and possibly audience) will be captured.

(2) Echo360 technology records the classroom session together with the Powerpoint slides or any materials projected on the screen through the classroom computer system. Echo360 content is automatically uploaded to the Blackboard course after the class ends. The recording can be located under “Lecture Recordings” in your Blackboard course. Students can easily navigate the recordings of the class using thumbnails of particular time points in the lecture.

NOTE: Classroom lecture recordings are meant to enhance the student's learning and for review purposes only. Unless specifically stated otherwise by your instructor, it is not meant to substitute for attendance in class.

4. **Blackboard**

Blackboard is a web-based course management system designed to allow students and faculty to participate in classes delivered online or use online materials and activities to complement face-to-face teaching. Blackboard enables instructors to provide students with course materials, discussion boards, course announcements, online quizzes, an academic resource center, and more. The degree to which Blackboard is used for a course varies. However, in order to achieve consistency in look and orientation throughout all courses, the College of Public Health uses a standard Blackboard layout for most courses.



COPH COURSE OFFERINGS

Courses offered by College of Public Health departments are listed as both CPH and Graduate (BIOS, EPI, ENV, HPRO, HSRA) offerings. MPH and Cert.PH students should register for the CPH listing. M.S. and PhD students should register for the graduate listing.

Grad. Course #	CPH Course #	COPH COURSE OFFERINGS BY DEPARTMENT	
		Course Title	Credit Hr
BIOS			
BIOS 806	CPH 506	Biostatistics I	3
BIOS 808	CPH 650	Biostatistics II	3
BIOS 810	CPH 651	Introduction to SAS Programming	3
BIOS 816	CPH 516	Biostatistical Methods I	3
BIOS 818	CPH 652	Biostatistical Methods II	3
BIOS 823	CPH 653	Categorical Data Analysis	3
BIOS 824	CPH 654	Survival Data Analysis	3
BIOS 825	CPH 655	Correlated Data Analysis	3
BIOS 835	CPH 517	Design of Medical Health Studies	3
BIOS 896	CPH 677	Research Other Than Thesis	Variable
BIOS918		Biostatistical Linear Models: Theory and Applications	3
BIOS 921		Advanced Programming for SAS	3
BIOS 924		Biostatistical Theory and Models for Survival Data	3
BIOS 925		Theory of Generalized Linear and Mixed Models in Biostatistics	3
BIOS 935		Semi-parametric Methods for Biostatistics	3
BIOS 970		Seminar	1
BIOS 998	CPH 679	Special Topics	Variable
BIOS 999		Biostatistics PhD Dissertation Research	Variable
	CPH 528	Service Learning for MPH Students	3
	CPH 529	MPH Capstone Experience	3
ENV			
ENV 800	CPH 590	Elements of Industrial Safety for Health Sciences	3
ENV 802	CPH 591	Occupational Health and Safety for Health Sciences	3
ENV 804	CPH 592	Human Factors and Ergonomics for Work Environments	3
ENV 810	CPH 593	Principles of Occupational and Environmental Health	3
ENV 816	CPH 594	Environmental Exposure Assessment	3
ENV 840	CPH 595	Sustainability, Climate Change & Health	3
ENV 850		Occupational Biomechanics	3
ENV 875	CPH 596	Chemical Carcinogenesis	2
ENV 888	CPH 597	Principles of Toxicology	3



ENV 892	CPH 503	Public Health Environment & Society	3
ENV 896	CPH 617	Research other than Thesis	Variable
ENV 899		Master's Thesis	Variable
ENV 902	CPH 619	Special Topics	Variable
ENV 920		Xenobiotics in the Environment (UNL Campus)	3
ENV 950	CPH 602	Advanced Toxicology	3
ENV 970		Seminar	1
ENV 999		Doctoral Dissertation	Variable
	CPH 528	Service Learning for MPH Students	3
	CPH 529	MPH Capstone Experience	3
EPI	CPH	Title	Crd Hr
EPI 811	CPH 631	Emergency Preparedness: Protection	3
EPI 812	CPH 620	Chronic Disease Epidemiology	3
EPI 820	CPH 504	Epidemiology in Public Health	3
EPI 821	CPH 621	Fundamentals of Epidemiology	3
EPI 825	CPH 623	Infectious Disease Epidemiology	3
EPI 830	CPH 624	Advanced Infectious Disease Epidemiology	3
EPI 831	CPH 625	Physical Activity Epidemiology	3
EPI 835	CPH 626	Health Information and Surveillance for Public Health Practice	3
EPI 840	CPH 627	Epidemiological Measurements and Research in Maternal & Child Health	2
EPI 845	CPH 628	Principles of Epidemiologic Research	4
EPI 870		Seminar	1
EPI 896	CPH 647	Research Other Than Thesis	Variable
EPI 900		Epidemiologic analysis of binary and time-to-event-data	3
EPI 905		Epidemiologic Research Development	3
EPI 970		Epidemiology Doctoral/Departmental Seminar	3
EPI 998	CPH 649	Special Topics	Variable
EPI 999		Epidemiology Dissertation Research	Variable
	CPH 528	Service Learning for MPH Students	3
	CPH 529	MPH Capstone Experience	3
HPRO			
HPRO 802	CPH 530	Cultural Competence and Professionalism	3
HPRO 803	CPH 531	Research Methods in HPER	3
HPRO 805	CPH 505	Applied Research in Public Health	3
HPRO 807	CPH 540	Introduction to Community Based Participatory Research	3
HPRO 808	CPH 555	Public Health Law	3
HPRO 809	CPH 545	Introduction to Health Disparities and Health Equity	3
HPRO 810	CPH 550	Emergency Preparedness: Prevention	3
HPRO 812	CPH 553	Emergency Preparedness: Response	3



HPRO 813	CPH 554	Emergency Preparedness: Respond and Recover	3
HPRO 815	CPH 532	Issues in Public Health: Past & Present	3
HPRO 817	CPH 551	Community Oriented Primary Care (COPC):Principles and Practice	3
HPRO 818	CPH 552	Opportunities and Challenges in the Applicability of Community Oriented Primary Care (COPC)	3
HPRO 825	CPH 533	Health Care Ethics	3
HPRO 827	CPH 534	Interventions in Health Promotion	3
HPRO 830	CPH 500	Foundations of Public Health	3
HPRO 831	CPH 535	Physical Activity Epidemiology	3
HPRO 840	CPH 536	Health Promotion Program Planning	3
HPRO 841	CPH 541	Introduction to Social Marketing and Health Communication	3
HPRO 842	CPH 542	Applied Social Marketing	3
HPRO 843	CPH 543	Advanced Health Communication	3
HPRO 844	CPH 544	Nutrition Across the Lifespan	3
HPRO 860	CPH 501	Health Behavior	3
HPRO 869	CPH 537	Sexual Health: Ontology, Research, and Education	3
HPRO 875	CPH 538	Public Health Program Evaluation	3
HPRO 880	CPH 546	Introduction to Maternal and Child Health	3
HPRO 881	CPH 547	Advanced Maternal and Child Health (MCH)	3
HPRO 882	CPH 548	Child and Adolescent Growth and Development	2
HPRO 883	CPH 549	Women's Health	2
HPRO 895	CPH 539	Public Health Leadership and Advocacy	3
HPRO 896	CPH 557	Research Other Than Thesis	Variable
HPRO 902		Complex Systems Thinking	3
HPRO 910		Humanistic Traditions of Qualitative Research	3
HPRO 935		Ethics of Human Subjects Research	3
HPRO 970		Seminar	1
HPRO 998	CPH 559	Special Topics	Variable
HPRO 999		Doctoral Dissertation	Variable
	CPH 528	Service Learning for MPH Students	3
	CPH 529	MPH Capstone Experience	3
HRSA			
HSRA 810	CPH 560	U.S. Health Care Systems: An Overview	3
HSRA 820	CPH 507	Global Applications in Public Health	3
HSRA 830	CPH 580	Health Care Organizational Theory and Behavior	3
HSRA 840	CPH 561	Public Budgeting	3
HSRA 841	CPH 562	Human Resources Management in Health Organizations	3
HSRA 853	CPH 563	Strategic Planning and Management in the Public Health	3
HSRA 860	CPH 564	Health Economics	3
HSRA 867	CPH 567	Health Policy Analysis and Evaluation	3



HSRA 870	CPH 575	Principles of Public Health Informatics	3
HSRA 872	CPH 565	Health Care Finance	3
HSRA 873	CPH 502	Health Services Administration	3
HSRA 874	CPH 566	Health Policy	3
HSRA 896	CPH 587	Research Other Than Thesis	Variable
HSRA 920		Quantitative Methods in Health Services Research	3
HSRA 930		Design of Health Services Research	3
HSRA 940		Integrated Seminar in Economics & Health Services Research	3
HSRA 950		Medical Geography and Spatial Methods in Health Services	3
HSRA 970		Seminar	1
HSRA 980		Seminar in Health Policy	3
HSRA 998	CPH 589	Special Topics	Variable
HSRA 999		Doctoral Dissertation	Variable
	CPH 528	Service Learning for MPH Students	3
	CPH 529	MPH Capstone Experience	3

DEFINITION OF COLLEGE OF PUBLIC HEALTH STUDENTS AND GRADUATE COLLEGE STUDENTS

The College of Public Health includes two categories of students: **professional** (Master of Public Health and Certificate programs) and **graduate** (MS and PhD programs). The College administers the professional programs, and the Graduate College administers the graduate programs. Many of the policies are similar, but there are some differences. Each College has official oversight of its particular programs.

College of Public Health (COPH) Education Administration

The College of Public Health has a standing Curriculum Committee composed of faculty representatives from all five departments, two student representatives, and staff (see description in student governance section). A chair is elected by the governing faculty and serves a three-year term. The Committee is responsible for new course review, student requests for exceptions and remediation, new degree or certificate program review, competency review, and other academic matters. Prior to 2009, the MPH Graduate Program Committee carried out those functions. The Student Recruitment and Admissions Committee reviews MPH and Certificate applications and plans recruitment activities.

Graduate Studies (GRAD) Education Administration

The University of Nebraska system has one Graduate College with administrative units located on each of the four campuses (the University of Nebraska – Lincoln, the University of Nebraska at Omaha, the University of Nebraska Medical Center, and the University of Nebraska at Kearney). The Office of Graduate Studies on the UNMC campus oversees graduate education on the campus, with policies and procedures aligned with other units and the Graduate College. Each unit has a Dean for Graduate Studies who, in conjunction with the Executive Graduate Council (system) and the UNMC Graduate Council elected from the UNMC Graduate Faculty, is responsible for Graduate College activities at UNMC. In 2003, the University of Nebraska Board of Regents voted to designate all regular faculty as graduate faculty and disband the former two-tiered application process.

Each graduate program at UNMC has a Graduate Committee of three or more members formally appointed by the Dean for Graduate Studies but selected or elected by the program Graduate Faculty. Each department in the College of Public Health has a Graduate Program Committee.

The COPH Doctoral Committee is an umbrella committee composed of each of the Graduate Program Chairs, Associate Dean for Academic Affairs, doctoral students, Assistant Dean for Student Affairs, and a staff assistant. The COPH Doctoral Programs Committee reviews programs of study, oversees competency reviews, sets internal policies, and handles other matters.

MS and PhD students should reference the UNMC Graduate Bulletin for all academic and administrative policies.

**COLLEGE OF PUBLIC HEALTH
STUDENT SECTION**

**Master of Public Health (MPH)
Certificate Programs**

MS/PhD Reference the Graduate Section p. 88

COPH ACADEMIC CALENDAR

Fall 2013 Semester

Fall Registration Begins	May 1
Orientation for New Students	August 21, 22, 23
1 st Day of Classes	August 26
Last Day to ADD Classes	August 30
Last Day to DROP with 100% Refund	August 30
Last Day to DROP Classes	October 18
Service Learning/Capstone Experience Student Orientation	September 20
Deadline for filing for December graduation	October 1
Holidays – No Class Labor Day Fall Break Thanksgiving	September 2 October 21-22 November 27-29
Open House for Prospective Students	November 15
Student Research Day	November 15
Service Learning/Capstone Experience Presentation Day	December 9, 10
Last Day of Class	December 20
Commencement	December 20

** PhD and MS students should also reference the Graduate Bulletin for dates specific to their requirements

Spring 2014 Semester

Spring Registration Begins	November 1
Orientation for New Students	January 3
1 st Day of Classes	January 6
Last Day to ADD Classes	January 10
Last Day to DROP with 100% Refund	January 10
Last Day to DROP Classes	February 28
Deadline for filing for May graduation	February 1
MPH Student Portfolios are Due	February 1
Service Learning/Capstone Experience Student Orientation	February 21
Open House for Prospective Students	TBA
Holidays – No Class Martin Luther King Day Spring Break	January 20 March 23-30
Last Day of Class	May 2
Fall 2012 Registration Begins	May 1
Service Learning/Capstone Experience Presentation Day	April 28, 29
Commencement	May 10

** PhD and MS students should also reference the Graduate Bulletin for dates specific to their requirements

Summer 2014 Terms

Summer Registration Begins	March 15
Eight Week Session	May 12 – July 3
First Five Week Session	June 9 – July 11
Second Five Week Session	July 14 – August 15
Last Day to ADD Classes	8 week session – May 14 1 st 5-week session – June 11 2 nd 5-week session – July 16
Last Day to DROP with 100% Refund	8 week session – May 14 1 st 5-week session – June 11 2 nd 5-week session – July 16
Last Day to DROP Classes	8 week session – May 28 1 st 5-week session – June 18 2 nd 5-week session – July 23
Deadline for filing for August graduation	June 1
Holidays – No Class Memorial Day Independence Day	May 26 July 4
Service Learning/Capstone Experience Presentation Day	July 31 st , Aug. 1
Commencement (no ceremony)	August 15

** PhD and MS students should also reference the Graduate Bulletin for dates specific to their requirements

UNMC CAMPUS SERVICES & ACTIVITIES

Please refer to the UNMC Student Handbook <http://net.unmc.edu/care/docs/handbook.pdf> for the following services:

- UNMC Alumni Relations
 - Bookstore
 - Academic Success Programs
 - Services for Students with Disabilities
 - Center for Healthy Living
 - Child Development Center
 - Counseling and Student Development
 - Rental Property at UNMC
 - ID Badges
 - Information Technology Services
 - Insurance
 - International Studies & Programs
 - ITS Video Services
 - Library
 - Lounges
 - Notary Public Service
 - Ombudsperson for Students
 - Parking
 - Printing Services
 - Public Relations, Department of
 - Security
 - Student Health Services
 - Student Services, Division of
 - Academic Records
 - Office of Student Equity and Multicultural Affairs
 - Student Loan Accounting
 - Financial Aid
 - Student Financial Services
 - Student Organizations for University of Nebraska Medical Center 2012-2013
 - Organizations of Interest to Students
 - New Organizations
-

ACADEMIC POLICIES & UNIVERSITY REQUIREMENTS

Please refer to the UNMC Student Handbook <http://net.unmc.edu/care/docs/handbook.pdf> for the following policies:

- Campus Academic Policies
 - The Family Educational Rights and Privacy Act
 - Commercial Support for UNMC Students
 - Residency Policy
 - Social Security & Medicare Tax Exemption Policies for Student Employees
 - Standards of Student Academic Performance
 - Academic Integrity and Professional Conduct
 - Minimum Standards of Academic Integrity
 - Cheating
 - Academic Misconduct
 - University of Nebraska Medical Center Delinquent Tuition/Fees Policy
 - Transcripts
 - Conduct
 - Compliance Training Policy
 - Background Check Policy
 - Procedural Rules Relating to Student Discipline
 - University of Nebraska Student Maternity/Paternity Leave Policy
 - Student AIDS and Other Bloodborne Pathogens Policy
 - Student Background Checks and Drug Screening
 - Substance Abuse or Dependency Standards of Conduct – Alcohol & Drugs
 - Tuberculosis Skin Testing and Bloodborne Pathogens Immunization Policy
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GENERAL INFORMATION

Student Rights and Responsibilities

The Bylaws of the Board of Regents at the University of Nebraska protect the rights of each member of the University community. Each individual has the right to be treated with respect and dignity, and each has the right to learn. With these rights comes the responsibility of each individual to maintain an atmosphere in which others may exercise their human rights and their right to learn. Chapter V of the Bylaws fully delineates the rights and responsibilities of students. UNMC policies are in accord with Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973 and Sections 799AS and 854 of the Public Health Services Act.

Admission to the College of Public Health

Applicants must hold a minimum of a baccalaureate degree or equivalent from a recognized college or university. Specific requirements for admission to a program are listed in the departmental sections.

Information about Tuition and Fees

Tuition and fees charges are subject to future change without notice. The following information, therefore, is offered as a guideline, not as a firm commitment. Tuition is based on the number of hours enrolled.

2013-2014 Tuition and Fees				
Type of Tuition or Fee	Unit	Campus Students/Courses Tuition & Fee Amount	Campus Student Distance Course Tuition & Fee Amount	Distance Program Tuition & Fee Amount
Tuition				
Resident	credit hour	373.50	560.00	560.00
Non-Resident	credit hour	881.75	560.00	560.00
University Program & Facilities Fees				
Fund A	semester	5.00	5.00	0.00
Fund B				
Student Health Program:				
Full-time Students	semester	99.75	99.75	0.00
Part-time Students (optional)	semester	99.75	99.75	0.00
Center for Healthy Living: <i>Mandatory for all campus classes except UNMC employees</i>	semester	62.50	62.50	0.00
Student Health Insurance (unless waived*)	semester	770.00	770.00	0.00
Library Fee	credit hour	4.00	4.00	4.00
Distance Education Delivery Fee**	credit hour	25.00	25.00	25.00

Distributive Learning fee	credit hour	30.00	30.00	30.00
COPH Technology Fee	semester	150.00	150.00	150.00
<i>*waiver based upon student having personal insurance</i>				
<i>**Only for courses delivered exclusively at a distance.</i>				
1. Full-time, for Financial Aid purpose, is defined as follows:				
Per Semester		Undergrad - 7 or more hours		
		Grad/Prof - 5 or more hours		
Summer Session		Grad/Prof/Undergrad - 4 or more hours		
<i>For a comprehensive list of all incidental fees, please see the UNMC Student Handbook</i>				

Some courses require payment of a laboratory or course-related fee – these will be indicated on the Summary of Courses. A detailed list of fees is published in the UNMC Student Handbook.

Tuition refund policy

Students who withdraw may receive a refund of a portion of their tuition for the term in which they are registered. (See the UNMC Student Handbook.)

Change of concentration

Process/Procedure

It is the student's responsibility to:

- Contact the Office of Educational Services to declare intention to change concentration.
- Obtain written approval of academic advisor for change of concentration. (An e-mail approval is acceptable. Please copy the Office of Educational Services on all correspondence.)
- Obtain written approval of the department home of the concentration the student wishes to enter.

Drops/Adds/Withdrawal

Students may drop a course (see below for circumstances where students withdraw from the University) at any time during the first eight weeks of the semester. After the first week, a grade of "W" will appear on the transcript. The approval of the student's advisor, the instructor of the course, and the Associate Dean for Academic Affairs is required. No student may drop a course after the deadline dates unless the student is able to demonstrate that conditions unforeseen at the time of registration, such as illness, will not permit continuance in the course. These unforeseen conditions will not include unsatisfactory scholarship.

Students withdrawing from the University are required to initiate their withdrawals in the Office of Educational Services. Grades are assigned by the instructor on the date of withdrawal. A grade of WP is given if the student is considered to be doing passable work; a grade of WF is given if the student is considered to be doing failing work at the time. The withdrawal form must be completed with appropriate signatures to insure appropriate entries for the permanent record.

Full-time status

MPH/Cert. PH students requiring certification as full-time students must be enrolled for at least 9 credit hours during a semester, at least 4 credit hours during an eight-week session, or at least 3 credit hours during a five week session. The same requirements apply to students holding a graduate assistantship.

Residency requirements

Each term, students are asked to certify their residency as part of the registration procedure. Students who reside in a state other than Nebraska or who have recently moved to Nebraska must apply for resident status. The Office of Academic Records has full information on the requirements for residency and the forms for applying for resident status.

Access to student records

In accordance with federal law as established in 1974 by the Family Educational Rights and Privacy Act, the University of Nebraska Medical Center maintains the confidentiality of student records and allows students to inspect and review information in their educational records at the Medical Center. The UNMC policy statement concerning student records may be found in the current UNMC Student Handbook or in the Office of Academic Records.

Services for veterans

All men and women planning to attend UNMC under Chapters 31, 34, 35, and 1606, the educational assistance and vocational rehabilitation laws administered by the Veterans Administration, should inquire at the Office of Academic Records before they register to make sure all necessary steps have been taken.

Deferral/Delaying enrollment

Students admitted to the MPH or Certificate of Public Health programs are expected to start classes in the semester in which they were admitted. The official start date for the program of study is significant because students have a limit of seven years to complete studies, calculated from the start date of the semester in which they were admitted through seven complete academic year cycles.

Students admitted to the MPH or Certificate of Public Health programs who elect to defer admission, and thus the start date of classes, must request approval in writing from the Office of Educational Services before the semester begins. A request for more than two semesters will not be granted and the student will need to reapply if she/he wishes to participate in the program.

Any student who is admitted to the MPH or Certificate of Public Health program but does not enroll in classes or complete an official deferral of admission will be considered withdrawn prior to matriculation and will need to reapply if she/he wishes to participate in the program.

Disenrollment/Dismissal

Contact the COPH Office of Educational Services.

Readmission

An MPH/Cert. PH student who has been dismissed for failure to meet academic standing requirements may reapply following standard application procedures.

Reinstatement following disenrollment

Contact the COPH Office of Educational Services.

Withdrawal from university

Contact the COPH Office of Educational Services

Blackboard Access

Access to Blackboard is granted to all students as soon as they have registered for their first course in the program. Blackboard logins and passwords are set up to correspond with the Outlook logins and passwords. Should students encounter any problems with accessing Blackboard they should contact the UNMC Help Desk.

Blackboard Site address – <http://my8.unmc.edu>

Help Desk

E-mail – helpdesk@unmc.edu

Phone – 402-559-7700

E-mail/Microsoft Outlook

Student E-mail

All students are required to use official student e-mail accounts for communication pertaining to University matters. Personal e-mail accounts will not be used for communication with students after students matriculate. Students are responsible for checking their e-mail regularly.

Once a student enrolls for classes, UNMC Information Technology Services (ITS) will mail the information required to access the student's Outlook e-mail account. Outlook can be accessed from off campus using the web-based Outlook, which uses the same login and password.

Grievances

Refer to the UNMC Student Handbook for procedures. <https://net.unmc.edu/care/docs/handbook.pdf>.

GOOD ACADEMIC STANDING

To maintain good academic standing, College of Public Health students are required to maintain a grade point average (GPA) of at least a B (3.00) in their programs of study.

MPH Students

Grades for all required MPH core courses must be a B- (2.67) or above. A grade of C (2.00) may be accepted for no more than one course (provided it is not a core course); receipt of two grades of C or any grade below C (2.00) is not acceptable for MPH credit and may result in dismissal from the program.

Certificate Students

Receipt of more than two grades of C (2.00) and any grade below C (2.00) is not acceptable and may result in dismissal from the program.

Remediation

Any MPH or Certificate student not in good academic standing for reasons cited above, may not continue his/her program of study without the permission of his/her academic advisor, the CoPH Curriculum Committee, and the CoPH Associate Dean for Academic Affairs. In order to secure this permission, the student, in conjunction with his/her academic advisor, must submit a plan of remediation for approval to the Curriculum Committee (see Remediation Plan Document below for more details). The Curriculum Committee will review the student's status and plan of remediation and forward a recommendation to the Associate Dean for Academic Affairs who after approval of the plan files it with the Office of Educational Services. To continue in his/her program, the student must successfully complete his/her approved remediation plan and return to good academic standing within the subsequent twelve (12) months.

Doctoral and MS students: please refer to the Graduate Bulletin (<http://www.unmc.edu/gradstudies/105.htm>).

Instructions for Developing a Plan of Remediation for Academic Standing MPH Students:

The following steps outline what must take place to address a situation prompting academic probation:

1. The student is placed on academic probation by the College of Public Health Associate Dean for Academic Affairs.
 2. The Office of Educational Services notifies the student that special permission is required for the student to continue his/her program of study.
 3. The Office of Educational Services notifies the student in writing, with a copy to the academic advisor, that he/she must develop a remediation plan, in conjunction with his/her academic advisor, which addresses:
 - a. how the student plans to master the essential content provided by the course(s) in which a low grade was received; and
 - b. how the student plans to avoid receiving any grade less than B (3.00) in the future.
 4. Along with the notification referenced in step 3 above, the Office of Educational Services informs the student and the academic advisor of the due date for the plan of remediation.
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Written remediation plans are due at least two calendar weeks prior to the next regularly scheduled Curriculum Committee meeting.

5. It is the student's responsibility to contact his/her academic advisor about developing the plan of remediation. The remediation plan may need to include retaking the same course if it was a required core course.
 6. The student and his/her academic advisor confer to develop a written remediation plan, which the academic advisor sends, along with his/her recommendation regarding approval, to the Director of Master's Programs.
 7. Although the plan may be forwarded by e-mail in order to meet deadlines, a hard copy signed and dated by the student and the academic advisor must be submitted. The academic advisor provides a copy of the plan to the student and keeps one for his/her advising records.
 8. The Director of Master's Programs places the remediation plan on the agenda for review/approval at the next regularly scheduled Curriculum Committee meeting.
 9. If the plan is approved by the Curriculum Committee, the Director of Master's Programs forwards a summary of the plan, with Curriculum Committee recommendation for approval, to the Office of Educational Services. If the plan is not approved by the Curriculum Committee, the plan is returned to the student and academic advisor with comments for revision. When the plan is approved by the Associate Dean for Academic Affairs, the student and Director of Master's Programs are notified. The Director of Master's Programs will notify the academic advisor. If not approved, the plan will be returned with comment to the student and academic advisor with comments for revision.
 10. If the student has not produced a written plan of remediation in consultation with his/her academic advisor by the due date specified in the written notice from the Office of Educational Services (step 4 above), the advisor informs the Office of Educational Services, which notifies the student in writing that he/she must produce same for review a minimum of 2 weeks prior to the next regularly scheduled Curriculum Committee meeting (date given), or they will be considered delinquent in the matter. If no plan of remediation is received in the allotted time, a memo will go to the Associate Dean for Academic Affairs, indicating that a plan of remediation has not been received. Action will follow from that office, which typically involves a block on registration for future terms and a hold on records, including transcripts, or graduation until the matter is resolved.
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ACADEMIC AND GRADE APPEALS

Appeals Process

Under the provisions of the Bylaws of the Board of Regents, students may appeal grades or other evaluations of their academic progress that they believe to have been prejudiced or capricious. In those cases in which informal attempts fail to resolve the problem, appeals or complaints must be made in writing to the appropriate individual or group as described below. All participants should act as expeditiously as possible to resolve the matter.

In cases of appeals concerning matters other than grades, the CPH Curriculum Committee will serve as the Appeals Committee. For purposes of considering appeal of grades and other course evaluations, the CPH Curriculum Committee will reconstitute itself as a Faculty-Student Appeals Committee. It will be augmented by an additional student to be recommended by the CPH Student Association. In the absence of a functioning Student Association, the additional student representative would be selected by the Dean of the College of Public Health.

In these deliberations, both student members of the Curriculum Committee will be voting members of the CPH Faculty-Student Appeals Committee. The CPH Dean will not be present during deliberations of the Faculty-Student Appeals Committee; a Committee member other than the Dean will act as chair. Any member of the Appeals Committee who has a conflict of interest in the case (e.g., same department or program as one of the parties, on the supervisory committee) should be replaced through *ad hoc* appointment(s) made by the CPH Dean.

Grade Appeals

Students who believe that evaluation of their academic progress in a course has been prejudiced or capricious may appeal that grade or evaluation as follows:

1. Initially, an attempt must be made to resolve the matter through discussion with the instructor of the course for which the grade was received.
 2. If the matter is not resolved, the appeal is submitted in writing to the chair of the department in which the course was taken.
 3. If the matter is still not resolved, the appeal is submitted in writing to the Faculty-Student Appeals Committee within two weeks following reporting or posting of the grade. This committee may change a student's evaluation if there is sufficient evidence that the evaluation of a student by a faculty member has been improper. When a student takes a course in a department that is administratively based on another campus, the student must follow the grade appeals procedure for that campus. In cases involving dual-listed courses, appeals should be made through procedures of the academic unit that granted admission to the course.
 4. The Faculty-Student Appeals Committee will be the final authority in resolution of grade appeals, with the following exception. The student or the faculty member issuing the grade may within ten days submit an appeal in writing to the Dean of the College of Public Health setting forth his or her reasons for believing he or she was not accorded a fair hearing. The Dean will review the record and facts of the case and may return the matter to the Committee for reconsideration. The decision of the Dean as to whether the case should be reopened will be final.
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Appeal of Matters Other Than Grades

MPH and Certificate program students should use the following procedure for appeals concerning general academic matters, other than grades or other course evaluations (e.g., constitution of programs, suspension, or dismissal).

1. A student who wishes to appeal or register a complaint regarding an official notification should meet with his/her advisor in an attempt to resolve the conflict.
 2. If the matter is not resolved, the appeal or concern may be submitted in writing to the Director of Masters Programs. This written appeal must be presented within thirty days after official notification of an action is received by the student.
 3. If the appeal to the Director of Masters Programs is denied, within thirty days of receipt of the denial notice a written appeal may be made to the COPH Curriculum Committee. Normally the COPH Curriculum Committee serves as the final appeal committee. If the Committee is unable to resolve the issue, the matter is sent to the CoPH Dean who makes the final determination.
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TRANSFER OF CREDIT

All graduate credits to be counted toward the satisfaction of requirements for the MPH and the Certificate programs—including all credits transferred from other programs of the University of Nebraska and/or other institutions of higher education—must be approved by the Curriculum Committee and the Associate Dean for Academic Affairs. Grades received in courses for transfer of credit must be the equivalent of "B" (3.00) or higher on the University of Nebraska grade scale.

Use of graduate credit earned for another degree will be treated in the same manner as transfer credit from another institution if applied to the requirements for the degree. Up to one-third of the course work required for the MPH degree may be accepted from an accredited institution other than a unit of the University of Nebraska when the transfer is supported by the student's advisor and the Curriculum Committee. Students wishing to transfer credit must submit official transcripts of graduate-level work taken elsewhere and course syllabi to the Office of Educational Services for review by the Curriculum Committee no later than one semester before the student intends to graduate. *It is recommended that this be done at the time of application/admission to the program so that students are fully aware of their complete plan of study.* Transfer of graduate credits from a course taken with a pass/fail option must be recommended by the Curriculum Committee, supported by a written evaluation from the instructor, and approved by the Associate Dean for Academic Affairs.

Transfer of credit for courses taken 5 or more years prior to the time of admission will be evaluated by the Curriculum Committee on a case-by case basis.

REGISTRATION

Registering for CPH Classes

Registration is accomplished before each academic term. Information and instructions regarding registration are circulated prior to the date of registration. All MPH/Certificate students are required to meet with their academic advisor prior to beginning coursework to establish a master plan of study. It is highly recommended that meetings occur prior to each academic session.

Procedure

- Registration will be conducted online at: <http://myrecords.unmc.edu>

Intercampus Registration

MPH students in good standing who wish to register for courses on a University of Nebraska campus other than their home campus must complete an intercampus registration form. The intercampus registration form is available on-line at https://intercampus.nebraska.edu/pre_inter_campus.aspx.

After the form is processed, students will be contacted by the host campus with information for access and registration.

GENERAL PROCEDURES FOR STUDENT DISCIPLINARY ACTION

In accordance with Section 5.4 of the Bylaws of the Board of Regents and in order to insure the protection of students' rights, the University of Nebraska Medical Center has established general procedures that must be followed if any disciplinary action is proposed against students. Students will be informed in writing by the Associate Dean for Academic Affairs of the specific charges, the supporting evidence, and the proposed disciplinary action. The Associate Dean for Academic Affairs will also inform students of their right to appeal. The UNMC "Procedural Rules Relating to Student Discipline" may be found in the [UNMC Student Handbook](#).

ACADEMIC INTEGRITY AND PROFESSIONAL CONDUCT

The University of Nebraska Medical Center has established a policy on academic integrity and professional conduct. This policy may be found in the UNMC Student Handbook. All MPH/Certificate students are expected to adhere scrupulously to this policy. Cheating, academic misconduct, fabrication, and plagiarism are viewed as serious matters and will lead to disciplinary action as described in the UNMC Student Handbook under Procedural Rules Relating to Student Discipline. Additional materials related to Responsible Conduct in Research can be found in the UNMC Student Handbook.

GRADING

MPH/Certificate students are graded by letter grades, with associated quality points for courses completed, as follows:

Grade Quality Points

A+	4.00
A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33
D	1.00
D-	0.67
F	0.00

Grade point averages are determined by multiplying the quality points earned in each course by the number of credit hours for that course, adding the products for all courses, and then dividing the sum by the total number of credit hours in which quality points were earned. Grades of Pass/Fail are not used in determining grade point averages.

Grades for all required core courses must be a B- (2.67) or above. A student may repeat any course in which he/she received a grade below a B (3.00), with the approval of the student's academic advisor, course instructor, and the Associate Dean for Academic Affairs. A student registering for such a course should notify the Office of Academic Records of re-registration in the course. Both grades will appear on the transcript, but only the last grade will be used in determining the grade point average.

Only a Pass/Fail grade is to be used for research projects. The grade of "I" is to be used by an instructor at the end of a term to designate incomplete work in a course. It is used when a student, due to extenuating circumstances such as illness, military service, hardship, or death in the immediate family, is unable to complete the requirements of the course in the term in which the student is registered for credit. A grade of Incomplete is given only if a student has already substantially completed the major requirements of a course. Instructors will judge each situation individually.

The instructor must also indicate by a department record, with a copy to the student, how and by when the Incomplete is to be removed; if the instructor is at the University at the time of the removal, he/she must supervise the makeup work and report the permanent grade. In the event that the instructor is not available at the time of the student's application for removal of an Incomplete, the department chairperson shall supervise the removal of the Incomplete and turn in the permanent grade for the student.

Grades of Incomplete must be completed within one semester after they have been awarded or they will be automatically changed to grade of F. Any extensions to the one-semester time frame must be arranged with the Associate Dean for Academic Affairs prior to the Incomplete being changed to a grade of F.

A student with two or more current grades of Incomplete will not be permitted to enroll in any new courses until the number of current Incomplete grades becomes less than two.

All grades of "I" on courses that are part of the degree requirements must be removed at least one month before the final oral/written examination for the master's or PhD degree.

LEAVE OF ABSENCE

The granting of the Leave of Absence (LOA) is solely within the discretion of the CPH program officials based upon the merits of the request, evaluated on a case-by-case basis. The student who is considering a request for LOA should discuss this request with the Office of Educational Services and the Financial Aid Office. This request must be made in writing detailing the rationale for the LOA.

A LOA is considered an attendance withdrawal for students receiving federal student financial aid. Students are considered to be not enrolled during the LOA. Student loan lenders are notified of the student's non-enrollment. Repayment of federal student aid may be required before a LOA can be granted. A leave of absence can affect a student's satisfactory academic progress. Student loans are placed in their six-month grace period during the LOA status.

Students receiving federal student grants or loans are required to visit the Financial Aid Office prior to finalizing a leave of absence. The Office of Financial Aid will determine if current federal student aid must be repaid. The student will be required to complete an exit interview. This exit process is not considered to be an exit/withdrawal from the program; it is a federal compliance process for students receiving federal student aid who will not be enrolled for an extended period of time.

GRADUATION

Filing for graduation

UNMC

- Announcements concerning deadlines for applications are posted on the academic calendar and at <https://net.unmc.edu/care>.
- Each student who expects to receive a diploma is required to complete the following steps:
 1. Submit the master's **candidacy form** (*MPH students only*) before the end of the term prior to your intended graduation to the COPH Office of Educational Services.
 2. File the degree application by the deadline date through the UNMC Office of Academic Records on the C.A.R.E. website (\$25 filing fee).
 3. **The Completion of Requirements form** is due 4 weeks prior to the graduation date. This must be submitted to the COPH Office of Educational Services.
 - Removal of any grades of Incomplete by stated deadline
- The **Candidacy and Completion of Requirements** forms can be found on the MPH Blackboard site.

Application for the diploma

Each student who expects to receive a diploma must file an application for the diploma through the Office of Academic Records on the C.A.R.E. website and pay a \$25 non-transferrable, nonrefundable graduation fee.

Announcements concerning deadlines for applications are posted throughout the campus and published in the internal communications of the Medical Center and on the UNMC student website.

Commencement exercises

Commencement attendance is required, unless explicitly excused by the Dean of the College of Public Health, for those completing degree requirements when a formal commencement is offered – usually in May and December. Those graduating in August have the privilege of participating in the next formal commencement.

**CERTIFICATE IN COMMUNITY
ORIENTED PRIMARY CARE
OVERVIEW**

ADMISSION REQUIREMENTS

- Completion of the College of Public Health application and submission of an application fee.
- Official transcripts reflecting an earned bachelor's degree, with a 3.0 or higher grade point average for the last 60 undergraduate or the last 18 graduate/post-baccalaureate credit hours completed.

Foreign Transcripts: Official transcripts or mark sheets of college level work not in English or in the standard U.S. grading scale must be sent to a credential evaluation service for translation.

Transcripts must carry the signature of a responsible official in which the work was done and the seal of that institution, or must be certified true copies of the original records. If transcripts do not show the degree earned and the date on which it was conferred, official degree statements must also be provided

- Two letters of recommendation from academic or professional references.
 - A one-page personal statement describing the applicant's:
 - Interest in and potential for contributing to the field of public health
 - Career objectives
 - Self-assessment of computer, quantitative analysis, and personal skills and general preparation for succeeding in a public health certificate program
 - All applicants whose primary language is not English or whose undergraduate degree is from a college or university outside of the United States are required to submit official Test of English as a Foreign Language (TOEFL) scores.
 - Admissions are limited to the number that can best be handled to the advantage of the students and program operations. Preference is given to residents of Nebraska, to individuals who wish to pursue study that can be adequately supported by program resources, and to those who have adequate preparation and time for their proposed program.
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PROGRAM OF STUDY

Program Requirements

Core Curriculum

A total of 18 credit hours are required for completion of the Certificate in Community Oriented Primary Care (CCOPC).

Core Courses: 15 Credit Hours

CPH 501 Health Behavior	3 cr hrs
<i>CPH 500 Foundations of Public Health</i>	<i>3 cr hrs</i>
<i>-or-</i>	
<i>CPH 502 Health Services Administration</i>	
CPH 504 Epidemiology in Public Health	3 cr hrs
CPH 551 Community Oriented Primary Care: Principles and Practice	3 cr hrs
CPH 552 Opportunities and Challenges in the Application of COPC	3 cr hrs

Elective Course: 3 Credit Hours

3 cr hrs

College of Public Health course(s) selected with assistance of CCOPC advisor

Total Credits:

18 cr hrs

**CERTIFICATE IN INFECTIOUS
DISEASE EPIDEMIOLOGY
OVERVIEW**

ADMISSION REQUIREMENTS

- Completion of the College of Public Health application and submission of an application fee.
- Official transcripts reflecting an earned bachelor's degree, with a 3.0 or higher grade point average for the last 60 undergraduate or the last 18 graduate/post-baccalaureate credit hours completed.

Foreign Transcripts: Official transcripts or mark sheets of college level work not in English or in the standard U.S. grading scale must be sent to a credential evaluation service for translation.

Transcripts must carry the signature of a responsible official in which the work was done and the seal of that institution, or must be certified true copies of the original records. If transcripts do not show the degree earned and the date on which it was conferred, official degree statements must also be provided

- Two letters of recommendation from academic or professional references.
 - A one-page personal statement describing the applicant's:
 - Interest in and potential for contributing to the field of public health and infectious disease
 - Career objectives
 - Self-assessment of computer, quantitative analysis, and personal skills and general preparation for succeeding in a public health certificate program
 - All applicants whose primary language is not English or whose undergraduate degree is from a college or university outside of the United States are required to submit official Test of English as a Foreign Language (TOEFL) scores.
 - Prerequisites:
 - Prior college-level mathematics or statistics courses and grades:
 - The student must have received the equivalent of at least a grade of B in a statistics course or college algebra or a more advanced mathematics course taken within five years of program application.
 - Prior college-level biology course and grades:
 - The student must have received the equivalent of at least a grade of B in a biology course taken within five years of program application.
 - Admissions are limited to the number that can best be handled to the advantage of the students and program operations. Preference is given to residents of Nebraska, to individuals who wish to pursue study that can be adequately supported by program resources, and to those who have adequate preparation and time for their proposed program.
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PROGRAM OF STUDY

Program Requirements

Core Curriculum

A total of 18 credit hours are required for completion of the Certificate in Infectious Disease Epidemiology.

Core Courses: 9 Credit hours

CPH 504 Epidemiology in Public Health	3 cr hrs
CPH 506 Biostatistics I	3 cr hrs
CPH 623 Infectious Disease Epidemiology	3 cr hrs

Elective Courses: 9 credit hours selected from the list below

CPH 624 Advanced Infectious Disease Epidemiology	3 cr hrs
CPH 631 Emergency Preparedness: Protection	3 cr hrs
CPH 650 Biostatistics II	3 cr hrs
CPH 628 Principles of Epidemiologic Research	4 cr hrs
PAMM 509 Immunology	2 cr hrs
PAMM 550 Medical Microbiology	3 cr hrs

Total Credits:	18 cr hrs
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CERTIFICATE IN MATERNAL AND CHILD HEALTH OVERVIEW

ADMISSION REQUIREMENTS

- Completion of the College of Public Health application and submission of an application fee.
- Official transcripts reflecting an earned bachelor's degree, with a 3.0 or higher grade point average for the last 60 undergraduate or the last 18 graduate/post-baccalaureate credit hours completed.

Foreign Transcripts: Official transcripts or mark sheets of college level work not in English or in the standard U.S. grading scale must be sent to a credential evaluation service for translation.

Transcripts must carry the signature of a responsible official in which the work was done and the seal of that institution, or must be certified true copies of the original records. If transcripts do not show the degree earned and the date on which it was conferred, official degree statements must also be provided

- A résumé reflecting one or more years of work/volunteer history related to public health.
 - Two letters of recommendation from academic or professional
 - A personal essay describing:
 - A brief personal history describing their statement of interest and motivation for pursuing a certificate program in MCH; ability to communicate with peers and others and team work; career goals
 - All applicants whose primary language is not English or whose undergraduate degree is from a college or university outside of the United States are required to submit official Test of English as a Foreign Language (TOEFL) scores.
 - Admissions are limited to the number that can best be handled to the advantage of the students and program operations. Preference is given to residents of Nebraska, to individuals who wish to pursue study that can be adequately supported by program resources, and to those who have adequate preparation and time for their proposed program.
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PROGRAM OF STUDY

Program Requirements

Core Curriculum

A total of 18 credit hours are required for completion of the Certificate in Maternal and Child Health.

Core Courses: 18 credit hours

CPH 501 Health Behavior	3 cr hrs
CPH 504 Epidemiology in Public Health	3 cr hrs
CPH 546 Introduction to MCH	3 cr hrs
CPH 547 Advanced MCH	3 cr hrs
CPH 548 Child and Adolescent Growth and Development	2 cr hrs
CPH 549 Women's Health	2 cr hrs
CPH 627 Epidemiological Measurements and Research in MCH	2 cr hrs

Total credits: 18 cr hrs

CERTIFICATE IN EMERGENCY PREPAREDNESS OVERVIEW

ADMISSION REQUIREMENTS

- Completion of the College of Public Health application and submission of an application fee.
- Official transcripts reflecting an earned bachelor's degree, with a 3.0 or higher grade point average for the last 60 undergraduate or the last 18 graduate/post-baccalaureate credit hours completed.

Foreign Transcripts: Official transcripts or mark sheets of college level work not in English or in the standard U.S. grading scale must be sent to a credential evaluation service for translation.

Transcripts must carry the signature of a responsible official in which the work was done and the seal of that institution, or must be certified true copies of the original records. If transcripts do not show the degree earned and the date on which it was conferred, official degree statements must also be provided

- Two letters of recommendation from academic or professional references.
 - A one-page personal statement describing the applicant's:
 - Interest in and potential for contributing to the field of public health and preparedness
 - Career objectives
 - Self-assessment of computer, quantitative analysis, and personal skills and general preparation for succeeding in a public health certificate program
 - All applicants whose primary language is not English or whose undergraduate degree is from a college or university outside of the United States are required to submit official Test of English as a Foreign Language (TOEFL) scores.
 - Admissions are limited to the number that can best be handled to the advantage of the students and program operations. Preference is given to residents of Nebraska, to individuals who wish to pursue study that can be adequately supported by program resources, and to those who have adequate preparation and time for their proposed program.
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PROGRAM OF STUDY

Program Requirements

Core Curriculum

A total of 18 credit hours are required for completion of the Certificate in Emergency Preparedness.

Core Courses: 12 credit hours

CPH 550 Emergency Preparedness: Prevention	3 cr hrs
CPH 631 Emergency Preparedness: Protection	3 cr hrs
CPH 553 Emergency Preparedness: Response	3 cr hrs
CPH 554 Emergency Preparedness: Response and Recovery	3 cr hrs

Elective courses: 6 credit hours selected from the list below

CPH500 Foundations of Public Health	3 cr hrs
CPH 504 Epidemiology in Public Health	3 cr hrs
CRCJ 8230 Terrorism (UNO Course)	3 cr hrs

Total credits: 18 cr hrs

Duration/Scheduling of the Program - The recommended duration for the certificate program is two academic semesters (fall and spring). All credits must be earned within a three year period. Extensions for good cause may be granted by permission of the Curriculum Committee.

**CERTIFICATE IN PUBLIC HEALTH
PROGRAM OVERVIEW**

ADMISSION REQUIREMENTS

- Completion of the College of Public Health application and submission of an application fee.
- Official transcripts reflecting an earned bachelor's degree, with a 3.0 or higher grade point average for the last 60 undergraduate or the last 18 graduate/post-baccalaureate credit hours completed.

Foreign Transcripts: Official transcripts or mark sheets of college level work not in English or in the standard U.S. grading scale must be sent to a credential evaluation service for translation.

Transcripts must carry the signature of a responsible official in which the work was done and the seal of that institution, or must be certified true copies of the original records. If transcripts do not show the degree earned and the date on which it was conferred, official degree statements must also be provided

- Two letters of recommendation from academic or professional references.
 - A one-page personal statement describing the applicant's:
 - Interest in and potential for contributing to the field of public health
 - Career objectives
 - Self-assessment of computer, quantitative analysis, and personal skills and general preparation for succeeding in a public health certificate program
 - All applicants whose primary language is not English or whose undergraduate degree is from a college or university outside of the United States are required to submit official Test of English as a Foreign Language (TOEFL) scores.
 - Admissions to the Certificate in Public Health program are limited to the number that can best be handled to the advantage of the students and program operations. Preference is given to residents of Nebraska, to individuals who wish to pursue study that can be adequately supported by program resources, and to those who have adequate preparation and time for their proposed program.
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PROGRAM OF STUDY

Program Requirements

Core Curriculum

A total of 18 credit hours are required for completion of the Certificate in Public Health Program.

Core Courses: 18 credit hours

CPH 501	Health Behavior	3 cr hrs
CPH 502	Health Services Administration	3 cr hrs
CPH 503	Public Health, Environment, & Society	3 cr hrs
CPH 504	Epidemiology in Public Health	3 cr hrs
CPH 506	Biostatistics I	3 cr hrs
CPH 500	Foundations in Public Health	3 cr hrs
	- Or -	
CPH 507	Global Applications in Public Health	3 cr hrs

CPH 506/516 Required Prerequisites: An undergraduate or graduate statistics course or permission of instructor. While successful completion of an undergraduate or graduate statistics course is not required for admission into the Certificate of Public Health Program, students enrolling for CPH 506 Biostatistics I must have successfully completed a statistics course within the past 5 years resulting in a grade of B or better or obtain permission of the instructor.

MASTER OF PUBLIC HEALTH PROGRAM OVERVIEW

INTRODUCTION TO THE MPH PROGRAM

MPH Program Description

The UNMC Master of Public Health Program is a specialized professional master's degree program designed to prepare graduates for work in public health. Public health practice is increasingly regarded as important to citizen well-being as a means to better health and potential reduction in costs for critical care.

Core courses focus on the areas of knowledge basic to public health. Concentration areas emphasize the areas of prevention, scientific knowledge base, interdependency with other areas of knowledge and practice, and social justice.

Course material pays particular attention to health status, health outcomes, and health needs in special populations (e.g., racial and ethnic minorities, children, and women). Statistics related to these populations, as well as cultural and etiological considerations, will be discussed throughout the curriculum in an effort to instill in students the need for awareness of the health differences in population groups. The goal of this orientation is to equip program graduates to address society's public health needs. Elective courses will be drawn from a broad base of courses.

The MPH Program was approved by the Board of Regents and the Nebraska Coordinating Commission for Postsecondary Education in the summer/fall of 2001 and began admitting students in January 2002. On May 13, 2004, the program received 5-year national accreditation from the Council on Education for Public Health (CEPH). On July 1, 2009, the program received reaccreditation for the maximum term of 7 years from CEPH.

ADMISSION REQUIREMENTS

- Official transcripts reflecting an earned bachelor's degree, with a 3.0 or higher grade point average for the last 60 undergraduate or the last 18 graduate/post-baccalaureate credit hours completed.

Foreign Transcripts: Official transcripts or mark sheets of college level work not in English or in the standard U.S. grading scale must be sent to a credential evaluation service for translation.

Transcripts must carry the signature of a responsible official in which the work was done and the seal of that institution, or must be certified true copies of the original records. If transcripts do not show the degree earned and the date on which it was conferred, official degree statements must also be provided

- Official Graduate Record Examination (GRE) scores taken within the last five years.
 - Three letters of recommendation from academic or professional references.
 - A resume reflecting one or more years of work/volunteer history related to health and/or human services.
 - A one-page personal statement.
 - Official Test of English as a Foreign Language (TOEFL) scores are required of all applicants whose primary language is not English or whose undergraduate degree is from a college or university outside of the United States.
 - Epidemiology Concentration Prerequisites:
 - The student must have received the equivalent of a grade of B or better in a statistics course, differential calculus, integral calculus, algebra or a more advanced mathematics course taken within five years of program application.
 - Environmental and Occupational Health Prerequisites:
 - The student must have successfully completed the following courses: two semesters of biology, two semesters of chemistry, one semester of physics, and one semester of college level math.
 - Biostatistics Concentration Prerequisites:
 - The student must have received the equivalent of a grade of B or better in a college-level statistics course, differential calculus and integral calculus.
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CORE CURRICULUM

Degree Requirements

MPH Core Curriculum

A total of 45 credit hours are required for completion of the Master of Public Health Program.

MPH Core Courses: 21 credit hours

CPH 500	Foundations in Public Health	3 cr hrs
CPH 501	Health Behavior	3 cr hrs
CPH 502	Health Services Administration	3 cr hrs
CPH 503	Public Health Environment and Society	3 cr hrs
<i>CPH 504</i>	<i>Epidemiology in Public Health</i>	<i>3 cr hrs</i>
-or-		
<i>CPH 621</i>	<i>Fundamentals of Epidemiology</i>	<i>3 cr hrs</i>
	<i>*Required for Epidemiology concentration students</i>	
<i>CPH 505</i>	<i>Applied Research in Public Health</i>	<i>3 cr hrs</i>
-or-		
<i>CPH 517</i>	<i>Design of Medical Health Studies</i>	<i>3 cr hrs</i>
	<i>*Required for Biostatistics concentration students</i>	
<i>CPH 506</i>	<i>Biostatistics I</i>	<i>3 cr hrs</i>
-or-		
<i>CPH 516</i>	<i>Biostatistical Methods I (Calculus-based)*</i>	<i>3 cr hrs</i>

CPH 506/516 and CPH 504/CPH 621 must be successfully completed in the first 18 hours of the program of study.

Students who do not complete Biostatistics and Epidemiology with a grade of B- or better must retake the course within the next 18 months. Students admitted prior to the fall of 2007 are exempt.

CPH 500 must be successfully completed in the first 21 hours of the program of study.

CPH 560 U.S. Healthcare Systems fulfills the health administration core requirement for students admitted prior to fall 2009 only.

CPH 506 Required Prerequisites: Undergraduate or graduate statistics course or permission of instructor. While successful completion of an undergraduate or graduate statistics course is not required for admission into the MPH program, students enrolling for CPH 506 Biostatistics I must have successfully completed a statistics course within the past 5 years resulting in a grade of B or better or obtain permission of the instructor.

CPH 516: Prerequisites include calculus (covering differential and integral calculus) within the past 5 years resulting in a grade of B or better.

CONCENTRATION AREAS

There are nine areas of concentration. Each of the following areas of concentration requires 12-13 credit hours of prescribed coursework:

Biostatistics

The Biostatistics concentration provides the basic biostatistical and quantitative skills and knowledge to prepare students for careers in public health practice and public health research. This area of study is designed to meet the needs of those individuals who work in public health and who desire to broaden their training by learning the statistical/quantitative evaluation of public health research and programs. The concentration provides the tools needed to conceptualize and define a public health problem in multidimensional terms, to develop an appropriate study design, to plan and implement proper statistical analyses, and to interpret and report the results of a study. The course work and applications focus on methodology typically used to analyze different types of public health data and provide the opportunity to apply these methods to real-world problems.

12 credit hours from these courses:

CPH 652 Biostatistical Methods II	3 cr hrs
CPH 653 Categorical Data Analysis	3 cr hrs
CPH 654 Survival Data Analysis	3 cr hrs
CPH 655 Correlated Data Analysis	3 cr hrs

Community Oriented Primary Care

The MPH concentration in community-oriented primary care (COPC) is designed to provide students with knowledge, tools, and skills in community orientation of health services, necessary for the application of the COPC approach. The COPC approach integrates clinical individual care and public health, allowing both actions to be implemented and carried out by a single team. The conceptual framework of COPC and the curriculum of this concentration are oriented to the implementation of community health care programs as a component of public health.

12 credit hours from these courses:

CPH 551 Community-Orient Primary Care: Principles and Practice	3 cr hrs
CPH 552 Opportunities and Challenges in the Application of COPC	3 cr hrs
CPH 626 Health Information and Surveillance for Public Health Practice	3 cr hrs
CPH 545 Health Disparities and Health Equity	3 cr hrs

Environmental and Occupational Health

The Environmental and Occupational Health concentration provides (1) basic knowledge in ecological, environmental, agricultural and occupational health, as well as toxicology; (2) a broad understanding of relevant problems in the various areas of ecological health, environmental health, occupational health, and safety or toxicology, with particular emphasis on agriculture; and (3) the ability to apply this information to important problems in these areas. This area of study is designed to meet the needs of individuals who work in public health and who desire to broaden their training in environmental health, occupational health, toxicology, and related fields.

12 credit hours from these courses:

CPH 590 Elements of Industrial Safety for Health Sciences	3 cr hrs
CPH 593 Principles of Occupational and Environmental Health	3 cr hrs
CPH 594 Environmental Exposure Assessment	3 cr hrs
CPH 597 Principles of Toxicology	3 cr hrs

Epidemiology

The Epidemiology concentration provides the basic epidemiological skills and knowledge to prepare students for careers in public health. This area of study is designed to meet the needs of those individuals who currently work in public health as well as those who wish to embark on a career in public health. The concentration provides the tools needed to conceptualize a public health problem, to design an epidemiological study, to collect and analyze data, and to interpret and report the results of a study. The course work and applications focus on the determinants, distribution, dynamics, and etiology of disease in populations and include proposal and report writing, the promotion of good health practices, the prevention of disease, and the evaluation of public health policy and programs.

13 credit hours from these courses:

CPH 620 Chronic Disease Epidemiology	3 cr hrs
CPH 623 Infectious Disease Epidemiology	3 cr hrs
CPH 628 Principles of Epidemiologic Research	4 cr hrs
CPH 650 Biostatistics II	3 cr hrs

Health Policy

The Health Policy concentration is designed to train policy analysts in health care and public health that can evaluate and analyze the effectiveness of health policy. Students in this concentration will acquire a unique set of skills, knowledge and abilities that will enable them to prioritize health concerns, develop evidence based policies, and address major public health issues.

12 credit hours from these courses:

CPH 566 Health Policy	3 cr hrs
CPH 564 Health Economics	3 cr hrs
CPH 555 Public Health Law	3 cr hrs
CPH 567 Health Policy Analysis and Evaluation	3 cr hrs

Health Promotion

The Health Promotion concentration prepares students for implementing effective interventions directly with clients, determining a community's health needs, promoting healthy lifestyles, and carrying out health surveys.

12 credit hours from these courses:

CPH 534 Interventions in Health Promotion	3 cr hrs
CPH 536 Health Promotion Program Planning	3 cr hrs
CPH 538 Health Promotion Program Evaluation	3 cr hrs
CPH 539 Public Health Leadership & Advocacy	3 cr hrs

Maternal and Child Health

The MPH concentration in maternal and child health (MCH) takes a life course approach to the study of MCH through the lifespan, from preconception through pregnancy, infancy, childhood, adolescence, adulthood, and senescence. Such an approach addresses not only the health status at each stage of the lifespan, but the influence that health in one stage has in subsequent stages. A life course approach also considers the determinants of health — biological, behavioral, sociocultural, and environmental — as well as the influence of policies and politics on the health status of mothers, children, adolescents, and families. The MCH concentration focuses on equity, social justice, and human rights.

Students are prepared as MCH professionals in practice (program planning and management, advocacy, policy making) and research that has an impact locally, regionally, nationally, and globally.

12 credit hours from these courses:

CPH 546 Introduction to MCH	3 cr hrs
CPH 547 Advanced MCH	3 cr hrs
CPH 548 Child and Adolescent Growth and Development	2 cr hrs
CPH 549 Women's Health	2 cr hrs
CPH 627 Epidemiological Measurements and Research in MCH	2 cr hr

Public Health Administration

The Public Health Administration concentration prepares students for an administrative, managerial, or supervisory role, with an emphasis on community organizing, policy development, planning, and program evaluation.

12 credit hours from these courses:

CPH 565 Health Care Finance	3 cr hrs
CPH 562 Human Resource Management in Health Organizations	3 cr hrs
CPH 563 Strategic Planning and Management in the Public Health	3 cr hrs
CPH 580 Health Care Organizational Theory and Behavior	3 cr hrs

Public Health Practice

The Public Health Practice concentration prepares students for the planning, evaluation and management of programs and organizations in public health practice.

12 credit hours from these courses:

CPH 536 Health Promotion Program Planning	3 cr hrs
CPH 538 Public Health Program Evaluation	3 cr hrs
CPH 563 Strategic Planning & Management in Public Health	3 cr hrs
CPH 565 Health Care Finance	3 cr hrs

Social Marketing and Health Communication

The Social Marketing and Health Communication concentration prepares students to design and apply social marketing and health communication processes to public health programs and health behavior interventions.

12 credit hours from these courses:

CPH 540 Community-Based Participatory Research	3 cr hrs
CPH 541 Introduction to Social Marketing and Health Communication	3 cr hrs
CPH 542 Applied Social Marketing	3 cr hrs
CPH 543 Advanced Health Communication	3 cr hrs

DUAL DEGREES

Bachelor of Science in Information Technology Innovation/Master of Public Health (BSIT/MPH)

Overview

The Bachelor of Science in Information Technology Innovation and MPH in Biostatistics (BSIT/MPH) dual degree is a collaborative program between the University of Nebraska Omaha, College of Information Science and Technology and the University of Nebraska Medical Center, College of Public Health.

The program of study is guided by the curriculum standards established by the UNO BITI and the UNMC MPH Program. It is designed as a 151 credit hour undergraduate/professional option that allows eligible students to work toward the Biostatistics concentration in the MPH program requirements while completing their undergraduate degree. Students interested in this option will work closely with their advisor to develop an integrated plan of study.

Admissions

Applicants to the Bachelor of Science in Information Technology/Master of Public Health dual degree program must complete each program's individual application requirements and be admitted to each program separately. To apply for the UNMC MPH program, applicants should contact the CoPH Office of Educational Services. To apply for the University of Nebraska Omaha BSIT program, applicants should contact the UNO Undergraduate Admission Office. An applicant not admitted to both programs may pursue separately the program to which they were admitted.

Curriculum

BSIT/MPH students will enroll in their undergraduate years in the traditional sequence. In the third year of study the BSIT/MPH students will complete 6 credit hours of MPH coursework along with their undergraduate courses. In their 4th year of study students will complete fifteen credit hours of MPH courses. The fifth academic year of study will be focused on the completion of 18 credit hours of didactic coursework and six credit hours of Service Learning/Capstone Experience.

Master of Public Health/Master of Physician Assistant Studies (MPAS)

Overview

The Master of Physician Assistant Studies/Master of Public Health (MPAS/MPH) dual degree program with a concentration in Community Oriented Primary Care (COPC) aims to provide Physician Assistants with the knowledge, tools, and skills to enhance their public health practice in the community orientation of health services. The focus in COPC constitutes a bridge between individual clinical care and public health in which the focus is the community. It is a practical model for the delivery of health care with a purpose to rationalize, organize and systematize existing health resources through interventions at the community level.

Admissions

Applicants to the MPAS/MPH dual degree program must complete each program's individual application requirements and be admitted to each program separately. To apply for the UNMC MPH program, applicants should contact the CoPH Office of Educational Services. To apply for the UNMC

School of Allied Health Professions (SAHP), applicants should contact the UNMC SAHP Admissions Office. An applicant not admitted to both programs may pursue separately the program to which they were admitted.

Curriculum

The MPAS/MPH dual program curriculum consists of 27 hours of Master of Public Health core courses, (including 6 hours of Service Learning and Capstone work), 12 hours of COPC concentration courses, 63 hours of MPAS didactic courses and 57 hours of MPAS clinical education/clerkships.

Master of Public Health/Master of Social Work (MSW)

Overview

This program aims to prepare highly skilled professionals who will have competence in both advanced social work practice and in public health. On completion of all requirements, students receive both the MSW and the MPH graduate degrees. The MSW/MPH program consists of 57 credit hours and prepares students to provide the range of social work services, including policy practice and interventions for health and mental health problems, and assume leadership in the public health sector for population-based services, prevention, collaboration, and strategies and policies grounded in basic science. The program meets the educational standards of both accrediting bodies, the CSWE (MSW) and the CEPH (MPH).

Concentration:

- Public Health Administration

Admissions

Applicants to the Master of Public Health/Master of Social Work dual degree program must complete each program's individual application requirements and be admitted to each program separately. To apply for the UNMC MPH program, applicants should contact the CoPH Office of Educational Services. To apply for the University of Nebraska Omaha MSW program, applicants should contact the UNO Graduate Studies Office. An applicant not admitted to both programs may pursue separately the program to which they were admitted.

Curriculum

Core Course (39 Credit Hours)	Credit Hours
SOWK 8220 Clinical Social Work with Individuals	3
SOWK 8230 Clinical Social Work with Groups	3
SOWK 8270 Social Work Practice with Sexual Concerns	3
SOWK 8290 Social Work Practice in Health/ Mental Health	3
SOWK 8686 Medical and Psychosocial Aspects of Alcohol/Drug Use and Addition	3
SOWK 8940 Evaluation of Social Programs	3
SOWK 8190 Research and Computer Applications	3
(meets MPH CPH 505 Applied Research in Public Health requirement)	
CPH 500 Foundations of Public Health	3
CPH 501 Health Behavior	3
CPH 502 Health Services Administration	3
CPH 503 Public Health, Environment, & Society	3
CPH 504 Introduction to Epidemiology	3

CPH 506 Biostatistics I	3
Concentration Courses (12 Credit Hours)	
SOWK 8510 Supervision & Personnel Administration (meets MPH CPH 562 Public Human Resource Management Requirement)	3
SOWK 8540 Social Welfare Planning (meets MPH CPH 563 Strategic Planning and Management Requirement)	3
CPH 566 Health Care Policy	3
CPH 561 Public Budgeting or CPH 565 Health Care Finance	3
Service Learning/Capstone Experience & Practicum Courses (6 Credit Hours)	
SOWK 8400 Advanced Practicum I (meets CPH 528 Service Learning in MPH requirement)	3
SOWK 8410 Advanced Practicum II (meets CPH 529 Capstone in MPH requirement)	3
Total Credit Hours	57

Medical Doctor (MD)/Master of Public Health Dual Degree

Overview

The MD/MPH dual degree program at the UNMC College of Public Health and College of Medicine is designed for students who envision a medical career that incorporates public health and medicine. The MD/MPH program prepares physicians for practice in today's health care environment. This flexible program combines traditional medical preparation with a focus in one of the five concentration areas in the MPH degree program. In addition, students are encouraged to pursue programs of study and practice placements that allow the exploration of the multifaceted relationships between medicine and population-focused public health disciplines.

Concentrations:

- Biostatistics
- Environmental and Occupational Health
- Epidemiology
- Community Health Education
- Community Oriented Primary Care
- Maternal and Child Health
- Public Health Administration
- Health Policy
- Social Marketing and Health Communications

Admissions

Applicants to the MD/MPH dual degree program must complete each program's individual application requirements and be admitted to each program separately. To apply for the UNMC MPH program, applicants should contact the CoPH Office of Educational Services. To apply for the UNMC Medical School, applicants should contact the UNMC College of Medicine Admissions Office. An applicant not admitted to both programs may pursue separately the program to which they were admitted.

Curriculum

MD/MPH students will enroll in their medical school M1, M2 and M3 years in the traditional sequence. In the fourth year of study the MD/MPH students will complete an “MPH Year” in which they will sabbatical from their medical school course work and complete 36 credit hours of MPH course work. In their 5th year of study (traditional M4 year) the MD/MPH students will complete three to six credit hours of MPH concentration and/or elective courses and the remaining six credit hours of the Service Learning/Capstone Experience. The MPH and MD programs will share six MPH credit hours or eight COM credit hours with the SL/CE (Service Learning/Capstone Experience) replacing two traditional fourth year electives (eight weeks).

Juris Doctorate/Master of Public Health Program

The JD/MPH program is designed for students who desire specialized expertise and training in public health law. Public health, public policy, and biomedical ethics issues are at the forefront of American’s unresolved social problems. Ongoing efforts at health care reform by policymakers are expected to increase demand for lawyers with health care expertise to generate legal solutions to issues of health care access, quality, patient protection, and privacy. The built environment is also emerging as a significant factor in health prompting fresh attention to city planning and land use regulation. Occupational injuries continue to plague American’s workforce. Environmental degradation threatens the health of future generations. Lawyers play a central role in society’s approach to these issues. However, their effectiveness may be limited by inadequate knowledge of public health and health care systems. Similarly, public health professionals often have a rudimentary understanding of the legal systems.

A dual JD/MPH degree program can prepare graduates for leadership in the myriad of public health issues confronted by society. Graduates of this dual degree program will be equipped to work in a variety of public interest arenas such as governmental agencies, legislative bodies and advocacy groups. They may also seek commercial or industrial employment, in hospitals or manufacturing settings, or in universities.

MPH Concentrations areas:

- Biostatistics
- Community - Oriented Primary Health
- Environmental and Occupational Health
- Epidemiology
- Health Policy
- Health Promotion
- Maternal and Child Health
- Public Health Administration
- Social Marketing and Health Communication

Curriculum Outline

A student in the dual degree program must successfully complete the first-year curriculum at the College of Law (COL) beginning in the fall semester of the academic year for which the student is admitted before taking any public health courses. The student may then take both law and public health courses in a sequence that meets the approval of the COL and the COPH.

The degree programs as they stand alone total 138 credit hours (JD=93, MPH=45). The JD/MPH is a 123 credit hour program that allows students to share 15 credit hours between the two programs to meet the academic requirements of each individual program.

Master of Business/Master of Public Health

The Master of Business Administration and Master of Public Health dual degree program (MBA/MPH) is designed for students who desire specialized expertise and training in public health management and administration. Graduates will be equipped to work in a variety of public interest arenas, commercial or industrial employment, hospitals or insurance settings, or in universities.

Depending upon the student's chosen area of specialty, graduates will be prepared to:

- Manage and administer public health or health care organizations and agencies;
- Assess the methodology, execution, analysis and conclusions of scientific studies;
- Use empirical data to analyze the efficacy and feasibility of health policies and health care management decisions;
- Consult with organizations and agencies on best practices for management and administration in public health or health care settings.

MPH Concentrations areas:

- Health Policy
- Public Health Administration
- Social Marketing and Health Communication

Curriculum Outline

A student in the dual degree program may take both business and public health courses in a sequence that meets the approval of the College of Business Administration and the College of Public Health. The College of Business Administration normally requires 36 credit hours for the MBA degree.

Additionally, students with non-business degrees may be required to complete foundation courses, including BSAD 8110 – Accounting and Financial Fundamentals (or ACCT 2010 and ACCT 2020); and BSAD 8180 – Analytical Foundations of Economics (or ECON 2200 and ECON 2220); and BSAD 3160 – Managerial Statistics for Business or one semester of statistics which will be satisfied by CPH 506/BIOS 806 – Biostatistics I. The College of Public Health normally requires 45 hours for the MPH degree. Students select an MPH area of concentration that best suits the student's interest with the knowledge that some prerequisites courses may be required. The MPH requires 12 hours of concentration courses, 6 hours of elective courses, and 6 hours of service learning/capstone. The concentrations in the MPH program available for the MBA/MPH program are: Public Health Administration, Health Policy, & Social Marketing and Health Communication. The Service Learning (three credit hours) and Capstone Experience (three credit hours) will follow the guidelines of the UNMC MPH Program as described in the College of Public Health Service-Learning/Capstone Experience Handbook. The objectives, components, details of assignment, advisors, timelines, and evaluation of student performance are to be formulated later by the student and his or her Capstone Committee.

MPH CORE COMPETENCIES

Upon graduation, a student with a Master of Public Health should be able to...

Core Domains
1. Biostatistics
A. Describe the roles biostatistics serves in public health.
B. Apply descriptive and inferential methodologies according to the type of study design.
C. Interpret results of statistical analyses in public health studies.
2. Environmental Health Sciences
A. Describe how biological, chemical, and physical agents affect human health.
B. Describe federal and state regulatory programs, guidelines, and authorities that control environmental health issues.
C. Specify approaches for assessing, preventing, and controlling environmental hazards that pose risks to human health and safety.
D. Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.
3. Epidemiology
A. Explain the importance of epidemiology for informing public health issues.
B. Identify key sources of data for epidemiological purposes.
C. Calculate basic epidemiology measures and draw appropriate inferences from epidemiological data.
D. Use epidemiological measures to describe a public health problem in terms of magnitude, person, time, and place.
4. Health Policy and Management
A. Identify the main components and issues of the structure, financing, and delivery of health services within health systems in the U.S.
B. Discuss the policy process for improving the health status of populations.
C. Identify the fundamentals of organizational management.
D. Discuss the theory of organizational structures and behaviors.
5. Social and Behavioral Sciences
A. Identify social and behavioral theories, concepts, and models used in public health research and practice.
B. Identify social and behavioral factors that affect the health of individuals and populations.
C. Describe the planning, implementation, and evaluation of public health programs, policies, and interventions.
D. Specify targets and levels of intervention for social and behavioral science programs and policies.

Cross-Cutting Domains
6. Foundations of Public Health
A. Describe the ecological model of public health.
B. Describe basic biological principles that apply to public health.
C. Communicate accurate public health information with professional and lay audiences.
7. Applied Research Skills
A. Identify and apply fundamental research skills in public health.
B. Identify and critically appraise public health research.
C. Prepare grant proposals.
8. Leadership, Advocacy, and Community-Building
A. Identify linkages with key stakeholders.
B. Identify different levels of community engagement and participation.
C. Engage in collaborative problem-solving and decision-making.
9. Culture and Diversity
A. Discuss determinants of health disparities.
B. Describe methods and regulations associated with public health practice in relation to diverse populations.
10. Ethics Skills
A. Apply ethical principles to the collection, maintenance, use, and dissemination of public health information.
B. Articulate how ethical principles apply to public health practice.

BIOSTATISTICS COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Biostatistics should be able to...

Concentration Domains
1. Statistical Considerations in Study Design
A. Formulate pertinent research questions and hypotheses in statistical terms.
B. Identify strengths and weaknesses of study designs and implement scientifically and statistically sound design strategies.
C. Select variables relevant to a specific public health or biomedical problem for utilization in statistical design and analysis.
D. Recognize sources of bias and confounding in study design.
E. Determine statistical power and sample size needed for future public health and biomedical studies.
2. Perform Statistical Analysis of Data
A. Apply appropriate statistical methods for estimation and inference, including univariate and multivariate methods appropriate for continuous, categorical, and time-to-event data.
B. Utilize a software package for data management, statistical analyses, and data presentation.
C. Apply statistical methods for quality control and data cleaning to already collected data, before the actual statistical analysis.
D. Verify assumptions of statistical tests and models and implement appropriate methods to address observed violations of the assumptions.
E. Apply basic measures to account for confounding factors in the analysis of public health and biomedical studies, including matching, and multivariable analysis.
F. Evaluate the strengths and limitations of statistical analyses of public health and biomedical studies.
3. Interpretation and Dissemination of Statistical Analysis
A. Develop written and oral presentations based on statistical findings for both public health professionals and lay audiences.
4. Ethical/Legal Treatment of Human Subjects
A. Be familiar with the Institutional Review Board (IRB) research requirements and process.

COMMUNITY ORIENTED PRIMARY CARE COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Community Oriented Primary Care should be able to...

Concentration Domains
1. The Community Dimension in Health Care
A. Explain the ecological model of Community Health.
B. Identify the role of the community in the promotion and improvement of its own health and on health care services.
C. Demonstrate understanding of the role and value of primary health care in promotion of community health as an integral component of the health care system.
D. Formulate different definitions of community.
E. Identify the purpose, content, and methods in the characterization of a community.
2. Community Oriented Primary Care (COPC)
A. Describe, analyze, and integrate the conceptual framework and principles of COPC.
B. Define a community for the purpose of clinical care at the community level; and plan an assessment of health needs using available data for the collection and analysis of health information.
C. Justify the need for the prioritization process in COPC, and define objective criteria to be used for the selection and determination of methods to discuss process and decision.
D. Demonstrate the ability to plan an in-depth selective detailed assessment of a health or set of health conditions in the community, using quantitative and qualitative methods.
E. Demonstrate the ability to plan and develop all the stages of a systematic COPC intervention considering evidence based interventions and apply appropriate methods to promote community participation in the development of COPC.
F. Analyze the differential features and factors involved in the application of COPC worldwide, and identify the opportunities and challenges in the current application of COPC to different healthcare systems.
G. Assess the conceptual and practical factors to take into account the applicability of COPC, recognize the socio-economic, cultural, environment, political and health policy elements that could challenge the application of COPC and develop alternative application solutions.
H. Communicate the principles and features of the practice of COPC to lay populations, to health professionals, and to other related audiences.

ENVIRONMENTAL AND OCCUPATIONAL HEALTH COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Environmental and Occupational Health should be able to...

Concentration Domains
1. Industrial Safety for Health Sciences
A. Apply evidenced-based safety engineering and occupational health concepts and methods to the identification, evaluation, prevention, and control of important injury and illness hazards in general industry work environments.
B. Synthesize and apply specific occupational health and safety regulations and best practices to common workplace environments and situations in accordance with OSHA 29 CFR 1910 Occupational Health and Safety Standards for General Industry.
C. Identify and describe the human and organizational direct and indirect costs of accidents and injuries in the workplace and to the community at large.
D. Discuss and apply common accident causation models to case study scenarios to develop effective corrective action to prevent future occurrence.
E. Discuss the major components of an effective and efficient general industry safety program.
F. Discuss and apply basic risk management and risk communication approaches to common industrial safety and health problems.
2. Occupational and Environmental Health
A. Explain the role of biology and the environment in the ecological model of population-based health.
B. Specify pathways of exposure including routes of transfer from the source, through all environmental media, to humans.
C. Identify major causes of workplace related illnesses and approaches to reducing occupational health risks.
D. Describe seminal historical cases that have shaped understanding of environmental and occupational health and have helped to avoid repeating past mistakes.
E. Identify ethical, social, and legal issues central to occupational health.
F. Describe how human behavior impacts environmental and occupational exposures and outcomes.
G. Develop interventions to reduce environmental and occupational exposures.

EPIDEMIOLOGY COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Epidemiology should be able to...

Concentration Domains
1. Problem Conceptualization
A. Conceptualize epidemiologic research questions and hypotheses.
B. Apply principles of causal inference to epidemiologic data.
C. Review and critique published epidemiologic studies.
2. Surveillance
A. Identify key sources of surveillance data.
B. Compute epidemiologic measures using surveillance data.
C. Use surveillance data to answer an epidemiologic question.
3. Study Design
A. Choose a study design appropriate for a particular epidemiologic question.
B. Design an appropriate, scientifically sound study.
4. Data Analysis and Interpretation
A. Identify and interpret key study results.
B. Select appropriate statistical methods for analysis of epidemiologic data.
C. Identify potential sources and effects of bias in epidemiologic studies.
D. Apply methods to minimize sources of bias in epidemiologic study results.
5. Dissemination of Study Findings
A. Communicate epidemiologic information to lay and professional audiences.

HEALTH POLICY COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Health Policy should be able to...

Concentration Domains
1. Formulation and Implementation
A. Demonstrate knowledge of public health policy formulation and implementation strategies.
B. Collect, analyze, and synthesize information about health policy problems and issues.
C. Develop alternative policy options for specific public health issues and assess their economic, political, legal, and social implications.
2. Analysis and Evaluation
A. Evaluate the effectiveness of public health policy using formal methods of policy analysis and program evaluation.
B. Comparatively analyze and interpret legislation, administrative regulations, judicial opinions, and agency rulings.
C. Apply economic principles and theories to analyze the delivery of health care services, public health, and health policy issues.

HEALTH PROMOTION

Upon graduation, a student with a MPH with a concentration in Health Promotion should be able to...

Concentration Domains
1. Program and Intervention Planning
A. Demonstrate skills needed to conduct health-related needs assessments in a variety of communities.
B. Apply community health and organizational theories, models, principles, and best practices in planning health promotion programs or interventions.
C. Identify, incorporate, and analyze contexts and key factors relevant to the implementation of health promotion programs or interventions.
2. Evaluation of Programs and Interventions
A. Identify and evaluate health-related data and instruments.
B. Utilize appropriate qualitative and quantitative evaluation methods.
C. Apply evaluation findings to programs and policies.
3. Community Engagement
A. Demonstrate skills needed to coordinate and facilitate community groups, coalitions, and partnerships.
4. Management and Leadership
A. Demonstrate abilities in the administration and management of community health programs.
B. Demonstrate the skills to advance a systems approach to community health through professional leadership and practice.

MATERNAL AND CHILD HEALTH COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Maternal and Child Health should be able to...

Concentration Domains
1. Scientific Basis
A. Identify the major behavioral, morbidity, and mortality issues within the maternal and child populations at the local, state, national, and global levels.
B. Assess the socio-economic, cultural, biological, environmental, and societal determinants of health and disease in maternal and child populations.
C. Identify appropriate methods to study health status and its determinants, and design interventions.
D. Identify the key elements in the life course perspective and how they are applied.
2. Methodological and Analytical Skills
A. Use data to analyze health status and its determinants through the life span, and to identify effective interventions.
B. Critically analyze the qualitative and quantitative methods applied in MCH research.
C. Identify existing gaps in knowledge in MCH assessments and interventions, and propose alternatives to close the gaps.
3. Management and Communication Skills
A. Apply knowledge of management and organizational theories in the development of proposals for program interventions and research.
B. Present an effective oral and written presentation to diverse audiences.
4. Policy and Advocacy Skills
A. Describe the historical development of MCH public policies and practices in the U.S. for federal, state, and local agencies and programs serving maternal and child populations.
B. Analyze the current organizations and their gaps in MCH services and programs.
5. Values and Ethics in MCH Public Health Practice
A. Analyze the principles of equity, social justice, and human rights in the assessment of the health of maternal and child populations and programs for those populations.
B. Identify the ethical principles in MCH practice and research.

PUBLIC HEALTH ADMINISTRATION COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Public Health Administration should be able to...

Concentration Domains
1. Organizational Theory and Behavior
A. Describe fundamental concepts and information about organizational and behavioral theories in health care.
B. Demonstrate the skills to resolve organizational problems through a systems approach.
C. Demonstrate the skills to analyze organizational issues from a multidisciplinary perspective.
2. Health Care Finance
A. Prepare operating and capital budgets, considering political, economic, and social contexts; using appropriate financial and statistical tools; and stating assumptions and justifications.
B. Demonstrate the skills to implement budgets, evaluating actual performance and taking appropriate actions to enhance performance and/or revise budgets.
C. Analyze risk as a basis for financial decision-making and implement appropriate risk mitigation strategies.
D. Demonstrate the application of financial management techniques to enhance performance of public health and health services organizations.
3. Strategic Planning
A. Evaluate and document internal and external strengths, weakness, opportunities, and threats to identify strategic issues.
B. Prepare strategic and operational plans that consider current and potential internal and external issues.
C. Demonstrate the skills to lead and facilitate planning activities.
D. Demonstrate the skills to implement operational and strategic plans, evaluating performance and adjusting implementation activities and/or plans.
4. Human Resources Management
A. Describe various theories, principles, best practices, and challenges of human resources management in health care organizations.
B. Explain the effects of human factors and demographics in managing others.
C. Identify the legal, political, social, and economic issues that impact human resources management.

SOCIAL MARKETING AND HEALTH COMMUNICATION COMPETENCIES

Upon graduation, a student with a MPH with a concentration in Social Marketing and Health Communication should be able to...

Concentration Domains
1. Macro-level Assessment
A. Identify social determinants of health for the purpose of tailoring social marketing and health communication programs to diverse populations.
B. Articulate principles of Community Based Participatory Research (CBPR).
C. Identify and apply various modes of learning such as written, audio, visual, and kinesthetic in health communication.
D. Identify the levels of health literacy and the instruments used to measure functional health literacy levels.
2. Program Planning
A. Articulate the ethical principles of social marketing, health communication, and CBPR as they apply to public health practice.
B. Explain the process to foster collaboration by establishing partnerships with communities, stakeholders, gatekeepers, and members of the identified priority population.
C. Demonstrate leadership, advocacy, and community building in the field of social marketing and health communication by utilizing effective health communication strategies.
D. Describe how the ecological model influences social marketing and health communication.
E. Analyze marketing strategies and identify the best possible option given the resources available.
3. Plan Implementation
A. Demonstrate awareness of the need for cultural humility in communication methodology.
B. Apply appropriate research methodologies to compile evidence that informs decision-making in social marketing and health communication.
C. Assess and apply communication delivery channels, such as mass media, social media, and print materials.
4. Plan Evaluation
A. Evaluate existing social marketing campaigns through examination of process and performance outcomes.
B. Create and evaluate a new social marketing campaign.

SERVICE-LEARNING/CAPSTONE EXPERIENCE

The Service-Learning/Capstone Experience is a 6-credit-hour integrated culminating experience that consists of two parts: (1) three credit hours (150 practical hours) of service learning in an approved organization under the direction of a practitioner (preceptor) and a faculty committee, and (2) three credit hours (150 practical hours) of research or program evaluation that includes a final paper and presentation to committee members, faculty, staff, and students.

The Service-Learning/Capstone Experience (SL/CE) is an essential part of the UNMC MPH Program and is required of all students in the MPH Program. It is designed to provide students with firsthand, scholarly, supervised experience in a practice setting. In the course of this community-based experience, students provide service that contributes to the health of the population while learning and further developing public health competencies under the guidance of established professionals. This experience augments the academic course work, providing students with an opportunity to integrate and apply/test the knowledge, principles, and skills acquired through classroom instruction.

In service learning, there is an equal focus on service and on learning. Activities, outcomes, and scheduled hours are negotiated among the placement site, the student, and the service-learning capstone course faculty member. Service learning is considered a capstone experience that not only allows students to demonstrate basic public health competencies and further develop essential skills, (e.g., collaborative team work, health education intervention skills, and management skills) but also to integrate academic course work with actual public health practice under the supervision of established public health practitioners. The SL/CE develops an environment of academic participation, collaboration, and engagement among students, faculty, and the community. Students complete individual or group projects at sites approved by the College of Public Health Service-Learning Academy Director.

References

Kendall, Jane C. (1990.) "Combining Service and Learning: An Introduction." Combining Service and Learning: A Resource Book for Community and Public Service, Volume 1 Raleigh, NC: National Society for Experiential Education.

Objectives of Service Learning

Through participation in the Service-Learning/Capstone Experience students will:

1. Develop a capstone project proposal that clearly demonstrates integrated and applied knowledge, principles, and skills acquired through classroom instruction.
 2. Perform activities that demonstrate the development/enhancement/application of core public health competencies in the areas of collecting and analyzing data, cultural competence and community practice/collaboration, as well as appropriate additional MPH Program-identified competency domains, and describe activities performed to achieve/address these competencies.
 3. Demonstrate the development/enhancement/application of concentration specific competencies, and describe activities performed to achieve/address these competencies.
-

4. Produce a capstone paper, including a 250-500 word abstract, of the experience that reflects the integration of public health knowledge, principles, and skills and demonstrates mastery of public health principles, values, and practice.
5. Make an oral presentation of the results of the project at the end of the experience. The presentation should address all objectives listed above.
6. Produce a beneficial product for the placement site, as appropriate.

Students will negotiate the specifics of the Service-Learning/Capstone Experience project with the capstone faculty chair and the community placement preceptor. Approaches and methodologies for the experience will vary, including group and individual projects, but each experience will, at a minimum, give students exposure to one or more of the core functions and essential services of public health and a majority of the public health competencies.

Contact the Director of Master's Programs for more information on the Service-Learning/Capstone Experience.

STUDENT PORTFOLIOS

Each MPH student is required to develop a portfolio that describes her/his experiences and accomplishments during the course of her/his professional education. The portfolio is intended to be useful and relevant to the student as well as serve as an important means of assessing educational outcomes for students in the MPH Program.

In order to confirm compliance with this requirement, the portfolio is reviewed annually at the end of the fall semester (November–December) between the student and his/her academic advisor, who provides advice to the student regarding contents and format. The portfolio must be submitted to the MPH Program Blackboard site by February 1.

The portfolio belongs to the student. He/she is expected to share the portfolio with his/her academic advisor and the Office of Educational Services but otherwise has the right to decide who else may have access to the portfolio, which must be maintained in electronic format and will include the following items:

Module I: (prepared at time of matriculation to MPH Program)

1) A statement containing:

- a) Explanation for choice of graduate field
- b) Expectations for learning in the field
- c) Anticipated career goals

Documentation: personal statement submitted upon application to program

2) A statement of what high ethical standards mean to the individual working in the field of public health

Documentation: Student's signed copy of MPH Program Core Values and Principles of Conduct and Service and the MPH Program's Academic Integrity Policy. These documents are read and signed during new student orientation, indicating students have read/understand/agree to abide by these principles/ethical standards.

Module II: (updated annually at the end of fall semester)

1) A professional resume or curriculum vitae (CV) that is relevant to current or intended positions containing:

- a) Basic information such as name, contact information, educational and paid/community volunteer work history
- b) Relevant honors, awards, licenses, certifications
- c) Relevant presentations, papers, posters
- d) Relevant grant applications submitted and outcomes, if applicable; IRB applications submitted and outcomes, if applicable
- e) Research projects, if applicable

Documentation: Professional resume/CV submitted upon application to program is updated annually by student and reviewed for constructive comment by academic advisor upon request by student.

2) An annual report to update the resume/CV, including a summary of learning objectives achieved, public health competencies mastered, projects accomplished, etc. (see Module IV for details).

Documentation: Annual report highlighting accomplishments submitted by student for review by academic advisor.

3) A course/grades worksheet updated annually to record progress in the program of study.

Documentation: Plan of study worksheet to be completed with academic advisor.

Module III: (updated annually at the end of fall semester)

1) Service-Learning/Capstone Experience (SL/CE) plans and progress report containing:

- a) General project ideas/description, including possible or actual site(s) and preceptor(s)
- b) Possible or actual goals/objectives
- c) Selected public health competencies to be developed
- d) Possible or actual committee members
- e) IRB application, if applicable
- f) Drafts of paper and presentation slides

Documentation: Preliminary SL/CE Proposal Form submitted to the academic advisor and updated annually. Once student actually begins SL/CE, committee and supervising faculty member reviews/approves proposal. Capstone paper and presentation slides are also included.

2) Other research projects/papers as applicable.

Documentation: copies of selected projects/papers.

Module IV: (updated annually at the end of fall semester)

Other relevant graduate education activities as applicable for the program:

- a) Mastery of the identified UNMC MPH Program core public health competencies (applied knowledge, skills, attitudes)
- b) Work goals/accomplishments for the year
- c) Written summaries of class or work projects, activities, selected research papers, or other materials as desired by the student

Documentation: Matrix of competencies and coursework/other activities completed/updated annually. Annual goals/accomplishments worksheet updated annually.

Module V: (terminal-year students only)

Brief exit narrative by students addressing:

- a) How career goals/employment expectations have changed since admission
- b) What high ethical standards in public health means now compared to at admission
- c) Specific public health skills or concepts you have learned in this program and how you will be able to apply those to your career goals

Documentation: updated personal statement, final annual report.

ACADEMIC ADVISING

Assigning an Academic Advisor

Certificate Programs

Each student will be assigned an academic advisor upon admission. It is the responsibility of the student to contact the advisor concerning the plan of study and academic progression.

MPH Program

Each student will be assigned an academic advisor upon admission based on their program, concentration, and interest of study. It is the responsibility of the student to contact the advisor concerning the plan of study and academic progression.

Academic Advisor Contract

In support of our efforts to constantly improve and clarify the student and advisor relationship, the College of Public Health has created an Advising Contract for Faculty and Students in the Master of Public Health Program. This contract serves to establish the roles and expectations for each party. It is recommended that you and your advisor go over the contract in your first meeting, and that each of you sign the document to signify that you understand your obligations.

Changing Academic Advisor

If students feel the need to change their academic advisor, they must first request release from their current advisor in writing and receive permission from that advisor. The student must then identify and request permission from the advisor to whom they wish to transfer. Finally, it is the student's responsibility to inform the Office of Educational Services of any advisor change.

TIME LIMITATION

Time limitations for the Certificate and MPH programs are assessed from the semester the student initially enrolls in the program.

Certificate Programs

3 Years

The certificate programs (as defined in the plan of study) must be completed within three consecutive calendar years. Course work that would be over three years old at the completion of the degree program cannot be used for the certificate. The first day of class of the earliest course which appears on the student's plan of study is the beginning of the student's certificate education.

MPH Program

7 Years

The degree program (as defined in the plan of study) for MPH degrees must be completed within seven consecutive calendar years. Course work that would be over seven years old at the completion of the degree program cannot be used for a master's degree. The first day of class of the earliest course which appears on the student's plan of study is the beginning of the student's MPH education.

Graduate Student Section

MS in Emergency Preparedness

PhD in Biostatistics

PhD in Epidemiology

**PhD in Environmental Health, Occupational Health
and Toxicology**

**PhD in Health Promotion Disease Prevention
Research**

PhD in Health Services Research and Administration

**MPH & Certificate Students see COPH
section page 22**

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GRADUATE PROGRAM GOVERNANCE

The University of Nebraska is composed of four major administrative units: the University of Nebraska at Kearney (UNK), the University of Nebraska-Lincoln (UNL), the University of Nebraska Medical Center (UNMC), and the University of Nebraska at Omaha (UNO). Each of the four major units is led by a Chancellor who reports to the University President. The University is ultimately governed by a twelve-member Board of Regents that insures that the Institution fulfills its role and mission of providing quality instruction, research, and public service for the citizens of the state.

The Graduate College of the University of Nebraska is a system-wide college with programs administered on each of the four major administrative units of the University of Nebraska. The Dean of the Graduate College, in conjunction with an Executive Graduate Council representing the Graduate Faculty, is responsible for the College's activities. Graduate educational programs are offered at UNK, UNL, UNMC, and UNO through separate Graduate Studies divisions, each led by a Dean for Graduate Studies. Each campus Dean reports to both the Chancellor of the campus and to the Dean of the Graduate College. Information on the graduate programs on the other campuses should be requested from the campus Graduate Studies Office.

As part of the system-wide Graduate College, the Graduate Studies programs at UNMC offer advanced instruction leading to the master's and doctor of philosophy degrees in health-related areas. The UNMC Dean for Graduate Studies, in conjunction with the UNMC Graduate Council elected from the UNMC Graduate Faculty, is responsible for Graduate College activities at the Medical Center.

MASTER OF SCIENCE IN EMERGENCY PREPAREDNESS: GENERAL OVERVIEW

Overview

The Master of Science (MS) in Emergency Preparedness is designed to prepare professionals in a world where emergency preparedness and response skills are essential to the public health infrastructure. Events explored include naturally occurring disasters, intentional acts of terrorism, and new emerging infectious disease threats. The course curriculum is designed to be reflective and inclusive of current and nationally endorsed competencies in emergency preparedness leadership, communication, information management, practice improvement and planning, and worker health and safety.

Degree Requirements

The MS in Emergency Preparedness is designed as a 36 credit hour program that can be completed in two academic years as a full-time student or a part-time student can take up to five years to complete. Students enrolling in the MS in Emergency Preparedness will choose to enroll in either a practice or academic track.

Program of Study

The M.S. in Emergency Preparedness is offered as two tracks (1) a practice based track or (2) an academic based track. Students must choose only one of the tracks and the curriculum is as follows:

Practice Track = 36 Total Credit Hours

Required Courses = 24 credit hours

- HPRO 810: Emergency Preparedness: Prevent
- EPI 811: Emergency Preparedness: Protect
- HPRO 812: Emergency Preparedness: Respond
- HPRO 813: Emergency Preparedness: Respond and Recover
- HPRO 830: Foundations of Public Health
- EPI 820: Epidemiology in Public Health
- EPI 825: Infectious Disease Epidemiology
- CRCJ 8230: Terrorism - UNO

Elective Requirements = 6 credit hours

Master's Thesis = 6 credit hours

Academic Track = 36 Total Credit Hours

Required Courses = 30 credit hours

- HPRO 810: Emergency Preparedness: Prevent
- EPI 811: Emergency Preparedness: Protect
- HPRO 812: Emergency Preparedness: Respond
- HPRO 813: Emergency Preparedness: Respond and Recover

HPRO 830: Foundations of Public Health
EPI 820: Epidemiology in Public Health
EPI 825: Infectious Disease Epidemiology
HPRO 805: Applied Research in Public Health
BIOS 806: Biostatistics I
CRCJ 8230: Terrorism - UNO
Elective Requirements = 0 credit hours
Master's Thesis = 6 credit hours

Thesis

The thesis proposal must be approved by the student's Advisory Committee. The thesis work should reveal a capacity to carry on independent study or research and should demonstrate the student's ability to use the techniques employed in the field of emergency preparedness.

Advisor and Supervisory Committee

Each student will be advised by a two – three member Advisory Committee.

Advisory Committee has the following principal responsibilities:

- a. Assist the student in developing a program of study.
- b. Advise the student regarding research direction and thesis preparation.
- c. Serve as the Examination Committee for the Comprehensive and Final Oral Exam, i.e., thesis defense

DOCTOR OF PHILOSOPHY: GENERAL OVERVIEW

PURPOSE AND PROGRAM DESIGN

The Board of Regents approved the UNMC COPH Environmental Health, Occupational Health, and Toxicology (EHOHT) PhD program in 2007 and the Health Services Research, Administration, and Policy (HSRAP) and Health Promotion and Disease Prevention Research (HPDPR) programs in 2009. The purpose of the PhD programs is to prepare students to become ethically, culturally, and scientifically competent researchers and educators in public health. The programs promote inter- and trans-disciplinary education, research, and service activities that are relevant to the community and population that we serve. An academic department hosts and operates each of the three PhD programs. In each department, a Graduate Committee, chaired by the Graduate Program Director, develops and implements curriculum, makes admission decisions, advises students, and monitors student progress.

Degree Program	Sponsoring Department
Biostatistics	Biostatistics
Epidemiology	Epidemiology
Environmental Health, Occupational Health, and Toxicology PhD	Environmental, Agricultural, and Occupational Health
Health Promotion and Disease Prevention Research PhD	Health Promotion, Social and Behavioral Health
Health Services Research, Administration, and Policy PhD	Health Services Research and Administration

The overall coordination of CoPH PhD programs is through the college-wide Doctoral Program Committee chaired by the Doctoral Programs Director. The primary purpose of the Doctoral Programs Committee is to elevate the quality of doctoral education through interdepartmental collaboration and coordination. The Committee makes decisions regarding policies and procedures that apply to all PhD programs, and develops and implements interdepartmental educational activities.

The UNMC Graduate Studies Office has specific requirements for admission, academic standing, program requirements, comprehensive examinations, dissertations, candidacy, and graduation. Please see the UNMC Graduate Bulletin for details at <http://www.unmc.edu/gradstudies/105.htm>.

CORE COMPETENCIES FOR PhD

The COPH PhD degrees are terminal degrees that prepare future public health researchers and educators to address public health issues through innovative research and education. Core competencies for all PhD programs are:

1. Demonstrate an in-depth knowledge and understanding of public health and related issues.
2. Critically evaluate research, reports, and data using theories and frameworks relevant to public health.
3. Demonstrate an in-depth understanding of theoretical, multidisciplinary concepts relevant to public health issues.
4. Design and conduct original research in public health.
5. Incorporate knowledge of cultural, social, behavioral, and biological factors in formulating and implementing public health research, teaching, and service.
6. Demonstrate teaching and presentation skills in academic, research, and practice settings.
7. Demonstrate cultural sensitivity in research, teaching, and service.
8. Demonstrate grant- and manuscript-writing skills.
9. Articulate the process for developing and/or sustaining collaborations with communities, policy makers, and other relevant groups.
10. Demonstrate knowledge of potential conflicts of interest encountered by practitioners, researchers, and organizations.

DOCTOR OF PHILOSOPHY BIostatISTICS

Program Purpose

The Ph.D. in Biostatistics is designed to provide students with the instruction and research experience necessary to become high quality academic faculty members, researchers and leaders in biomedicine and public health throughout Nebraska, the country, and the globe. They may also choose careers as scientists in government and private research agencies. The curriculum design of this program is consistent with the core competencies of Biostatistics followed by most major Ph.D. programs in the nation, and strongly emphasizes the acquisition of applied skills as well as the theoretical mathematical foundations of Biostatistics. The primary focus will be in the following areas of Biostatistics: clinical trials; study design; survival analysis; generalized linear models; longitudinal analysis; survey methodology; and analysis of microarray gene-expression data and other high-dimensional data. However, as the program grows, students may develop other lines of Biostatistics research in biomedicine and public health at the discretion of their dissertation committee.

Program Competencies

I. Serve as an expert biostatistician on a collaborative team of investigators addressing a research question

- a) Acquire knowledge and skills in advanced statistical methodologies to collaborate without supervision with research investigators
- b) Formulate a research question in statistical terms
- c) Communicate effectively with biomedical and public health experts, relying upon a basic understanding of human health and disease and the related basic sciences
- d) Construct an appropriate study design to address a research question, and determine an associated sample size based on statistical power considerations
- e) Become proficient in at least one commonly used statistical software package
- f) Examine data quality and verify data values to create consistent, reliable information
- g) Protect information from unauthorized access and use
- h) For a particular data set, when addressing a biomedical or public health question:
 - i. Choose and justify an appropriate statistical model
 - ii. Verify the model assumptions, implement the model, and correctly interpret the results of the analysis
 - iii. Document the analysis and results in a reproducible way
 - iv. Present in writing and orally a summary of the study results and their interpretation

II. Successfully conduct and disseminate original research on the theory and methodology of biostatistics

- a) Critically review and interpret the statistical literature relevant to a particular methodological area

- b) Identify important methodological problems (e.g., through participation in collaborative research)
- c) Formulate methodological questions and develop novel statistical methods addressing these questions
- d) Determine the statistical properties of new methods using mathematical and computer tools
- e) Apply innovative statistical theory and methods to gain novel insights into biomedical or public health-related questions
- f) Demonstrate deep knowledge of (at least) one statistical area, and general knowledge in the most important fields of biostatistics
- g) Write and submit for publication peer-reviewed article(s) that effectively communicate novel theoretical and/or methodological developments
- h) Clearly present biostatistical research findings in a research seminar

III. Effectively teach biostatistics to biostatistical and non-biostatistical audiences

- a) Identify biostatistical skills needed by a group of students
- b) Communicate to students the importance and utility of the material and an appreciation of it
- c) Demonstrate a commitment to student learning
- d) Communicate clearly and effectively in oral and written materials

IV. Develop a public health perspective on research

- a) Recognize the causes of morbidity and mortality and the strategies for promoting health and preventing disease and disability in a population
- b) Identify the scientific methods used in public health research and practice
- c) Effectively translate statistical ideas and concepts to public health collaborators

V. Demonstrate knowledge and expertise in a cognate field other than biostatistics

- a) Identify the quantitative aspects of important scientific problems in an area of biomedical or public health research outside of biostatistics/statistics (i.e., in a cognate field) and develop innovative biostatistical methodology to address the problems
- b) Demonstrate proficiency in the language of the cognate field
- c) Review and evaluate the use of biostatistical methods in the cognate field of study
- d) Engage in collaborations across fields and disciplines related to the cognate field

Admission Requirements

Admission to the program is governed by the requirements stated in the UNMC Graduate Studies Bulletin. Application materials should be submitted to the Office of Graduate Studies.

Requirements:

1. A minimum cumulative grade-point average of 3.00/4.00 on all relevant graduate course work is required for admission.
2. A MS, MA in Biostatistics/Statistics or equivalent degree (e.g. Biostatistics MPH plus courses in mathematical statistics and mathematical analysis at the Master's level (equivalent to UNL STAT 882, STAT 883, MATH 825 and MATH 826) is required for admission.
3. A minimum combined score of 1000 on the verbal and quantitative sections of the Graduate Record Exam is required.
4. International students: TOEFL of 550 (paper), 213 (computer) or 80 (internet).

Application materials must include:

1. Official copy of transcripts from postsecondary education
2. GRE scores
3. TOEFL scores
4. Letter of intent of 750–1,000 words that supports the applicant's interest and career goals
5. At least three, but no more than four, letters of recommendation.
 - a. At least two of these letters must be from faculty members from the applicant's previous program who can attest to the applicant's ability to pursue successfully a PhD program in Biostatistics.
 - b. The remaining letters may be academic or professional references.

The above admission requirements are minimal, and meeting them does not guarantee admission to the PhD program in Biostatistics.

Degree Requirements

Program-at-a-Glance

CORE COURSES (TOTAL 18 HOURS)

TYPE	CREDIT HOURS	COURSE NUMBER	COURSE TITLE
CORE	3	BIOS 918 (UNMC)	Biostatistical Linear Models: Theory and Application
	3	BIOS 924 (UNMC)	Biostatistical Theory and Models for Survival Data
	3	BIOS 925 (UNMC)	Theory of Generalized Linear and Mixed Models in Biostatistics
	3	STAT 980 (UNL)	Advanced Probability
	3	STAT 982 (UNL)	Advanced Inference I
	3	STAT 983 (UNL)	Advanced Inference II

REQUIRED COURSES (TOTAL 6 HOURS)

TYPE	CREDIT HOURS	COURSE NUMBER	COURSE TITLE
REQUIRED	3	EPI 820/CPH 504 (UNMC)	EPI 820 / CPH 504 Epidemiology in Public Health, 3 cr. (UNMC)
	3	HPRO 830/CPH 500 (UNMC)	Foundations in Public Health

EXAMPLES OF ELECTIVE COURSES (MINIMUM 18 HOURS)

TYPE	CREDIT HOURS	COURSE NUMBER	COURSE TITLE
EXAMPLES OF ELECTIVES	3	BIOS 835 (UNMC)	Design of Medical Health Studies
	3	BIOS 818 (UNMC)	Biostatistical Methods II
	3	BIOS 823 (UNMC)	Categorical Data Analysis
	3	BIOS 824 (UNMC)	Survival Data Analysis
	3	BIOS 825 (UNMC)	Correlated Data Analysis
	3	EPI 845 (UNMC)	Principles of Epidemiologic Research
	3	EPI 812 (UNMC)	Chronic Disease Prevention & Control: Research Concepts and Methodology
	3	EPI 825 (UNMC)	Infectious Disease Epidemiology
	3	STAT 950 (UNL)	Bootstrap Methods and Their Applications
	3	STAT 974 (UNL)	Nonlinear Regression Analysis
	3	STAT 884 (UNL)	Applied Stochastic Models
	2	GCBA 823 (UNMC)	Fundamentals in Genetics
	2	BIOC 873 (UNMC)	Introduction to Computerized Genetic Sequence Analysis
	3	BIOC 880 (UNMC)	Principles and Methodologies of Cancer Research
	3	BRTP 822 (UNMC)	The Cell and Gene Regulation

DISSERTATION (MINIMUM 12 HOURS)

TYPE	CREDIT HOURS	COURSE NUMBER	COURSE TITLE
DISSERTATION	1-15 Each semester	BIOS 999 (UNMC)	Biostatistics PhD Dissertation Research

In addition, all PhD students are expected to attend the monthly Doctoral Program Seminar

DOCTOR OF PHILOSOPHY ENVIRONMENTAL HEALTH, OCCUPATIONAL HEALTH AND TOXICOLOGY

Program Purpose

The Environmental Health, Occupational Health and Toxicology graduate program is an intercampus, multidisciplinary graduate program leading to a PhD degree in environmental health, occupational health, and toxicology. This program provides students with the knowledge base, laboratory skills, and problem-solving abilities to become independent, innovative investigators using state-of-the-art approaches to address scientific problems in the fields of environmental health, ecological health, occupational health and safety, and toxicology.

A unique aspect of the program is its focus on the impact of agricultural practices on human and environmental health. In states like Nebraska, where the economy is primarily based on agriculture, this focus will provide effective training for students interested in agricultural issues.

Specific objectives of this graduate education and training program are to provide students with: (1) basic knowledge in ecological, environmental, agricultural, and occupational health, as well as toxicology; (2) a broad understanding of relevant problems in the various areas of ecological health, environmental health, occupational health and biomechanics, ergonomics, or toxicology, with particular emphasis on agriculture; and (3) the ability to apply this information to important scientific questions and solve problems in these areas. Graduates of this program will be well equipped to pursue careers in environmental health, occupational health, toxicology, and related fields.

Program Competencies

Upon graduation, a student with a PhD in the Environmental Health, Occupational Health and Toxicology Program will be able to:

1. Synthesize, organize, and present, both orally and in writing, a broad range of qualitative and quantitative information and analyses of environmental, occupational, and toxicology topics, issues, and research to academic, professional, and public audiences.
2. Develop and conduct original research in environmental health, occupational health, and toxicology leading to advancing the field in methodology and field-driven concepts.
3. Use and manipulate knowledge obtained from the scientific literature, germane to the field of interest, to write competitive grant proposals.

4. Demonstrate knowledge, sensitivity, and skill in communicating and working with diverse communities, populations, and cultures on critical environmental, occupational, and toxicology problems and solutions.
5. Develop plans to investigate health issues and implement policies and programs to mitigate public health risks.
6. Identify, assess, control, and prevent various environmental and occupational hazards that are significant risks to human health and safety.
7. Formulate hypotheses, and design experiments to test such hypotheses, aimed at advancing the body of knowledge surrounding environmental, occupational, and toxicology issues.
8. Foster collaboration and cooperation among various stakeholders, interest groups, and populations to raise awareness and achieve environmental, occupational, and toxicology objectives and benefits.
9. Synthesize and leverage economic, cultural, political, and social factors for the creation, development, and successful implementation of environmental, occupational, and toxicology initiatives.
10. Understand risk analysis, assessment, communication, and management.
11. Understand the complex relationship between what is ethical and what is legal in the realm of environmental, occupational, and toxicology research, and appropriately use this knowledge as a scientist and professional.

Track Competencies

Environmental and Occupational Hygiene Track

1. Describe characteristics and trends in US agriculture.
2. Utilize available data on agricultural production and populations.
3. Describe common injury and illness hazards in agriculture.
4. Utilize available data resources on agricultural and environmental injuries and illnesses.
5. Describe common intervention strategies and how they apply to agriculture and the environment.
6. Evaluate agricultural safety programs and their strengths and weaknesses.
7. Discuss future strategies to reduce agricultural injuries.
8. Understand a broad range of environmental science health factors that affect the health of a community, including the biological effects of these exposures.
9. Understand methods of risk assessment and control.
10. Understand how public health policy helps control risk.
11. Understand how effective risk communication strategies and techniques contribute to solutions to environmental health problems.
12. Review current literature and formulate research questions.

Occupational Biomechanics Track

1. Develop basic skills necessary to apply the principles of biomechanical analysis to common work tasks.
2. Apply basic anatomical and mechanical principles to the description and analysis of human movement in common work tasks.
3. Evaluate biomechanical data of an individual and describe the motion of the human body in common work tasks.
4. Understand the systems of instrumentation used in occupational biomechanical research and learn techniques to measure movement and to analyze forces, work, and power in a working environment.
5. Appreciate the need for occupational biomechanics and its limitations in the analysis of standards for manual materials handling.
6. Comprehend the biomechanical principles necessary for understanding current models and guidelines used in occupational ergonomics.
7. Appreciate the need for future research in the development of new models and ergonomic guidelines.
8. Increase ability to better analyze and evaluate performance and make corrections in occupational settings to avoid injury and improve performance.
9. Discuss the origins of motor-control studies.
10. Apply appropriate theories to describe and analyze human movement, with emphasis on variability of human movement, the acquisition of motor skills, and external factors that can affect motor performance.
11. Apply appropriate experimental and clinical tools and procedures to assess motor control.
12. Understand how the nervous system is associated with motor control and its functions.
13. Understand how attentional processes can influence motor performance.

Toxicology Track

1. Recognize a chemically induced toxic response.
2. Utilize dose-response characteristics to associate a toxic response to a specific chemical exposure.
3. Use the principles of absorption and distribution to predict the severity of a toxic response to a particular toxicant.
4. Correlate targeted organ toxicity with a specific toxicant exposure.
5. Understand the use of epidemiological data and risk assessment protocols in the prediction of human toxic responses to environmental and workplace exposures.
6. Describe the process of development of government regulatory policies and their impact on industries and on human health.
7. Critically assess the literature on a specific chemical-induced toxicity and use literature resources to compose a critical assessment of a specific toxic response to a chemical toxicant.
8. Present an assessment of toxicity in both oral and written formats.
9. Propose areas of need in the study of specific toxicant-induced responses.
10. Propose approaches to determine the association and/or correlation of a toxic response to a specific chemical exposure.

Admission Requirements

Admission to the program is governed by the requirements stated in the UNMC Graduate Studies Bulletin. Application materials should be submitted to the Office of Graduate Studies. Students completing bachelor's or master's degrees in chemistry, biology, biochemistry, biomechanics, or related disciplines are encouraged to apply for admission.

Suggested Scores:

1. GPA minimum: 3.0
2. GRE: Verbal minimum: 143 on the current scale/350 on the prior scale
Quantitative minimum: 148 on the current scale/600 on the prior scale

Required score:

Graduate Studies requirements for TOEFL - Applicants from foreign countries where English is not the primary language must present official scores on the Test of English as a Foreign Language (TOEFL) and official scores on the Graduate Record Examination. A score of at least 550 on the paper-based TOEFL, 213 on the computer-based TOEFL, or 80 on the internet-based TOEFL is required.

Application materials must include:

Letter of intent that supports the applicant's interest area and goals, and:

1. Three letters of recommendation.
2. Curriculum vitae or resume.
3. Transcripts from postsecondary education.*

4. GRE scores.
5. TOEFL scores (if applicable).

*FOREIGN TRANSCRIPTS: Official transcripts or mark sheets of college level work not in English or in the standard U.S grading scale must be sent to a credential evaluation service for translation. The transcript evaluation must be a course by course evaluation that identifies and describes each diploma or certificate with periods of education and equivalency of each document. The preferred services are: World Education Services (WES) and Educational Credential Evaluators, Inc. (ECE). Other services approved by the National Association of Credential Evaluation Services (NACES) will also be accepted. Transcripts must carry the signature of a responsible official in which the work was done and the seal of that institution, or must be certified true copies of the original records. If photo static copies are provided, the copies must be certified after duplication as true copies of the original document. Transcripts should clearly indicate the grades received or the standing attained on required examinations. If transcripts do not show the degree earned and the date on which it was conferred official degree statements must also be provided.

Degree Requirements

Program-at-a-Glance

Courses	Track		
	Environmental and Occupational Hygiene	Occupational Biomechanics	Toxicology
HPRO 830 Foundations of Public Health	3 credits	3 credits	3 credits
ENV 970 Seminar	1 credit*	1 credit*	1 credit*
EPI 820 Epidemiology in Public Health	3 credits	3 credits	3 credits
EPI 821 Fundamentals of Public Health	3 credits		
BIOS 806 Biostatistics I	3 credits	3 credits	3 credits
BIOS 808 Biostatistics II	3 credits	3 credits	3 credits
ENV 810 Principles of Occupational & Environmental Health	3 credits		
ENV 816 Environmental Exposure Assessment	3 credits		
PE 8400 Motor Learning		3 credits	
PE 8410 Motor Control		3 credits	
PE 8450 Advanced Biomechanics		3 credits	
ENV 888 Principles of Toxicology			3 credits

ENV 950 Advanced Toxicology			3 credits
B RTP 821 Macromolecular Structure & Function			3 credits
Other Biochemistry Courses			2 - 4 credits
Approved elective courses	3 - 6 credits	3 - 6 credits	
Dissertation	10 - 16 credits	10 - 16 credits	10 - 16 credits
Total	35 - 44 credits	35 - 44 credits	34 - 42 credits

In addition, all PhD students are expected to successfully attend eight (8) Doctoral Program Seminars during their first academic year of study.

**1 credit for each fall and spring semester enrolled.*

Environmental and Occupational Hygiene Track

Required Core Courses (22 total credits)				
Required Environmental Courses (10 credits)		Credit	Semester Offered	Grading
H PRO 830	Foundations of Public Health	3	Fall/Summer	Grade
ENV 810	Principles of Occupational & Environmental Health	3	Fall	Grade
ENV 816	Environmental Exposure Assessment	3	Fall	Grade
ENV 970	Seminar (required each semester)	1	Spring/Fall	Pass/Fail
Required Epidemiology Courses (6 credits)		Credit	Semester Offered	Grade
EPI 820	Epidemiology in Public Health	3	Fall	Grade
EPI 821	Fundamentals of Public Health	3	Spring	Grade
Required Statistics Courses (6-8 credits)*		Credit	Semester Offered	Grade
BIOS 806	Biostatistics I	3	Fall/Spring	Grade
BIOS 808	Biostatistics II	3	Spring	Grade
Approved Elective Courses (variable number of total credits)				
Must take at least two graduate level 800/900 courses		Variable	Spring/Fall	Grade
Dissertation Research (variable number of total credits)				
ENV 999	Doctoral Dissertation	Variable	Spring/Fall	Pass/Fail

Occupational Biomechanics Track

Required Core Courses (22 total credits)				
Required Environmental Courses (4 credits)		Credit	Semester Offered	Grade
HPRO 830	Foundations of Public Health	3	Fall/Summer	Grade
ENV 970	Seminar (required each semester)	1	Spring/Fall	Pass/Fail
Required Epidemiology Courses (3 credits)		Credit	Semester Offered	Grade
EPI 820	Epidemiology in Public Health	3	Fall	Grade
Required Ergonomics Courses (9 credits)		Credit	Semester Offered	Grade
PE 8400	Motor Learning	3/UNO		Grade
PE 8410	Motor Control	3/UNO		Grade
PE 8450	Advanced Biomechanics	3/UNO		Grade
Required Statistics Courses (6-8 credits)*		Credit	Semester Offered	Grade
BIOS 806	Biostatistics I	3	Fall/Spring	Grade
BIOS 808	Biostatistics II	3	Spring	Grade
Approved Elective Courses (variable number of total credits)				
Must take at least one graduate level 800/900 course		Variable	Spring/Fall	Grade
Dissertation Research (variable number of total credits)				
ENV 999	Doctoral Dissertation	Variable	Spring/Fall	Pass/Fail

Toxicology Track

Required Core Courses (24-25 total credits)				
Required Environmental Courses (10 credits)		Credit	Semester Offered	Grading
HPRO 830	Foundations of Public Health	3	Fall/Summer	Grade
ENV 888	Principles of Toxicology	3	Spring	Grade
ENV 950	Advanced Toxicology	3	Fall/even years	Grade
ENV 970	Seminar (required each semester)	1	Spring/Fall	Pass/Fail
Required Epidemiology Course (3 credits)		Credit	Semester Offered	Grade
EPI 820	Epidemiology in Public Health	3	Fall	Grade
Required Biochemistry Courses** (5-7 credits)		Credit	Semester Offered	Grade
B RTP 821	Macromolecular Structure & Function	3	Fall	Grade
	plus one of the following: B RTP 822 The Cell and Gene Regulation (2 credits) <i>or</i> B RTP 823 Molecular Cell Biology (2 credits) <i>or</i> B RTP 824 Cell Signaling (3 credits)	2-3		
Required Statistics Courses (6-8 credits)*		Credit	Semester Offered	Grade
BIOS 806	Biostatistics I	3	Fall/Spring	Grade
BIOS 808	Biostatistics II	3	Spring	Grade
Approved Elective Courses (variable number of total credits)				
Optional graduate level 800/900 course(s)		Variable	Spring/Fall	Grade
Dissertation Research (variable number of total credits)				
ENV 999	Doctoral Dissertation	Variable	Spring/Fall	Pass/Fail

**or* STAT 801 Statistical Methods in Research (4 credits/UNL) and STAT 802 Experimental Design (4 credits/UNL).

***or* BIOC 831 Biomolecules & Metabolism (4 credits/UNL) or BIOC 832 Gene Expression and Rep (2 credits/UNL) *or* CHEM 8656 Biochemistry I (3 credits/UNL) or CHEM 8666 Biochemistry II (3 credits/UNL)

DOCTOR OF PHILOSOPHY EPIDEMIOLOGY

Program Purpose

The Ph.D. in Epidemiology is offered through the Department of Epidemiology, College of Public Health. The Ph.D. in Epidemiology is a research-oriented program whose objective is to train outstanding scholars, researchers, and leaders. Students are provided with a broad foundation of key concepts in epidemiology and focused research training in a specific substantive area. The program prepares graduates for positions in government agencies, education, and the private sector in Nebraska, as well as nationally and internationally.

The program of study consists of at least 48 credits beyond the Master's degree, including a common core of methods courses, elective courses oriented toward the student's area of research specialization, and an original dissertation, part of which must be submitted for publication in a peer-reviewed scientific journal. The Ph.D. program is intended for students with a prior Master's degree in epidemiology or a closely related field.

Admission Requirements

Admission to the program is governed by the requirements stated in the UNMC Graduate Bulletin. Application materials are to be submitted to the Office of Graduate Studies.

The following are the requirements for prospective students seeking admission to the Ph.D. epidemiology program:

- Master's degree in epidemiology or related field
- A statement of interest and career goals
- 3 recommendation letters (At least one from a faculty member in the applicant's previous program)
- Academic transcripts from previous graduate and undergraduate education programs
- GRE score (Under special circumstances, the GRE score may be waived. The decision on waiver will be made by the Epidemiology department's graduate program committee)
- TOEFL score (The TOEFL score is required for international students whose first language is not English. The TOEFL can be waived if a student has obtained a degree in an English-speaking institution)

The standards for the above criteria are determined by the Epidemiology Department's Graduate Program Committee, taking into account the prospective students' academic qualifications and professional experiences prior to admission. The criteria set by the Department are in addition to the minimum standard that is required by the UNMC's graduate studies admission guidelines (http://www.unmc.edu/gradstudies/admission_requirements.htm).

Program Competencies

Upon graduation, a student with a Ph.D. in Epidemiology is expected to be competent in the following:

I. Recognition of Public Health Problems

1. Recognize public health problems and the epidemiologic role in addressing them

II. Problem Conceptualization and Critical Thinking

2. Develop comprehensive knowledge of epidemiologic concepts
3. Critically evaluate scientific literature using epidemiologic principles and methods
4. Generate and evaluate hypotheses for epidemiologic research

III. Study design / methodology

5. Identify and discuss advantages and limitations of epidemiologic study designs, including practical aspects of their use and trade-offs in particular studies
6. Independently design and implement epidemiologic investigations to answer specific research questions
7. Recognize potential sources of bias in estimating population parameters, and implement strategies to control biases and reduce random error
8. Identify appropriate data sources to answer specific research questions
9. Develop and manage data collection procedures for new and existing data sources

IV. Data analysis and interpretation

10. Critically evaluate reports of epidemiologic studies
11. Select and apply appropriate statistical approaches to analyze epidemiologic data
12. Use the results of epidemiologic data analyses to make causal inferences

V. Ethics/ policy

13. Understand and apply principles for ethical study conduct and treatment of research participants
14. Know and apply principles of publication ethics related to conflict of interest, authorship, and falsification of data
15. Bring epidemiologic perspectives to the development and analysis of public health policies

VI. Other Professional Skills

16. Communicate epidemiologic concepts and findings orally and in writing in accordance with professional standards to professional audiences, policy makers, and the general public
17. Demonstrate knowledge, communication skills, and respect for students necessary to effectively teach epidemiology
18. Synthesize and communicate epidemiologic concepts, information from the scientific literature and original ideas to develop a competitive grant proposal

Degree Requirements

Program-at-a-Glance

Requirements		Credits
1. Public Health Courses (Required; 3 credits)		
HPRO 830	Foundations of Public Health	3
2. Epidemiology Core (Required; 5 courses / 15 credits)		
EPI 821	Fundamentals of Epidemiology	3
EPI 845	Principles of Epidemiologic Research	4
EPI 900	Epidemiologic Analysis of Binary and Time-to-Event Data	3
EPI 905	Epidemiologic Research Development	3
EPI 970	Epidemiology Doctoral Seminar (2 semesters at 1 credit)	2
3. Concentration Courses (Minimum of 3 courses / 9 credits)*		
<i>* Students may choose to take additional elective courses not listed below. However, those courses will not count toward the minimum requirements</i>		
EPI 812	Chronic Disease Epidemiology	3
EPI 825	Infectious Disease Epidemiology	3
EPI 830	Advanced Infectious Disease Epidemiology	3
EPI 835	Health Information and Surveillance for Public Health Practice	3
EPI 840	Epidemiological Measurements and Research in Maternal and Child Health	2
ENV 816	Environmental Exposure Assessment	3
ENV 888	Principles of Toxicology	3
BIOS 823	Categorical Data Analysis	3
BIOS 824	Survival Analysis	3
BIOS 825	Correlated Data Analysis	3
4. Biostatistics (Required; 3 courses / 9 credits)		
BIOS 806	Biostatistics I	3
BIOS 818	Biostatistical Methods II	3
BIOS 810	Introduction to SAS programming	3
5. Research (Minimum of 12 credits)		
EPI 999	Doctoral Dissertation	12-15
6. Doctoral Seminar (Minimum of 7 seminars required on 1st year)**		
<i>**No official registration is required, but attendance is recorded at each seminar and reported to the department.</i>		
----	Doctoral Seminar	0
Total Credit Hours (minimum)		48

In addition, all PhD students are expected to attend the monthly Doctoral Program Seminar and Epidemiology Department Seminar throughout their program of study.

DOCTOR OF PHILOSOPHY HEALTH PROMOTION AND DISEASE PREVENTION RESEARCH

Program Purpose

The PhD in Health Promotion and Disease Prevention Research is offered through the Department of Health Promotion, Social & Behavioral Health, College of Public Health. The mission of the program is to provide students with the training necessary to become skilled research scientists who will have a significant impact on the health of the population through critical and integrative thinking about complex public health problems and applying scientific rigor to the design and evaluation of health promotion and disease prevention research and programs. Our faculty offer research expertise in obesity, nutrition, physical activity, tobacco control, sexual health, substance abuse, health care ethics, health law, professionalism, nursing ethics, ethical issues in organ transplantation, medical organization, environmental aspects of health care, genetics, advanced medical technology, public health ethics, history of medicine and public health, and the aesthetic and humanistic aspects of health care facilities. Graduates of the program will be prepared for careers as scientists in government and private research agencies, as faculty in colleges and universities, and as leaders in public health agencies in Nebraska, the nation, and the world.

Program Competencies

Upon graduation, a student with a PhD in Health Promotion and Disease Prevention Research will be able to:

1. Conceptualize quantitative and qualitative research that is ethical, rigorous, and innovative and is based on an advanced knowledge of health promotion theories and disease prevention.
2. Conduct rigorous quantitative and qualitative research based on methodologically sound principles and analytical techniques.
3. Conduct needs assessment related to quality of life, health outcomes, and health behaviors in communities or priority population groups.
4. Develop measurable objectives and evidence-based interventions in response to needs assessment to promote health and prevent disease among targeted populations.
5. Implement evidence-based and high-impact health promotion and disease prevention interventions that effectively target policy, environmental, community, or individual health behavior change.
6. Evaluate the reach, effectiveness, cost, and impact of evidence-based health promotion and disease prevention interventions and programs using scientifically sound study design, indicators, and analytical techniques.
7. Disseminate and communicate results of research to a broad audience through such avenues as scientific conferences, community forums, and peer-reviewed journals.

Admission Requirements for the Ph.D. in Health Promotion and Disease Prevention Research

Any applicant desiring admission into the Ph.D. program must submit a fully completed application. Below is a complete list of all documents required for application. It is the applicant's responsibility to request an official copy of the academic record be sent to the graduate office from each college or university that the applicant has attended.

A minimum cumulative grade-point average of 3.00/4.00 on all graduate course work attempted at an accredited institution of higher education is required for admission. Masters or other advanced degrees are required for admission, although exceptional students with Bachelor's degree will be considered.

The official results from the GRE must be submitted to the graduate office. The GRE must have been taken no more than five years prior to the application date. Most successful applicants will have verbal and quantitative GRE scores at or above the 60th percentile. All international applicants whose native language is not English and who do not have a MS from an accredited institution are required to submit a TOEFL of 550 (paper), 213 (Computer), or 80 (Internet). The TOEFL must have been taken no more than two years prior to the application date.

Each applicant must submit a written statement of career goals. This writing sample of 750-1000 words will be used to assess writing competence as well as career objectives.

Three letters of recommendation are required for admission. At least one of these letters must be from a faculty member in the applicant's previous program who can attest to the applicant's ability to pursue successfully a PhD program. The remaining two letters may be academic or professional references.

Complete list of documents and scores required of applicants:

- Fully completed application form.
- Official copy of academic record- sent to the graduate office- minimum of 3.00 on a 4.00 scale GPA for all graduate course work.
- Masters or other advanced degrees, although exceptional students with Bachelor's degree will be considered.
- GRE results from test taken no more than five years prior to the application date. Most successful applicants will have verbal and quantitative GRE scores at or above the 60th percentile.
- International students: TOEFL of 550 (paper), 213 (computer), or 80 (internet.)
- Written statement of career goals, 750-1000 words.
- Three letters of recommendation; at least one from a faculty member in the applicant's previous program. Remaining two letters- academic and/or professional

Course requirements for the Ph.D. Degree

Students in the Health Promotion and Disease Prevention Research are required to complete all of the following courses. Successful completion of all the following courses is required prior to starting the dissertation.

Health Promotion (18 credit hours)

- Health Behavior: 3 hours
- Interventions in Health Promotion: 3 hours
- Advanced Theories in Public Health: 3 hours
- Health Promotion Program Planning: 3 hours
- Complex Systems Thinking: 3 hours
- Foundations of Public Health: 3 hours

Research (25 credit hours)

- Biostatistics I: 3 hours
- Biostatistics II: 3 hours
- Introduction to SAS Programming: 3 hours
- Fundamentals of Epidemiology: 3 hours
- Principles of Epidemiologic Research: 4 hours
- Applied Research in Public Health: 3 hours
- Humanistic Traditions in Qualitative Research: 3 hours
- Public Health Program Evaluation: 3 hours

Writing (4 credit hours)

- Scientific Writing or Critical Writing or Publication Writing: 2 hours
- Grant Proposal Writing: 2 hours

Ethics (3 credit hours)

All students completing the Ph.D. program will have successfully completed 3 credit hours in ethics.

Directed Research (6 credit hours)

All students completing the PhD program will have successfully completed at least 6 credit hours (i.e., two courses at 3 credit hours each, three courses at 2 credit hours each) of directed research. The intent of the directed research course is to allow students to acquire new research skills, expand their exposure to new research, and increase publication opportunities. Each course involves hands-on research working closely with a faculty member and developing a publishable scholarly product (e.g., something that can be documented on a CV such as manuscript for peer-reviewed publication, national conference presentation, book chapter, policy brief, community report, technical report, or program manual). Under the supervision of the course instructor, the student is expected to develop and submit to the Graduate Program Director of HPSBH a course outline, timeline (including timeline for production of a scholarly product which may occur outside of the semester in which the credits are taken) and expected outcome(s) for each directed research course before the start of the semester on the Directed Research Course Agreement form. The instructor of the directed research course(s) does not have to be the student's advisor.

Elective Courses (26 credit hours)

All students completing the Ph.D. program will have successfully completed 26 credit hours of elective courses. Electives, which are selected by the doctoral student in concert with his/her Supervisory Committee, are used to strengthen and solidify the Program of Study.

Dissertation Hours (8 credit hours)

After successfully completing the comprehensive exam, the student must register for 8 hours of dissertation research. Students must register for at least one credit hour of dissertation for each semester and summer session until the completion of the degree.

DOCTOR OF PHILOSOPHY HEALTH SERVICES RESEARCH, ADMINISTRATION, AND POLICY

Program Purpose

The PhD in Health Services Research, Administration and Policy is offered through the Department of Health Services Research and Administration, UNMC College of Public Health.

The PhD program in Health Services Research, Administration, and Policy educates students to be scholars and health services researchers for careers in academia and also in large corporations, insurance companies, government agencies, health care organizations, and consulting firms. Incorporating the core competencies of health services research, the program focuses on methods and application of health services research, health administration, and health policy. Program graduates will be equipped to serve the public and private sectors in Nebraska, the Midwest region, the nation, and the world. Students will gain valuable experience by working closely with faculty whose research interests include health economics, health care finance, organizational behavior, medical geography, policy analysis, program & policy evaluation, health outcomes research, public health informatics, workforce, public health services research, and underserved populations. Program faculty conduct research and service activities through the Nebraska Center for Rural Health Research and the UNMC Center for Health Policy.

Program Competencies

1. Apply alternative theoretical and conceptual models from a range of relevant disciplines to health services research.
2. Apply in-depth multidisciplinary knowledge and skills relevant to health services research.
3. Utilize the knowledge of the structures, performance, quality, policy, and environmental context of health and health care to formulate solutions for health policy problems.
4. Critically evaluate evidence, synthesize findings, and draw inferences from literature relevant to health services research.
5. Pose innovative and important research questions, informed by systematic reviews of the literature, stakeholder needs, and relevant theoretical and conceptual models.
6. Use a conceptual model to specify study constructs for a health services research question and develop variables that reliably and validly measure these constructs.
7. Select appropriate interventional (experimental and quasi-experimental) or observational (qualitative, quantitative, and mixed methods) study designs to address specific health services research questions.
8. Know how to collect primary health and health care data obtained by survey, qualitative, or mixed methods.
9. Use appropriate analytical methods to clarify associations between variables and to delineate causal inferences.
10. Appropriately interpret the results of data analysis and discuss the implications for policy and practice, to support public health decisionmaking.
11. Effectively communicate the findings and implications of health services research through multiple modalities to technical and lay audiences.
12. Implement research protocols with standardized procedures that ensure reproducibility of the science and ensure the ethical and responsible conduct of research in the design, implementation, and dissemination of health services research.
13. Articulate the importance of collaborating with policymakers, organizations, and communities to plan, conduct, and translate health services research into policy and practice.

Admission Requirements

Admission to the program is governed by the requirements stated in the UNMC Graduate Bulletin. Application materials are to be submitted to the Office of Graduate Studies.

Degree Requirements

Students enrolled in the PhD program without a Master’s degree are required to complete a total of 90 credit hours in course and dissertation work, including the following:

Credits	Course Work
39	Required courses
15	Area of emphasis courses
12-18	Elective courses
18-24	Dissertation

The required courses are designed to help students build a strong foundation of multidisciplinary knowledge and skills for scholarship in health services research. After completing all required courses, students will then take area of emphasis courses. In addition to coursework, all PhD students are expected to attend the monthly Doctoral Program Seminar throughout their program of study.

Required Courses	Course Number
US Healthcare System	HSRA 810
Health Policy	HSRA 874
Health Services Administration	HSRA 873
Health Economics	HSRA 860
Health Care Organizational Theory and Behavior	HSRA 830
Biostatistics I	BIOS 806
Biostatistics II	BIOS 808
Epidemiology in Public Health	EPI 820
Foundations of Public Health	HPRO 830
Health Care Finance	HSRA 872
Quantitative Methods in Health Services Research	HSRA 920
Design of Health Services Research	HSRA 930
Qualitative Research Methods	HPRO 910
Area of Emphasis Courses (selected list—see advisor for more options)	
Integrated Seminar in Economics and Health Services Research	HSRA 940

Application of Medical Geography to Health Services Research	HSRA 950
Seminar in Health Care Administration	HSRA 960
Seminar in Health Policy	HSRA 980
Research Other Than Thesis	HSRA 896

All M.S. and PhD students should reference the UNMC Graduate Bulletin for further detail.

**COLLEGE OF PUBLIC HEALTH
COURSE DESCRIPTIONS BY
DEPARTMENT**

BIostatISTICS (BIOS)

BIOS 806/CPH 506 Biostatistics I (3 credits)

This course is designed to prepare the graduate student to understand and apply biostatistical methods needed in the design and analysis of biomedical and public health investigations. The major topics to be covered include types of data, descriptive statistics and plots, theoretical distributions, probability, estimation, hypothesis testing, and one-way analysis of variance. A brief introduction to correlation and univariate linear regression will also be given. The course is intended for graduate students and health professionals interested in the design and analysis of biomedical or public health studies.

Prerequisite: Undergraduate or graduate statistics course or permission of instructor

While successful completion of an undergraduate or graduate statistics course is not required for admission into the MPH program, students enrolling for BIOS 806/CPH 506 Biostatistics I must have successfully completed a statistics course or obtain permission of the instructor.

Requirements for the prerequisite course:

- The prerequisite statistics course must have been completed within 5 calendar years of registering for Biostatistics 806/CPH 506.
- The student must have received the equivalent of a B or above (3.00 or higher on the University of Nebraska grade scale) in the course.

Permission of the instructor:

- The instructor reserves the right to waive the prerequisite requirements for students who can demonstrate familiarity with basic statistical concepts because of work or research experience.

Some suggested undergraduate statistics courses are:

Omaha:

UNO: Psyc 2130 Statistics for Behavioral Sciences
Stat 3000 Statistical Methods I
Soc 2130 Basic Statistics
HPER 8030 (graduate level) Research in Health, Physical Education and Recreation
HED 8080 (Recommended for MPH students) Topics in Health Education, Research in Public Health

Metropolitan Community College: Math 1410 Statistics

Lincoln:

UNL: Stat 218 Introduction to Statistics

Southeast Community College: Math 1180 Elementary Statistics

BIOS 808/CPH 650 Biostatistics II (3 credits)

This course is designed to prepare the student to understand and apply advanced biostatistical methods needed in the design and analysis of biomedical and public health investigations. The major topics to be covered include multiple linear regression, analysis of covariance, logistic regression, survival analysis, and repeated measures analysis.

Prerequisites: BIOS 806/CPH 506 or an equivalent course. The course is intended for graduate students and health professionals interested in the design and analysis of biomedical and public health studies.

BIOS 810/CPH 651 Introduction to SAS Programming (3 credits)

This course is an introduction to programming for statistical and epidemiologic analysis using the SAS Software System. Students will learn to access data from a variety of sources (e.g., the web, Excel, SPSS, data entry) and create SAS datasets. Data management and data processing skills, including concatenation, merging and sub-setting data, as well as data restructuring and new variable construction using arrays and SAS functions will be taught. Descriptive analysis and graphical presentation will be covered. Concepts and programming skills needed for the analysis of case-control studies, cohort studies, surveys, and experimental trials will be stressed. Simple procedures for data verification, data encryption, and quality control of data will be discussed. Accessing data and summary statistics on the web will be explored. Through in-class exercises and homework assignments, students will apply basic informatics techniques to vital statistics and public health databases to describe public health characteristics and to evaluate public health programs or policies. Laboratory exercises, homework assignments, and a final project will be used to reinforce the topics covered in class. The course is intended for graduate students and health professionals interested in learning SAS programming and accessing and analyzing public use datasets from the web.

Prerequisites: BIOS 806/CPH 506 or an equivalent introductory statistics course; EPI 821/CPH 621; and instructor permission.

BIOS 816/CPH 516 Biostatistical Methods I (3 credits)

This course is designed to prepare the graduate student to understand and apply biostatistical methods needed in the design and analysis of biomedical and public health investigations. The major topics to be covered include types of data, descriptive statistics and plots, theoretical distributions, probability, estimation, hypothesis testing, nonparametric methods, and one-way analysis of variance. A brief introduction to correlation and univariate linear regression will also be given. Interpretation of subsequent analysis results will be stressed. Concepts will be explored using the biomedical and public health literature, class exercises, exams, and a data analysis project. Statistical analysis software, SAS (SAS Institute Inc., Cary, NC, USA.), will be used to implement analysis methods. The course is intended for graduate students and health professionals who will be actively involved in the design, analysis, and interpretation of biomedical research or public health studies.

Prerequisites: instructor permission and calculus (covering differential and integral calculus) within the past 5 years resulting in a grade of B or better.

BIOS 818/CPH 652 Biostatistical Methods II (3 credits)

This course is designed to prepare the graduate student to analyze continuous data and interpret results using methods of linear regression and analysis of variance (ANOVA). The major topics to be covered include simple and multiple linear regression model specification and assumptions, specification of covariates, confounding and interactive factors, model building, transformations, ANOVA model specification and assumptions, analysis of covariance (ANCOVA), multiple comparisons and methods of adjustment, fixed and random effect specification, nested and repeated measures designs and models, and diagnostic methods to assess model assumptions. Interpretation of subsequent analysis results will be stressed. Concepts will be explored through critical review of the biomedical and public health literature, class exercises, an exam, and a data analysis project. Statistical analysis software, SAS (SAS Institute Inc., Cary, NC, USA.), will be used to implement analysis methods. The course is intended for graduate students and health professionals who will be actively involved in the analysis and interpretation of biomedical research or public health studies.

Prerequisites: Instructor permission; calculus (including differential and integral calculus); BIOS 806/CPH 506 Biostatistics I or BIOS 816/CPH 516 Biostatistical Methods I or an equivalent statistics course; BIOS 810/CPH 651 Introduction to SAS Programming, or equivalent experience with SAS programming.

BIOS 823/CPH 653 Categorical Data Analysis (3 credits)

This course surveys the theory and methods for the analysis of categorical response and count data. The major topics to be covered include proportions and odds ratios, multi-way contingency tables, generalized linear models, logistic regression for binary response, models for multiple response categories, loglinear models, and simple mixture models for categorical data.

Interpretation of subsequent analysis results will be stressed. Concepts will be explored through critical review of the biomedical and public health literature, class exercises, an exam, and a data analysis project. Computations will be illustrated using SAS statistical software (SAS Institute Inc., Cary, NC, USA.). The course is intended for graduate students and health professionals who will be actively involved in the analysis and interpretation of biomedical research or public health studies.

Prerequisites: instructor permission, Biostatistical Methods I, BIOS 816/CPH 516, or an equivalent introductory statistics course, and Biostatistical Methods II, BIOS 818/CPH 652, or an equivalent advanced statistics course.

BIOS 824/CPH 654 Survival Data Analysis (3 credits)

The course teaches the basic methods of statistical survival analysis used in clinical and public health research. The major topics to be covered include the Kaplan-Meier product-limit estimation, log-rank and related tests, and the Cox proportional hazards regression model. Interpretation of subsequent analysis results will be stressed.

Prerequisites: Instructor permission; calculus (including differential and integral calculus); BIOS 806/CPH 506 Biostatistics I or BIOS 816/CPH 516 Biostatistical Methods I or an equivalent statistics course; BIOS 810/CPH 651 Introduction to SAS Programming, or equivalent experience with SAS programming.

BIOS 825/CPH 655 Correlated Data Analysis (3 credits)

This course surveys the theory and methods for the analysis of correlated, continuous, binary, and count data. The major topics to be covered include linear models for longitudinal continuous data, generalized estimating equations, generalized linear mixed models, impact of missing data,

and design of longitudinal and clustered studies. Interpretation of subsequent analysis results will be stressed. Concepts will be explored through critical review of the biomedical and public health literature, class exercises, two exams, and a data analysis project. Computations will be illustrated using SAS statistical software (SAS Institute Inc., Cary, NC, USA.). The course is intended for graduate students and health professionals who will be actively involved in the analysis and interpretation of biomedical research or public health studies.

Prerequisites: Instructor permission and Biostatistics BIOS 823/CPH 653.

BIOS 835/CPH 517 Design of Medical Health Studies (3 credits)

This course is designed to prepare the graduate student to understand and apply principles and methods in the design of biomedical and public health studies, with a particular emphasis on randomized, controlled clinical trials. The major design topics to be covered include sample selection, selecting a comparison group, eliminating bias, need for and processes of randomization, reducing variability, choosing endpoints, intent-to-treat analyses, sample size justification, adherence issues, longitudinal follow-up, interim monitoring, research ethics, and non-inferiority and equivalence hypotheses. Data collection and measurement issues also will be discussed. Communication of design approaches and interpretation of subsequent analysis results also will be stressed. Concepts will be explored through critical review of the biomedical and public health literature, class exercises, and a research proposal. The course is intended for graduate students and health professionals interested in the design of biomedical or public health studies.

Prerequisites: Biostatistics I, BIOS 806/CPH506, or an equivalent introductory statistics course, and instructor permission.

BIOS 896/CPH 677 Research Other Than Thesis (Variable)

This course is for more advanced students who wish to pursue their research interests in selected areas of Medical Humanities.

BIOS 918 Biostatistical Linear Models: Theory and Applications (3 credits)

This course on linear models theory includes topics on linear algebra, distribution theory of quadratic forms, full rank linear models, less than full rank models, ANOVA, balanced random mixed models, unbalanced models and estimation of variance components.

Prerequisites: Linear algebra, BIOS 818, one year of mathematical statistics, and instructor permission

BIOS 921 Advanced Programming for SAS (3 credits)

The objective of this course is to prepare students in advanced SAS programming. The main topics comprise advanced SAS programming techniques, SAS macro programming, using SQL with SAS, and optimizing SAS programs, which are similar to those covered on the SAS Advanced Programmer Exam offered through the SAS Institute, Inc.

Prerequisites: BIOS 810 or equivalent course and instructor permission.

BIOS 924 Biostatistical Theory and Models for Survival Data (3 credits)

The course teaches the statistical theory and models for survival data analysis used in biomedical and public health research. Major topics include parametric, nonparametric and semi-parametric theory and models. The statistical software SAS and R will be used.

Prerequisites: STAT 980 Advanced Probability provided by UNL, STAT 982-983 Advanced Inference I & II provided by UNL, BIOS 824 Survival Data Analysis (or their equivalent), and instructor permission required.

BIOS 925 Theory of Generalized linear and Mixed Models in Biostatistics (3 credits)

This course focuses on the theory of generalized linear models for both continuous and categorical data. Major topics include generalized linear models, linear mixed models, and generalized linear mixed models.

Prerequisite: BIOS 918 or equivalent

BIOS 935 Semiparametric Methods for Biostatistics (3 credits)

This course teaches the fundamental theory and application of semiparametric methods in biomedical and public health studies. The major topics include additive semiparametric models, semiparametric mixed models, generalized semiparametric regression models, bivariate smoothing, variance function estimation, Bayesian semiparametric regression, and spatially adaptive smoothing.

Prerequisite: BIOS 925, familiarity with the software R and SAS; and instructor permission

BIOS 970 Seminar (1 credit)

BIOS 998/CPH 679 Special Topics (Variable)

Independent study course focusing on selected topics or problems. The subject will be dependent on student demand and availability of staff.

BIOS 999 Biostatistics PhD Dissertation Research (1-15 credits)

The dissertation represents original research on a defined problem in biostatistics. The PhD dissertation must be a significant, original piece of biostatistical research that makes a contribution to knowledge in the field.

Prerequisites: Instructor permission.

ENVIRONMENTAL, AGRICULTURAL, AND OCCUPATIONAL HEALTH SCIENCES (ENV)

ENV 800/CPH 590 Elements of Industrial Safety for Health Sciences (3 credits)

This course is an introduction to safety in the general work environment, with emphasis on selected OSHA safety regulations, human costs of injuries, safety programs and management, field trip work observations, risk assessment, and hazard/risk communications. No previous experience or coursework in safety is required.

Prerequisites: ENV 892/CPH 503 or equivalent introductory environmental health sciences course; instructor permission.

ENV 802/CPH 591 Occupational Health and Safety for Health Science (3 credits)

This course is an introduction to fundamental concepts, methods, and application of occupational and safety for various industrial settings, including hazard analysis and control, OSHA

regulations, worker's compensation, safety program elements, and safety and health management.

Prerequisites: Graduate student status in health sciences or related discipline and instructor permission.

ENV 804/CPH 592 Human Factors and Ergonomics for Work Environments (3 credits)

This course is an introduction to fundamental concepts of physical work, human abilities, and capabilities (ergonomics), including psychological and cognitive aspects of human work performance (human factors) for the reduction of occupational injuries and illnesses, reduced costs, productivity improvement, worker well-being and longevity, quality of work life, and job satisfaction.

Prerequisites: Graduate student status in health sciences or related discipline and instructor permission.

ENV 810/CPH 593 Principles of Occupational and Environmental Health (3 credits)

This course is designed to allow students to develop an understanding of the human health outcomes associated with environmental and occupational exposures. Students will learn how key issues in environmental health and environmental and occupational medicine are approached from a public health perspective.

Prerequisites: ENV 892/CPH 503 or equivalent introductory environmental health sciences course; instructor permission.

ENV 816/CPH 594 Environmental Exposure Assessment (3 credits)

The course will allow students to develop their understanding and knowledge of exposure assessment methods and the application of these methods to substantive issues in occupational and environmental health. The course emphasizes methodological principles and good practice, and highlights the many similarities and some interesting differences between occupational and environmental health.

Prerequisites: ENV 892/CPH 503 or equivalent introductory environmental health sciences course; BIOS 806/CPH 506 or equivalent introductory biostatistics course; instructor permission.

ENV 840/CPH 595 Sustainability, Climate Change and Health (3 credits)

This course provides an overview of the emerging issue of climate change as it affects society (with a special emphasis on public health), and the development of strategic frameworks of action to prepare for a sustainable and healthy future. The course is divided into three broad areas: frameworks and fundamentals (basic concepts and root causes of climate change and environmental problems); sector assessments (root causes and system impacts; measurement and monitoring); and action (approaches to intervention, core competencies, and communication).

ENV 850 Occupational Biomechanics (3 credits)

This course is designed for graduate students, health professionals, or fellows to recognize occupational health and safety through learning of biomechanical principles for common work tasks. It provides an introduction to biomechanical measurement techniques and introduces methods available for reducing physical stressors and musculoskeletal disorders in the workplace. This course will also ground students with a practical understanding of occupational health. Major topics include (1) biomechanical, psychophysical, physiological, and integrated

approaches to perform analyses of physical demands; (2) anatomy and etiology of lower back injuries and upper limb disorders; (3) principles of redesigning tasks to reduce the risk of injury; and (4) preemployment screening and legislated guidelines. Students and health professionals will acquire basic knowledge of human anatomy, physiology, human capacities and limitations, bioinstrumentation, and workplace evaluation methods. This knowledge will enable students to explore ideas for designing and modifying workplaces, tasks, and tools to promote occupational health, while maintaining or improving human performance outcomes. The course also serves as a foundation for students who are interested in doing research in occupational biomechanics.

Prerequisites: (1) an undergraduate or graduate level course in biomechanics, human physiology and anatomy, or equivalent and (2) an undergraduate or graduate level course in biostatistics and research design or equivalent.

ENV 875/CPH 596 Chemical Carcinogenesis (2 credits)

This course is designed to prepare graduate students to evaluate the carcinogenic potential of chemicals and carry out research related to the role of chemicals in the induction of cancer. Major topics to be covered include the basic concepts of chemical carcinogenesis, major classes of chemical carcinogens, the metabolic activation and mode of action of chemical carcinogens, mechanisms of tumor initiation, DNA damage leading to oncogenic mutations, and cancer epidemiology. The course is intended for graduate students and health professionals who will be following research or administrative careers.

Prerequisites: College-level courses in chemistry and biochemistry and permission of the instructor.

ENV 888/CPH 597 Principles of Toxicology (3 credits)

This course will introduce students to the principles and methods that are used to determine whether an adverse effect is a result of exposure to a specific agent. A primary purpose of toxicology is to predict human toxicity, and human health risk assessment relies heavily on toxicological data obtained from animal studies. This course covers basic mechanisms of toxicity as they pertain to whole organisms, organ systems, and specific toxic agents.

Prerequisites: None.

ENV 892/CPH 503 Public Health, Environment, and Society (3 credits)

The purpose of this course is to introduce the students to environmental factors, including biological, physical, and chemical factors, which affect the health of a community. The main focus of the course will be the effects of exposures that have been associated with human health and environmental problems in the Midwest, specifically water and air pollutants related to animal feeding operations, arsenic in ground water, pesticides, herbicides, lead, and radiation. The effects of global warming, ergonomic problems in the meat packing industry, and occupational and environmental problems in health care will also be discussed.

Prerequisites: None.

ENV 896/CPH 617 Research Other Than Thesis (Variable)

This course is for more advanced students who wish to pursue their research interests in selected areas of Medical Humanities.

ENV 899 Master's Thesis

ENV 902/CPH 619 Special Topics (Variable)

Independent study course focusing on selected topics or problems. The subject will be dependent on student demand and availability of staff.

ENV 920 Xenobiotics in the Environment (3 credits)

Fate and ecotoxicological impacts of biologically foreign compounds in soil-water-plant environments; uptake, mechanisms of toxicity and metabolism in plants and other biota. Herbicides and other pesticides.

Prerequisite: Recommend one course each in organic chemistry, soil science, biochemistry, plant physiology, microbiology, and ecology.

ENV 950/CPH 602 Advanced Toxicology (3 credits)

This course deals with the adverse effects of chemicals on biological systems. Physiological and biochemical mechanisms of toxicity at the cellular and subcellular levels will be emphasized.

Prerequisite: Permission from instructor and ENV 888/CPH 597 or equivalent.

ENV 970 Seminar (1 credit)**ENV 999 Doctoral Dissertation (Variable)****EPIDEMIOLOGY (EPI)****EPI 811/CPH631 Emergency Preparedness: Protection (3 credits)**

This course is designed to introduce the student to emergency preparedness concepts, in preparation for naturally occurring disasters, intentional acts of terrorism and new emerging infectious disease threats. Students will explore Critical Infrastructure protection, agriculture and food safety, surveillance and detection of biological agents among other topics.

Prerequisites: None

EPI 812/CPH 620 Chronic Disease Epidemiology (3 credits)

The target audience for this course includes, but is not limited to, student researchers and practitioners in the field of public health. The course will cover risk factors for major chronic diseases such as cancer, diabetes, musculoskeletal disease, and chronic lung disease. Through the course, students will learn advanced concepts and methodology in chronic disease epidemiology research, including disease surveillance and etiologic and outcomes research. Students will also gain experience developing a proposal to conduct an etiological study of a selected chronic disease.

Required prerequisites: Epidemiology I (EPI 820/CPH504), Biostatistics I (BIOS 806/CPH506).

Recommended coursework: Epidemiology II (EPI 821/CPH621), Biostatistics II (BIOS 808/CPH650).

EPI 820/CPH 504 Epidemiology in Public Health (3 credits)

The objective of the course is to understand the application of survey and research methodology in epidemiology, especially in the community setting. Theoretical aspects will be taught as an

integral part of understanding the techniques of study design and community survey. Concepts to be covered include measure of disease occurrence, measures of disease risk, study design, assessment of alternative explanations for data-based findings, and methods of testing or limiting alternatives. Students will be expected to address an epidemiological question of interest to them, first developing the hypothesis and conducting a literature search, then developing a study design and writing, in several stages, a brief proposal for the study.

Prerequisites: none.

EPI 821/CPH 621 Fundamentals of Epidemiology (3 credits)

This course presents basic principles and methods of epidemiology in greater depth and detail than presented in EPI 820. The purpose of the course is to further develop the methodologic concepts underlying the science of epidemiology. The material covered is intended to broaden and extend the student's understanding of elements of study design, data analysis, and causal inference in epidemiologic research, including specific emphasis on bias and confounding, and is expected to serve as a foundation for advanced study of epidemiologic methods. The primary goal is to provide working knowledge of the fundamentals of epidemiology to graduate students who wish to further their career in public health research and need more expertise in advanced epidemiologic methods, with the objective of applying these concepts to a broader public health context.

Prerequisites: Epidemiology I (EPI 820/CPH504).

EPI 825/CPH 623 Infectious Disease Epidemiology (3 credits)

This course is an introductory, generic course which presents basic infectious disease epidemiology principles and methods. The purpose of the course is to introduce students to concepts of epidemiology as they relate to infectious disease. Students who wish to know how to conduct population studies in infectious disease will be better prepared through this course. This course will produce graduates from UNMC who are better prepared to meet the challenges of infectious disease. Public health is a cornerstone for healthy living, and improving the health of communities is its broad-based goal. Dealing with infectious disease is intricately related to this goal.

Prerequisites: EPI 820/CPH 504; Introduction to Basic Epidemiology.

EPI 830/CPH 624 Advanced Infectious Disease Epidemiology (3 credits)

This course is designed to prepare graduate students, professionals, and fellows to use mathematical models for better understanding of epidemics and examine research methods for global infectious diseases. Major topics to be covered include global infections, including TB, malaria, HIV/AIDS, STIs; research methodology in infectious disease, data analysis, and interpretation; use of mathematical models for prediction and prevention of epidemics; and review of biological, clinical, and public health issues relevant to understanding disease transmission and prevention. The course is intended for graduate students and health professionals who will be engaging in infectious disease investigation, prevention, and research.

Prerequisites: EPI 820/CPH 504-Epidemiology: Theory and Applications and EPI 825/CPH 623-Infectious Disease Epidemiology.

EPI 831/CPH 625 Physical Activity Epidemiology (3 credits)

This course is designed to prepare graduate students to understand and apply physical activity epidemiologic methods to biomedical and public health investigations. Major topics to be covered include core concepts in physical activity epidemiologic methods; research design; data reporting and interpretation; the role of physical activity in health outcomes; and promoting physical activity and healthy lifestyles through intervention research. Concepts will be explored using the biomedical and public health literature, class exercises, exams, and projects. The course is intended for graduate students and health professionals who will be involved in biomedical research or public health studies that integrate physical activity as an outcome, exposure, or confounding variable into the research design.

Prerequisites: Instructor permission and BIOS 806/CPH 506 or BIOS 816/CPH 516 and EPI 820/CPH504 within the past 5 years resulting in a grade of B- or better.

EPI 835/CPH 626 Health Information and Surveillance for Public Health Practice (3 credits)

This course focuses on the role of health information and health information systems for the practice of national, state- and community-level public health.

Prerequisite: BIOS 806/CPH 506 or EPI 820/CPH 504

EPI 840/CPH 627 Epidemiological Measurements and Research in Maternal & Child Health (2 credits)

This course will emphasize the methodological aspects of Maternal and Child Health (MCH). It will address indicators and measurements of health and disease, types of studies needed or used in this field, to address the life course perspective and the study of topical issues.

Prerequisites: EPI 820/CPH 504, BIOS 806/CPH 506 and HPRO 880/CPH 546

EPI 845/CPH 628 Principles of Epidemiologic Research (4 credits)

This course is a comprehensive course in the concepts, principles and methods of population-based epidemiologic research. The course, which expands on topics covered in EPI 821/CPH 621(Advanced Research and Methods), is both theoretical and quantitative, with emphasis on study design, quantitative measures, statistical analysis, data quality, sources of bias, and casual inference.

Prerequisites: EPI 821/CPH 621 and BIOS 806/CPH 506. An introductory course to SAS programming is recommended.

EPI 896/CPH 647 Research Other Than Thesis (Variable)

This course is for more advanced students who wish to pursue their research interests in selected areas of Medical Humanities.

EPI 900 Epidemiologic Analysis of Binary and Time-to-Event-Data (3 credits)

Analysis of data from common epidemiologic study designs using logistic, proportional hazards, and Poisson regression models. Covers model building, estimation, assessment of confounding and modification and threats to validity.

Prerequisites: EPI 845, BIOS 818 and a course (e.g. BIOS 810) or equivalent in statistical program.

EPI 905 Epidemiologic Research Development (3 credits)

This course provides students the opportunity to apply principles learned in epidemiologic methods and bios courses to the design of epidemiologic studies. Emphasis is placed on study design and implementation strategies, approaches to minimize bias and improve data quality, and on strategies for valid analysis and interpretation of epidemiologic data. Study protocols will be developed in the context of preparation for submission to the NIH.

Prerequisites: EPI 821, EPI 845 and BIOS 806

EPI 970 Epidemiology Doctoral/Departmental Seminar (1 credit)

This seminar is a series of scientific sessions on current topics exploring advanced concepts and methods in epidemiology. The course will promote the development of knowledge of epidemiologic methods, analytic approaches, disease etiology, natural history, and current issues related to the application of these concepts for conducting epidemiologic research and practice.

Prerequisites: Standing as a doctoral student in Epidemiology

EPI 998/CPH 649 Special Topics (Variable)

Independent study course focusing on selected topics or problems. The subject will be dependent on student demand and availability of staff.

EPI 999 Epidemiology Dissertation Research (1-15 credits)

The dissertation represents original and significant research on a defined epidemiology problem. This research is the culmination of a training process designed to ready the student to do independent research including development of a research question, data collection, analysis, and interpretation.

Prerequisites: Instructor permission.

HEALTH PROMOTION, SOCIAL & BEHAVIORAL HEALTH SCIENCES (HPRO)**HPRO 802/CPH 530 Cultural Competence and Professionalism (3 credits)**

This is a graduate-level course designed to assist public health professionals and health care providers in understanding the impact and professional implications of interactions between diverse cultures, including language and belief systems in relation to health, health care delivery, health outcomes, and health disparities.

Prerequisites: Graduate standing in the College of Public Health or permission from the instructors.

HPRO 803/CPH 531 Research Methods in HPER (3 credits)

The course deals with scientific writing, research techniques, statistics, computer application, and quantitative research design and technique. Considerable emphasis is placed on evaluation of research in scholarly publications. A research proposal is written as one of the course requirements.

Prerequisites: None. Not open to nondegree students.

HPRO 805/CPH 505 Applied Research in Public Health (3 credits)

This course will assist students to develop the basic skills to conduct applied research to address contemporary problems in public health. The course will emphasize proposal writing, data collection, research design, statistical analysis, computer application, and writing of research reports. Unique problems associated with data collection in public health settings such as public health departments, neighborhood health centers, and community-based organizations will be addressed. Both quantitative and qualitative research designs will be explored. Considerable emphasis is placed on evaluation of public health research published in scholarly publications. A research proposal/capstone service-learning proposal is written as one of the course requirements.

Prerequisites: None.

HPRO 807/CPH 540 Introduction to Community-Based Participatory Research (3 credits)

This course is designed to prepare the graduate student, professional student, or fellow to utilize community-based participatory research (CBPR) principles in research, evaluation, and practice. A philosophical and practical approach will guide the examination of CBPR and its use. Core areas of discussion will include (1) the theoretical and historical grounding of CBPR, (2) ethical issues in the use of CBPR and developing cultural humility in working with community partners (3) developing sustainable CBPR relationships among all partners, (4) methodological considerations, and (5) promoting social justice and policy change through CBPR. Course participants will engage in both critical thought-provoking discussions on the principles of CBPR and the application of CBPR to research and/or evaluation in a culturally relevant manner. Hands-on application will occur through conducting a CBPR project by working collaboratively with a defined community and other students in the course. The course is intended for graduate students and health professionals who will be actively involved in addressing community health issues through research and evaluation. CBPR is not a methodology, but a philosophical approach to conducting research; therefore the course assumes students will come already grounded in multiple research methods, both qualitative and quantitative.

Prerequisites: HPRO 805/HED 8050/CPH 505 (or equivalent course) or permission of the instructor; permission will require a demonstrable knowledge of research methods.

HPRO 808/CPH 555 Public Health Law (3 credits)

Conceptual foundations of public health law, including constitutional considerations, federal & state statutes & regulations, tort (civil) law, balancing competing interests (e.g. civil liberties v. monitoring, reporting, persuading, regulating at various levels), current issues & emerging trends.

Prerequisite: Law students must have completed first year of law school.

HPRO 809/CPH 545 Introduction to Health Disparities and Health Equity (3 credits)

The course provides a critical understanding of health disparities in the U.S. and examines the underlying social, cultural, biological, behavioral, economic and political factors that contribute to such disparities in society.

Prerequisite: Instructor permission required.

HPRO 810/CPH 550 Emergency Preparedness: Prevention (3 credits)

This course is designed to prepare the graduate student to work in a world where emergency preparedness and response skills are essential to the public health infrastructure, in preparation for naturally occurring disasters, intentional acts of terrorism, and new emerging infectious disease threats. **Prerequisites:** None.

HPRO 812/CPH 553 Emergency Preparedness: Response (3 credits)

This course is designed to introduce the graduate student disaster response related concepts such as Responder Safety and Health, Citizen Evacuation, Weapons of Mass Destruction, and Medical Surge among other topics

Prerequisites: None

HPRO 813/CPH 554 Emergency Preparedness: Respond and Recover (3 credits)

This course is designed to introduce the graduate student to emergency preparedness concepts. Students will explore disaster response related concepts such as Medical Surge, Behavioral Health and Mass Fatalities, in addition to short and long term disaster recovery topics.

Prerequisites: None

HPRO 815/CPH 532 Issues in Public Health: Past and Present (3 credits)

The purpose of this course is to acquaint students with key historical incidents, important historical and philosophical themes, and key philosophical controversies in public health.

Prerequisites: None.

HPRO 817/CPH 551 Community Oriented Primary Care (COPC): Principles and Practice (3 credits)

This course will prepare students for the community orientation of primary health care services. It is intended for students interested in the delivery of health care with a community orientation and the integration of individual clinical care and public health.

Prerequisites: None

HPRO 818/CPH 552 Opportunities and Challenges in the Applicability of Community Oriented Primary Care (COPC) (3 credits)

The course is designed to prepare public health students on the critical analysis of the organization (levels of care, public/private partnership, insurance, coverage, access) and functions (curative/preventive, general practice, family medicine, specialties) of primary care services to be able to identify the opportunities and the challenges in the applicability of Community Oriented Primary Care (COPC).

Prerequisite: COPC: Principles and Practice (CPH 551/HPRO 817), Instructor Permission

HPRO 825/CPH 533 Health Care Ethics (3 credits)

This course uses selected topics to outline the history, theory, and methods of health care ethics. It is intended as a core course for graduate students in ethics and related fields--for bioethics teachers, administrators, policy makers, clinicians, and public health professionals.

Prerequisites: None.

HPRO 827/CPH 534 Interventions in Health Promotion (3 credits)

This course will provide health promotion students with an opportunity to investigate, contrast,

develop, implement, and evaluate a variety of intervention activities, to be applied in different settings. Theories regarding methods to enhance behavior change and teaching strategies to meet the health needs of a diverse population will be explored.

Prerequisites: None.

HPRO 830/CPH 500 Foundations of Public Health (3 credits)

This is an introductory survey course, which will ensure that all public health students, within their first full year of study, are exposed to the fundamental concepts and theories that provide the basis for the body of knowledge in the field of public health. This course will prepare students to work in public health with a sound theoretical, conceptual, and historical basis for their work.

Prerequisites: None.

HPRO 831/CPH 535 Physical Activity Epidemiology (3 credits)

This course is designed to prepare the graduate student to understand and apply physical activity epidemiologic methods to biomedical and public health investigations. The major topics to be covered include core concepts in physical activity epidemiologic methods; research design; data reporting and interpretation; the role of physical activity on health outcomes; and promoting physical activity and healthy lifestyles through intervention research. Concepts will be explored using the biomedical and public health literature, class exercises, exams, and projects. The course is intended for graduate students and health professionals who will be involved in biomedical research or public health studies that integrate physical activity as an outcome, exposure, or confounding variable into their research design.

Prerequisites: Instructor permission and BIOS 806/CPH 506 or BIOS 816/CPH 516 and EPI 820/CPH504 within the past 5 years resulting in a grade of B- or better.

HPRO 840/CPH 536 Health Promotion Program Planning (3 credits)

An in-depth application of the health promotion program planning process utilizing a comprehensive model called PRECEDE-PROCEED. Students submit six papers applying each phase of this model: social diagnosis, epidemiological diagnosis, behavioral/ environmental diagnosis, educational/organizational diagnosis, administrative/policy diagnosis, and evaluation at the process, impact and outcome levels.

Prerequisites: None.

HPRO 841/CPH 541 Introduction to Social Marketing and Health Communication (3 credits)

This course provides an introduction to the basic concepts of social marketing and health communication principles including the application to health behaviors and public health issues.

Prerequisites: None

HPRO 842/CPH 542 Applied Social Marketing (3 credits)

This course will explore the application of social marketing at the population, community, business and government levels. Students will examine the concepts of social marketing from perspectives of collaboration and co-creation, value and service driven design, and an ethical framework of dignity and honor. Working with public health entities, students will develop a social marketing campaign for a specific public health issue.

Prerequisites: CPH 501 and CPH 541

HPRO 843/CPH 543 Advanced Health Communication (3 credits)

This course is an in-depth study of health communication. Students will build competencies in health communication (from theory and practice) to promote individual and community health and well being.

Prerequisites: HPRO 860/CPH 501, HPRO 842/CPH 542

HPRO 844/CPH 544 Nutrition Across the Lifespan (3 credits)

This course is designed to prepare graduate students to apply basic concepts in nutrition and metabolism to healthy lifestyle during each stage of the life cycle. The following topics will be covered: nutrition and health promotion; under-nutrition and over-nutrition; Dietary Guidelines; healthy diet for individuals and populations; public food and nutrition programs, and nutrition assessment within the framework of the life course perspective.

HPRO 860/CPH 501 Health Behavior (3 credits)

The purpose of this course is to study the theoretical foundations of health behavior. Students will develop an understanding of the determinants of health behavior, the models and theories that provide a framework for predicting health behavior, and the strategies employed to bring about behavioral changes for health and disease prevention in individuals and groups.

Prerequisites: None.

HPRO 869/CPH 537 Sexual Health: Ontology, Research and Education (3 credits)

This course is designed to prepare the graduate student, professional student, or fellow to address sexual health issues, particularly at the community level, through sound research and education practices. A social ecological approach will guide the examination of the topic with emphasis on social justice. Core areas of discussion will include (1) an ontological, socio cultural, and philosophical examination of sexuality, (2) a survey of groundbreaking and current research in sexuality with emphasis on the ethical issues in sex research, and (3) a study in issues related to the deployment of sexual health knowledge, particularly in communities experiencing disparities in sexual health. Course participants will learn to address sexual health issues in a culturally relevant manner through research and education.

Prerequisites: None; An undergraduate or graduate level course in human sexuality (such as HED 3080) within the last 5 years or comparable field experience is preferred.

HPRO 875/CPH 538 Public Health Program Evaluation (3 credits)

This course is designed to provide an overview of methods for evaluating public health programs. Students will learn methods of choosing appropriate evaluation designs and procedures for data collection, choosing, and developing survey items, and interpreting and describing evaluation results.

Prerequisites: None

HPRO 880/CPH 546 Introduction to Maternal and Child Health (MCH) (3 credits)

This course will introduce the life course approach in Maternal and Child Health (MCH), and address specific MCH topics (i.e. immunizations, nutrition, pre-term births) from the local, regional and global perspectives, and organization and policy issues in MCH care in the U.S.

Prerequisites: None

HPRO 881/CPH 547 Advanced Maternal and Child Health (MCH) (3 credits)

Critical analysis of current and emerging priority areas in Mother and Child Health (MCH), including biological, behavioral and health care issues, based on defining the problem, identifying gaps in population health or health care and discussing alternative approaches towards gap reduction.

Prerequisites: EPI 820/CPH 504, HPRO 860/CPH 501, HPRO 880/CPH 546

HPRO 882/CPH 548 Child and Adolescent Growth and Development (2 Credits)

This course is designed to introduce students to the study and assessment of child and adolescent growth and development from a public health perspective. Physical, neurological, psychological, and social development will be discussed.

Prerequisites: HPRO 880/CPH 546

HPRO883/CPH 549 Women's Health (2 credits)

This course is a graduate level course that provides students with an overview of women's health issues across the lifespan from a multidisciplinary perspective.

Prerequisites: None

HPRO 895/CPH 539 Public Health Leadership and Advocacy (3 credits)

This course incorporates public health leadership theory and practices, which are grounded in biomedical and social science and sanctioned by public law. Politics of communities and organizations is also included. Advocacy is emphasized as a key tool to secure funding and to help assure that local, state, and federal policy makers will adopt, implement, and maintain important public health regulations, policies and programs.

Prerequisites: 15 graduate credits or instructor permission.

HPRO 896/CPH 557 Research Other Than Thesis (Variable)

This course is for more advanced students who wish to pursue their research interests in selected areas of Medical Humanities.

HPRO 902 Complex Systems Thinking (3 credits)

This course covers the major topics of systems thinking, including key terminology, general systems theory, systems analysis, systems mapping and dynamics, structural thinking, systems design and modeling, and finally applications of simulation models for policy decision making.

Prerequisites: For PhD students only or with instructor's permission

HPRO 910 Humanistic Traditions in Qualitative Research (3 credits)

The course provides a framework for a diverse group of qualitative research methods that emphasize approaches to inquiry drawn from the humanities, arts, and social sciences. The course focuses on the philosophical grounding of such inquiry, study designs, methodological implementation, analysis of findings and construction of concluding arguments.

Prerequisites: HPRO 805/CPH 505 Applied Research in Public Health or equivalent.

HPRO 935 Research Ethics (3 credits)

This course is designed to prepare the graduate student, professional student, or fellow to design research projects that respect human participants by understanding the ethical principles that serve as the foundation for sound research. Major topics to be covered include the history of research ethics, ethics of scientific design, participant selection and recruitment, risk/benefit assessments, informed consent, and independent review and oversight. The course will include discussion of clinical and translational research, community-based participatory research, and behavioral and social science research. The course will also introduce students to issues involved in research with vulnerable populations, such as pregnant women, children, and the decisional impaired. The course is intended for graduate students and health professionals who will be actively involved in the design, analysis, and interpretation of biomedical research or public health studies.

Prerequisites: None, although some experience with research design or practice (or a course in research design or practice) is preferred.

HPRO 970 Seminar (1 credit)

Prerequisites: Permission of instructor

HPRO 998/CPH 559 Special Topics (Variable)

Independent study course focusing on selected topics or problems. The subject will be dependent on student demand and availability of staff.

HPRO 999 Health Promotion and Disease Prevention PhD Dissertation Research (Variable Credit)

The dissertation represents a significant, original piece of research that makes a contribution to knowledge in the field of health promotion and Disease Prevention. It is the culmination of a training process designed to ready the student for independent investigation that typically includes development of a research question or public health intervention, data collection, analysis, interpretation and publication.

Prerequisites: Instructor Permission

HEALTH SERVICES RESEARCH & ADMINISTRATION (HSRA)**HSRA 810/CPH 560 U.S. Health Care System: An Overview (3 credits)**

This course will offer the student an overview of the health and medical care delivery system in the US. Topics covered from a historical, economic, sociological, and policy perspective include the following: social values in health care; need, use, and demand for services; providers of health services (people and places); public and private payment systems; alternate delivery systems; and models from other countries. Current health care reform proposals will also be addressed.

Prerequisites: None.

HSRA 820/CPH 507 Global Applications in Public Health (3 credits)

The course provides a survey of the field of global health, including health conditions, resources, and programs. The course deals with the application of the principles of public health to health

problems of countries around the world, and global forces that affect health. Topics covered include global health policy, including tobacco control policies, comparative health systems, climate change, and environmental health; the global impact of infectious and chronic diseases; infant mortality; women's health; cultural issues in global health; global occupational health issues; and human rights and ethics in global health. The course is intended for graduate students in public health, health professionals and health professions students who seek an understanding of global public health issues.

Prerequisites: None. Instructor permission is required.

HSRA 830/CPH 580 Health Care Organizational Theory and Behavior (3 credits)

This course focuses on introductory level of organizational theory and organizational behavior in health services research. Organizational theory is a macro examination of organizations, focusing on the organization as a unit, and inter-organizational and environmental relationships. Organizational behavior is a micro approach to studying organizations, focusing on individuals in organizations as the unit of analysis.

Prerequisites: None

HSRA 840/CPH 561 Public Budgeting (3 credits)

The purpose of the course is to familiarize public administration students with the basic characteristics and features of public budgets and enable them to deal competently with them.

Prerequisites: None. Not open to non-degree students.

HSRA 841/CPH 562 Human Resources Management in Health Organizations (3 credits)

The course explores human resources management and workforce planning in healthcare organizations. Students will gain in depth knowledge of the legal environment and major rules and regulations governing recruitment, selection and retention processes, as well as methods and techniques used in job analysis and interviews and organizational development. Another major focus area will be given to health professions workforce planning, succession planning, health safety preparedness, global issues facing healthcare workforce and future trends affecting human resources in healthcare organizations. The course is intended for students who are enrolled in the MPH program and students from other graduate degree programs who have an interest in managing human resources in health organizations. **Prerequisites:** None. Not open to non-degree students.

HSRA 853/CPH 563 Strategic Planning & Management in Public Health (3 credits)

This course examines the theory and practice of strategic planning and management in public health, health services, and voluntary health and welfare organizations. Application of specific principles, concepts, and techniques of strategic planning and management for these organizations will be addressed. The roles and responsibilities of public health and health services administrators in developing, implementing, monitoring and revising strategy will also be examined. **Prerequisites:** Instructor permission.

HSRA 860/CPH 564 Health Economics (3 credits)

This course is designed to help students understand how the theories and models of economics can be applied to the study of health and health care. The examination of the markets (demand and supply) for health, health care and health insurance is stressed. In addition, the economic

analytic tools such as economic evaluation of medicine will be introduced. The objective of this course is to equip students with the knowledge/tools to examine and analyze the problems/issues of health care from the perspective of economics.

Prerequisites: ECON 2200 (Principles of Economics-Micro) or its equivalent.

HSRA 867/CPH 567 Health Policy Analysis & Evaluation (3 credits)

This course will provide a framework for understanding how to analyze and evaluate the impact of health policies in public health and health care settings. Topics include structuring policy problems, gathering data for policy analysis, monitoring and evaluating policy performance, and communicating the results of policy analysis. The course is intended for students enrolled in the MPH program and students from other graduate degree programs who have an interest in analyzing and evaluating health policies.

Prerequisites: HPRO 805/CPH 505 Applied Research in Public Health and HSRA874/CPH 566 Health Policy.

HSRA 870/CPH 575 Principles of Public Health Informatics (3 credits)

The purpose of the course is to prepare graduate students, professional students or fellows with an opportunity to gain an in-depth understanding of the various concepts of public health informatics. The course is designed to help students increase their understanding about the concepts and relationships between data, information, and knowledge in context to public health informatics, data standards and how informatics can be used as a new means of data collection and increasing data accessibility. Further the course provides an opportunity for students to get prepared for applying informatics interventions and associated evaluation approaches to improve population health outcomes at both national and global levels.

Prerequisites: None

HSRA 872/CPH 565 Health Care Finance (3 credits)

This course is the required health care financial management course for the Health Care concentration in the MPA program and a required course in the MPH curriculum. Students are not expected to have prior coursework in financial management, managerial and financial accounting. The course does, however, assume the students have some experience with spreadsheet models. This course, which focuses on the application of financial management principles and concepts to health care organizations, consists of (1) instructor lectures, (2) case analyses, (3) presentations, and (4) two examinations. Much of the learning in this course will come from your own individual work and from interacting with other students, so the benefits that you receive will be directly related to your individual efforts.

Prerequisites: Research methods, epidemiology, or biostatistics, or instructor permission.

HSRA 873/CPH 502 Health Services Administration (3 credits)

This is a survey course designed to be an introduction to the management of health services organizations and systems in the United States. Specifically, this course will introduce students to the types of health services organizations and health systems in the United States, the context surrounding the administration of these organizations and delivery of health care services, and the skills needed to manage a health services organization within this setting.

Prerequisites: None.

HSRA 874/CPH 566 Health Policy (3 credits)

This course covers the fundamental issues of the health policy process by emphasizing the historical, social, economic, and political environment of contemporary US public health and health care policies. Students are expected to become knowledgeable about policy formation, implementation, modification and evaluation within public health and health care systems. The course is intended for students who are enrolled in the MPH program and students in other graduate degree programs who have an interest in health policy.

Prerequisites: None

HSRA 896/CPH 587 Research Other Than Thesis (Variable)

This course is for more advanced students who wish to pursue their research interests in selected areas of Medical Humanities.

HSRA 920 Quantitative Methods in Health Services Research (3 credits)

This course is designed to equip students with an in-depth understanding of the theoretical basis and applications of some more advanced quantitative methods to conduct independent health services research. The course will systematically examine quantitative methods for observational data in general but will emphasize the application of these quantitative methods to answer causal questions. Upon completion of this course, the students are expected to know how to identify and perform quantitative analysis appropriate to answer the research questions and how to critically review literature in health services research. This course will start with an overview of the complexity of the health services research data and a systematic discussion of appropriate quantitative methods to analyze complex survey data, including the limitations of these quantitative methods in generating answers to policy and research questions. Subsequently, an in-depth discussion of the theories and applications of selected quantitative methods in health services research will be extended. The selected quantitative methods will focus on, but not be limited to, those used to establish causal relationship from observational data, such as two stage least square model using instrumental variable, fixed and random effects model, factor analysis, and methods for economic evaluation of health. For each method, theories and quantitative analysis will be taught first and empirical studies from health services research literature will then be used to illustrate its applications in health services research. The course is intended for doctoral students and health professionals who will be conducting independent quantitative studies in health services research.

Prerequisites: BIOS 806/CPH 506 or an equivalent statistics course; BIOS 808/CPH 650 or an equivalent statistics course.

HSRA 930 Design of Health Services Research (3 credits)

The course is a required doctoral seminar course for the PhD program in Health Services Research, Administration, and Policy. The course is also expected to be useful for health professionals who seek an understanding of the foundations of health services research design and methods and to PhD students in the colleges of nursing and medicine (MD/PhD program).

Prerequisites: BIOS 808/CPH 650; Instructor permission required.

HSRA 940 Integrated Seminar in Economics and Health Services Research (3 credits)

This doctoral seminar course emphasizes the application of economics to the study of health services and health policy. Students in this course will discuss and examine the economic theories, empirical research issues, and policy topics related to demand-side aspects (demand for

health and health care, health production, health care utilization, health insurance), supply-side aspects (payment policies, health care provider behaviors, cost and efficiency of health care organizations), market competition, quality of health care, and government's role in health care. In addition to requiring students to study the traditional economic theories and models and their application to health care, this course will also facilitate students' critical thinking about the potential problems and limitations of traditional economic models in the study of health and health care. This course is a doctoral seminar course for the PhD program in Health Services Research, Administration, and Policy. Students in this PhD program can select this course as one of the five courses for their area of emphasis in order to meet the degree requirement. This course is also expected to be useful for health professionals or students of other PhD programs on campus who seek an in-depth understanding of the application of economics to health services research and policy analysis.

Prerequisites: HSRA 860/ECON 8600/CPH 564; Instructor permission required.

HSRA 950 Medical Geography and Spatial Methods in Health Services (3 credits)

Medical geography is generally defined under two major themes: the geography of disease and the geography of health disparities. This course focuses on the latter. The purpose of the course is to equip graduate students in health services research and administration with knowledge and skills to conduct geospatial health disparity research and to frame issues from medical geography to subject domains of other fields. The course illustrates how an understanding of population health must take into account the physical and social environment within which people live. The course is suited for PhD students in health services research, but highly motivated master's-level students in public health and related fields are also permitted. This graduate seminar has three sections. The first section critically discusses theoretical aspects of medical geography, which seeks to take into account place, structure and agency. It elucidates the mechanisms underlying geographic health disparities, and examines how residents cope and interact with location deficits. The second section critiques spatial analysis methods for measuring geographic health disparities. It seeks to identify effective approaches of isolating the role of geographic environment as a moderator, contextual factor, or determinant. The third section applies modules in geographic information systems that combine spatial data of health and health care with spatial analytical methods. A selection of topics which are of current interest to health services researchers will be used to elucidate the complexity between place and health. This course is a doctoral seminar course for the PhD program in Health Services Research, Administration, and Policy. Students in this PhD program can select this course as one of the five courses for their area of emphasis in order to meet the degree requirement.

Prerequisites: BIOS 808/CPH 650 or EQUIVALENT; An introductory course in GIS or 1 credit hour short course on GIS for public health to be approved by the instructor. Permission of the instructor.

HSRA 960 Seminar in Health Care Administration (3 credits)

This course will provide graduate students with in-depth study of organizational theory and behavior in health care organizations. It will prepare students to articulate, analyze and interpret health care organizations and the theories that underlie their structure and development. It focuses on historical, current and future perspectives of organizational theory and behavior and their role in the successful delivery of health care.

Prerequisites: PA8090 Organizational Theory and Behavior, graduate status, and permission of the instructor

HSRA 970 Seminar (1 credit)

Prerequisites: Permission of instructor

HSRA 980 Seminar in Health Policy (3 credits)

The course is an in-depth examination of the formation and implementation of health policy in the United States, including comparisons to policy formation and implementation in other developed nations. This course includes both seminar sessions and independent research activities. Graduate students will complete research projects analyzing a particular policy or implementation question.

HSRA 998/CPH 589 Special Topics (1-4 credits)

Independent study course focusing on selected topics or problems. The subject will be dependent on student demand and availability of staff.

HSRA 999 Dissertation Research (1-15 credits)

The dissertation research is the culmination of the doctoral training in health services research, administration and policy, and is designed to prepare students to conduct independent research.

Prerequisites: Instructor Permission

CAPSTONE COURSES

A community-based experience, designed to provide students with firsthand, scholarly, supervised experience in a practice setting. This experience augments the academic course work, meets actual community needs, and provides students with an opportunity to integrate and apply/test knowledge, principles and skills acquired through classroom instruction. Students will demonstrate mastery of public health principles, values and practice.

Prerequisites CPH 505 Applied Research in Public Health, CPH 517 Design of Medical Health Studies. Students must complete all core and concentration area courses, be within 12 hours of graduation (including the 6 hours of service learning/capstone experience), and be in good academic standing to start the Service-Learning/Capstone Experience (SL/CE).

Registers for:

CPH 528 Service learning for MPH Students (3 credit hours)

CPH 529 MPH Capstone Experience (3 credit hours)

