School of Public Health

Academic Certificate

Student Handbook

2014-2015

Revised August 2014
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ACADEMIC CERTIFICATE PROGRAM OVERVIEW

The School of Public Health offers nine fully online programs leading to a campus certificate; and a blended certificate program (courses are offered in-person and on-line). Students in these programs receive academic credit which may be applied toward a degree if the student later chooses to pursue one. Successful completion of a certificate program does not guarantee admission to any of the degree granting programs in the School.

More information about each of these programs is available by visiting the websites below as well as in this student handbook.

- Basic Community Public Health Practice Certificate
- Advanced Community Public Health Practice Certificate
- Clinical Research Methods Certificate
- Emergency Management and Continuity Planning Certificate
- Health Disparities Research
- Public Health Emergency Preparedness
- Public Health Geographic Information Systems Certificate
- Public Health Informatics Certificate
- Public Health Management Certificate
- Public Health Practice Certificate at Rockford (a blended certificate)
The School of Public Health offers a Certificate in Basic Community Public Health Practice to qualified professionals in a completely online format. This certificate program builds skills and competency in identifying and addressing community health needs and priorities. The Basic Community Public Health Practice Certificate is designed to serve specific learner needs, targeting current public health workers. The credits associated with this certificate can be used toward the MPH degree after admission into that degree program. Successful completion of the certificate program does not, however, guarantee admission into the MPH degree program.

Learning Objectives
Through this certificate program learners will acquire basic knowledge, attitudes and skills that are important for public health practice and will be able to:

1. Describe public health as a system, including its unique and important features and their role within it, to general audiences
2. Apply measures of population health and illness, including risk factors, to community health improvement initiatives
3. Identify and distinguish public health and prevention strategies from curative strategies for prevalent health problems
4. Describe the role of law and government in promoting and protecting the health of the public and identify specific functions and roles of governmental public health agencies in assuring population health
5. Identify and explain how various organizations, positions and roles contribute to carrying out public health's core functions and essential services, and assess the components of the public health infrastructure
6. Apply principles derived from the basic public health sciences to planning, implementing and evaluating public health interventions
7. Describe public health roles in emergency and disaster preparedness and response activities
8. Describe the major contributions of the social sciences (e.g. anthropology, sociology, psychology, demography, economics) to the field of public health
9. Explain major theoretical models derived from the social sciences to understand health problems and develop interventions
10. Demonstrate applications of knowledge from the social sciences to address public health problems
11. Compare and contrast diverse methodological approaches derived from different social sciences to address public health problems
12. Describe how social science-based knowledge and tools combine with biological and physical science to understand and address public health problems
13. Explain strategies to effectively work in a cross-cultural context and with different ethnic groups
14. Describe ethical aspects of public health research and practice as informed by the social sciences
15. Select indicators for assessment based on health promotion/assessment models
16. Engage with communities of interest, facilitating participation and capacity building, while identifying ethical and power status issues
17. Identify strategies for data acquisition and understand the corresponding assumptions regarding knowledge development
18. In public health needs assessment, design approaches taking into account community and cultural health definitions, culturally-based health behaviors, and cultural communication styles in planning and implementing effective programs and evaluations
19. Involve communities in assessing need for health programs, selecting health program approaches, and planning health programs
20. Communicate effectively both in writing and orally, including report and proposal preparation, and in interactions with the media to communicate public health information
21. Describe the historical development of epidemiology as a field of study
22. Compute measures of disease occurrence and association in populations
23. Identify and assess criteria for causal inference
24. Recognize components of various study designs, and the impact of bias on study findings
25. Apply various approaches for assessment and control of confounding and interaction.
26. Use statistical software to carry out simple epidemiologic analyses.
27. Describe the social, political and economic values and assumptions that have influenced the development and implementation of public health policy in the US.
28. Describe the steps and participants in the policy formation and development process.
29. Analyze a specific public health policy (regulations and/or legislation) by applying a policy analysis framework to the evaluation of policy options, including: collecting and summarizing data relevant to an issue; delineating policy options available to respond to the issue; and articulating the health, fiscal, administrative, legal, social, and political implications of each policy option.
30. Collect and summarize data relevant to an issue, state policy options, articulate the health, fiscal, administrative, legal, social, and political implications of each policy option.
31. Design a specific public health policy reform position and write a policy statement.
32. Design an advocacy plan promoting the public health policy reform.
33. Prepare and deliver testimony advocating the public health policy reform to a government agency, and
34. Defend a recommended policy reform.

The academic certificate in Basic Community Public Health Practice requires 12 semester hours (SH) and is designed for completion in approximately 10 months (2 courses per semester) or 22 months (1 course per semester). This certificate requires the following courses:

### Certificate Program Requirements (12 SH)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHSC 400</td>
<td>Public Health Concepts and Practice</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 401</td>
<td>Behavioral Sciences in Public Health</td>
<td>3 SH</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHSC 430</td>
<td>Public Health Policy and Advocacy</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 431</td>
<td>Community Assessment in Public Health</td>
<td>3 SH</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPID 400</td>
<td>Principles of Epidemiology</td>
<td>3 SH</td>
</tr>
<tr>
<td>EPID 403</td>
<td>Introduction to Epidemiology: Principles and Methods</td>
<td>3 SH</td>
</tr>
</tbody>
</table>
Contact Information
For further information about the Basic Community Public Health Practice certificate please contact:

David Brand
Academic Coordinator, Community Health Sciences
(312) 996-8940
dbrand@uic.edu
The School of Public Health offers a Certificate in Advanced Community Public Health Practice to qualified professionals in a completely online format. This certificate program builds skills and competency in identifying and addressing community health needs and priorities. It is designed to serve specific learner needs, targeting graduate and professional students in the other health professions and social sciences. The credits associated with this certificate can be used toward the MPH degree after admission into that degree program. Successful completion of the certificate program does not, however, guarantee admission into the MPH degree program.

Learning Objectives
Through this certificate program learners will acquire basic knowledge, attitudes and skills in community health sciences. These include:

1. In public health needs assessment, program development, evaluation and other applications, design approaches taking into account community and cultural health definitions, culturally-based health behaviors and cultural communication styles in planning and implementing effective programs and evaluations
2. Involve community in assessing need for health programs, selecting health program approach, planning, implementing and evaluating health programs
3. Use analytical synthesis and critical thinking skills to develop solutions to complex public health problems and situations demonstrating creative problem-solving
4. Communicate effectively both in writing and orally, including report and proposal preparation, and in interactions with the media to communicate public health information
5. Understand the research process, from research question through reporting results
6. Explain design strategies used in public health research and the major threats to internal and external validity
7. Critically evaluate a research design (for both proposed and completed projects) in terms of internal and external design validity
8. Apply research designs that are appropriate to addressing specific research questions
9. Select a representative sample of a population under study (for a simple design) and assigning subjects to comparison groups (as appropriate)
10. Understand the principles and basic techniques for developing measurement instruments and evaluating their validity and reliability
11. Independently plan and conduct a small-scale research project
12. Participate as a collaborator for a large-scale research project
13. Be prepared for advanced study in research methodology
14. Describe major events in the recent history of the health education and health promotion field
15. Describe the relationship between theory, research and practice in health promotion
16. Describe and critically examine major models and theories in health education and health promotion and apply them to actual problems in public health
17. Critically analyze how major models and theories of health education and health promotion apply to existing programs and interventions in the community
18. Identify important steps in planning and evaluating health promotion and education programs
19. Design a health promotion program for a selected target group including theory, objectives, activities, management and evaluation.

20. Understand the social, political, psychological and economic values and assumptions that have influenced the development and implementation of health policy in the US with particular emphasis on Maternal and Child Health policy.

21. Describe the steps of the policy formation process.

22. Describe the various types of policy analysis.

23. Understand the components of a social problem analysis as well as an analysis of the historical context in which a policy solution emerges.

24. Apply an evaluative policy analysis framework to analyze a policy.

25. Collect and summarize data relevant to an issue, to state policy options, and articulate the health, fiscal, administrative, legal, social and political implications of each policy option.

26. Appreciate the role of advocacy in the policy formation process and be able to advocate in support of a policy position.

27. Describe various strategies for advocacy (including legal, administrative, legislative).

28. Identify current key policy and advocacy issues in public health with an emphasis on Maternal and Child Health.

29. Prepare a policy brief that summarizes a key policy issue and makes recommendations for change.

The academic certificate in Advanced Community Public Health Practice requires 12 semester hours (SH) and is designed for completion in approximately 10 months (2 courses per semester) or 22 months (1 course per semester). This certificate requires the following courses:

**Certificate Program Requirements (12 SH)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHSC 433</td>
<td>Public Health Planning and Evaluation</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 446</td>
<td>Research Methods in Community Health</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 480</td>
<td>Health Education and Health Promotion</td>
<td>3 SH</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHSC 430</td>
<td>Public Health Policy and Advocacy</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 543</td>
<td>Maternal and Child Health Policy and Advocacy</td>
<td>3 SH</td>
</tr>
</tbody>
</table>

**Contact Information**

For further information about the Advanced Community Public Health Practice certificate please contact:

David Brand  
Academic Coordinator, Community Health Sciences  
(312) 996-8940  
dbrand@uic.edu
The School of Public Health offers a Certificate in Clinical Research Methods to qualified professionals in a completely online format. This certificate is designed to introduce clinicians, including physicians, pharmacists, nurses, dentists and physical therapists, to an array of methodologies needed to conduct clinical and translational research in a multi-disciplinary research environment. The campus certificate program is open to both degree and non-degree students. The curriculum consists of an online program of study of 5 courses (17 credit hours) of graduate coursework. The credits earned from these courses may be transferred to the Master of Science (MS) in Clinical and Translational Science. Successful completion of the certificate program does not, however, guarantee admission into the MS degree program. Clinicians currently enrolled in SPH degree programs will be allowed to register for certificate courses where the course content is relevant to their educational programs.

The academic certificate in Clinical Research Methods requires 17 semester hours (SH) and is designed for completion in approximately three semesters (two courses each in the fall and spring semester and one in the summer) or five semesters (one course per semester). This certificate requires the following courses:

**Certificate Program Requirements (17 SH)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPA 472</td>
<td>Clinical Research Methods I</td>
<td>4 SH</td>
</tr>
<tr>
<td>HPA 473</td>
<td>Clinical Research Methods II</td>
<td>4 SH</td>
</tr>
<tr>
<td>HPA 479</td>
<td>Evaluating Clinical Interventions</td>
<td>3 SH</td>
</tr>
<tr>
<td></td>
<td>Select at least two of the following courses*</td>
<td></td>
</tr>
<tr>
<td>HPA 475</td>
<td>Contexts for Clinical Research</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 477</td>
<td>Data Collection and Management for Clinical Research</td>
<td>3 SH</td>
</tr>
<tr>
<td>BHIS 509</td>
<td>Informatics for the Clinical Investigator</td>
<td>3 SH</td>
</tr>
<tr>
<td>BPS 508</td>
<td>Concepts in Drug Development: From Bench to Bedside</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 459</td>
<td>Introduction to Health Inequities in the United States</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 462</td>
<td>Quantitative Methods of Health Disparities Research</td>
<td>4 SH</td>
</tr>
<tr>
<td>HPA 464</td>
<td>Socio-cultural Dimensions of Health Disparities Research</td>
<td>3 SH</td>
</tr>
</tbody>
</table>

*Substitute courses permitted with the permission of the Program Director.

The Clinical Research Methods certificate program promotes student and faculty interaction through online discussion groups and the use of virtual collaboration sessions. CRM course objectives are assessed by participation in discussion, quizzes and assignments.

To earn the CRM certificate, students must maintain a 3.0 (out of 4.0) average for all certificate program courses.
**Contact Information**
For further information about the Clinical Research Methods certificate please contact:

Rocelia Viramontes  
Online Program Coordinator, Health Policy and Administration  
(312) 413-3760  
rviram1@uic.edu
The School of Public Health and the College of Business Administration offers a Certificate in Emergency Management and Continuity Planning to qualified professionals in a completely online format.

**Learning Objectives**

The Emergency Management and Continuity Planning (EMCP) Certificate Program provides participants with interdisciplinary training with an emphasis on "real" world experience. The courses that comprise the certificate are designed and presented by leading experts in the field in order to help individuals develop and refine their emergency management and continuity planning skills. Participants of the certificate program will be able to:

1. Analyze risk and vulnerabilities due to natural or manmade disasters using widely accepted hazard and risk assessment methodologies.
2. Apply emerging Federal guidelines such as the National Incident Management System, Integrated Command Systems and Target Capabilities to the development of emergency management plans.
3. Formulate strategic plans related to developing the necessary remedies in a municipal or corporate setting to respond to disasters and implement recovery programs.
4. Leverage, understand and evaluate technological and administrative needs with regard to planning and implementing emergency response and recovery plans.
5. Develop operational plans to respond to public health emergencies, natural disasters and terrorist events.

The academic certificate in Emergency Management and Continuity Planning requires 5 courses for a total of 16 semester hours (SH) and is designed for completion in as little as three semesters (two courses each in the fall and spring semester and one in the summer). This certificate requires the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPA 407</td>
<td>Foundations of Emergency Management and Continuity Programs</td>
<td>3 SH</td>
</tr>
<tr>
<td>EOHS 572</td>
<td>Environmental Risk Assessment and Management</td>
<td>4 SH</td>
</tr>
<tr>
<td>IDS 524</td>
<td>Strategic Emergency Management and Continuity Planning</td>
<td>3 SH</td>
</tr>
<tr>
<td>IDS 541</td>
<td>Disaster Response and Recovery Operations</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 497</td>
<td>Integrative Project in Emergency Management</td>
<td>3 SH</td>
</tr>
</tbody>
</table>

**Contact Information**

For further information about the Emergency Management and Continuity Planning certificate please contact:

Ed Zordani  
Academic Advisor, Environmental and Occupational Health Sciences  
(312) 996-8856  
zordani@uic.edu
HEALTH DISPARITIES RESEARCH

The School of Public Health offers a post-baccalaureate Certificate in Health Disparities Research in a completely online format. This certificate will provide a documented concentration of study for graduate students, fellows, junior faculty, and working professionals particularly interested in identifying, analyzing, and addressing health disparities in vulnerable communities and broader populations. Aimed at health science professionals across the spectrum, course content is applicable across disciplines.

Learning Objectives:

Students will acquire the following skills and knowledge:

1. Apply lessons from seminal historical events and scientific initiatives to inform efforts to achieve health equity
2. Explore cultural nuances entailed in designing, implementing, and interpreting population research in health disparities
3. Select appropriate conceptual models, strategies, and tools for studying vulnerable populations and health disparities
4. Critique scientific efforts and policy initiatives that endeavor to explain or eliminate health disparities
5. Incorporate knowledge, insights, and skills relative to health disparities in planning and implementing their own specific work

The certificate entails successful completion of four online courses for a total of 13 semester hours (SH) of credit. The four certificate courses address theoretical perspectives of health disparities, research methodology specific to the study of health disparities, and the use of evidence in policy development and implementation. Completion of the four courses is intended to yield greater benefit than any single course for designing, conducting, and collaborating in health disparities research. This certificate requires the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPA 459</td>
<td>Introduction to Health Inequities in the United States</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 462</td>
<td>Quantitative Methods of Health Disparities Research</td>
<td>4 SH</td>
</tr>
<tr>
<td>HPA 464</td>
<td>Sociocultural Dimensions of Health Disparities Research</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 469</td>
<td>Evidence Based Policy Development and Implementation: Health Disparity Case Studies</td>
<td>3 SH</td>
</tr>
</tbody>
</table>

Contact Information

For further information about the Health Disparities Research certificate please contact:

Rocelia Viramontes
Online Program Coordinator, Health Policy and Administration
(312) 413-3760
rviram1@uic.edu
PUBLIC HEALTH EMERGENCY PREPAREDNESS

The School of Public Health offers a Certificate in Public Health Emergency Preparedness to qualified professionals in a completely online format. This certificate program builds skills and competency in preparing for and responding to public health emergencies. The Public Health Emergency Preparedness Certificate is designed to serve specific learner needs, targeting current public health workers.

Admission to the program requires documentation of a previous baccalaureate degree. Completion of the program requires completion of all 4 courses with a minimum GPA of 3.0. Course credits cannot be transferred in from other institutions. CHSC 400 may be waived for individuals with a previous Master of Public Health (MPH) degree. The credits associated with this certificate can be used toward the MPH degree after admission into that degree program. Successful completion of the certificate program does not, however, guarantee admission into the MPH degree program.

Learning Objectives

Upon completion of this certificate program, learners will be able to demonstrate mastery of the competencies listed below:

1. Describe public health as a system, including its unique and important features and their role within it, to general audiences.
2. Apply measures of population health and illness, including risk factors, to community health improvement initiatives.
3. Identify and distinguish public health and prevention strategies for important health problems.
4. Describe the role of law and government in promoting and protecting the health of the public and identifying specific functions and roles of governmental public health agencies in assuring population health.
5. Identify and explain how various organizations, positions and roles contribute to carrying out public health's core functions and essential services, and assessing the components of the public health infrastructure.
6. Applying principles derived from the basic public health sciences to planning, implementing, and evaluating public health interventions.
7. Describe the roles of public health workers and public health organizations in the context of a public health emergency event.
8. Identify the roles and relationships among federal, tribal, state, and local governments and non-governmental organizations in the context of a public health emergency event.
9. Analyze the ethical challenges faced by public health workers and public health organizations in the context of a public health emergency event.
10. Explain key legal issues that need to be addressed by public health workers and public health organizations in the context of a public health emergency event.
11. Discuss strategies to promote community resilience in the context of a public health emergency event.
12. Perform in an assigned public health leadership role in the context of a public health emergency event.
13. Identify public health needs of a community in the context of a public health emergency event.
15. Assess public health capabilities in the context of a public health emergency event.
16. Apply the principles of epidemiology and surveillance in the context of a public health emergency event.
17. Conduct a rapid needs assessment in the context of a public health emergency event.
18. Identify the key components of a continuity of operations plan in the context of a public health emergency event.
19. Identify the key components of an emergency operations plan in the context of a public health emergency event.
20. Use evaluation results in the development of an improvement plan in the context of a public health emergency event.
21. Apply strategies for sharing information with internal and external partners in the context of a public health emergency event.
22. Apply principles of crisis and risk communication in the context of a public health emergency event.
23. Address the needs of vulnerable populations in the context of a public health emergency event.
24. Apply culturally competent public health actions in the context of a public health emergency event.
25. Apply worker health and safety principles in the context of a public health emergency event.
26. Describe psychosocial consequences likely to be experienced by public health workers and community members in the context of a public health emergency event.
27. Identify countermeasures in the context of a public health emergency event.
28. Describe surge strategies for the health system in the context of a public health emergency event.

The academic certificate in Public Health Emergency Preparedness requires 14 semester hours (SH) and is designed for completion in approximately 10 months (2 courses per semester) or 22 months (1 course per semester). This certificate requires the following courses:

**Certificate Program Requirements (14 SH)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHSC 400*</td>
<td>Public Health Concepts and Practice</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 460</td>
<td>Public Health Emergency Preparedness Concepts and Practice</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 461</td>
<td>Public Health Emergency Preparedness and Response Assessment Methods</td>
<td>4 SH</td>
</tr>
<tr>
<td>CHSC 462</td>
<td>Public Health Emergency Preparedness and Response Management</td>
<td>4 SH</td>
</tr>
</tbody>
</table>

*CHSC 400 may be waived for individuals with a previous Master of Public Health (MPH) degree.

**Contact Information**
For further information about the Public Health Emergency Preparedness certificate please contact:

David Brand  
Academic Coordinator, Community Health Sciences  
(312) 996-8940  
dbrand@uic.edu
PUBLIC HEALTH GEOGRAPHIC INFORMATION SYSTEMS

NOTE: The revised curriculum, below, is pending campus approval – Spring 2014. Students beginning the certificate Fall 2013 should consult their advisor regarding which GIS course to take.

The School of Public Health offers a Certificate in Public Health Geographic Information Systems (PHGIS) to qualified professionals in a completely online format. The UIC Public Health Geographic Information Systems online certificate program provides students with an understanding of fundamental GIS tools and their practical applications. Combining cartography, spatial analysis and data management, GIS is a rapidly emerging field in public health. The complex challenges posed by public health threats demand that public health professionals have a concrete understanding of the relationships among the various factors affecting health. In recent years, public health practitioners have grown increasingly aware of the value geographic information systems (GIS) can add in developing an effective framework for action. GIS systems make it possible for public health professionals to visualize population health problems within the context of available social services, demographic factors and changes in environmental variables.

Learning Objectives
Students receive advanced training from the experienced faculty of the UIC School of Public Health, as well as from practicing public health professionals. Students will acquire the following skills and knowledge:

1. Comprehension of the goals and analytical methods common to the public health informatics field
2. Command of the basic structure of spatial databases
3. Operational understanding of the most widely used GIS software package (ArcGIS)
4. Ability to consult and communicate effectively with stakeholders, interest groups and regulatory bodies by means of powerful spatial visualization tools
5. A clear understanding of how to apply GIS technology to public health problems

The academic certificate in Public Health Geographic Information Systems requires 13 semester hours (SH) and is designed for completion in as little as four semesters by completing one course each semester. This certificate requires the following courses:

<table>
<thead>
<tr>
<th>Certificate Program Requirements (13 SH)</th>
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<tbody>
<tr>
<td>Course</td>
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<tr>
<td>--------------</td>
</tr>
<tr>
<td>EOHS 475/HPA 480</td>
</tr>
<tr>
<td>HPA/EOHS 564</td>
</tr>
<tr>
<td>HPA 455</td>
</tr>
<tr>
<td>In consultation with your advisor, select at least one of the following courses:</td>
</tr>
<tr>
<td>HPA 436/EOHS 436</td>
</tr>
<tr>
<td>HPA 465</td>
</tr>
</tbody>
</table>

Contact Information
For further information about the Public Health Geographic Information Systems certificate please contact:

Rocelia Viramontes
Online Program Coordinator, Health Policy and Administration
(312) 413-3760
rviram1@uic.edu
The School of Public Health offers a Certificate in Public Health Informatics to qualified professionals in a completely online format. The courses required are a subset of the courses necessary for completion of the online MPH degree in Public Health Informatics. A Certificate can be earned in 15 months; however, there is an accelerated Certificate option which allows for completion of requirements in 12 months.

The Certificate program is intended for professionals with public health experience who wish to upgrade their informatics skills, individuals interested in a shorter course of study in public health informatics, and for those students enrolled in schools of public health outside the United States wishing to establish a public health informatics specialization with the agreement of their participating schools as part of their present degree program. Students completing Certificate coursework receive academic credit which may be applied toward an MPH if the student later pursues a degree. Successful completion of the Certificate does not, however, guarantee admission into a degree program.

**Learning Objectives**

The certificate program is ideal for students seeking an overview of public health informatics, whether public health professionals or students of traditional public health programs interested in a concentrated introduction to PHI. Candidates will specifically develop:

1. Proficiency in health data definitions and standards
2. Knowledge of the basic functions and operations of public health information systems
3. Ability to plan and manage public health information systems projects
4. Expertise to specify the requirements for the development or adaptation of public health information systems

The academic certificate in Public Health Informatics requires 16-19 semester hours (SH) and is designed for completion in three semesters (two courses each fall and spring semester and one during the summer semester), and must be completed over a maximum period of five years. This certificate requires the following courses:

**Certificate Program Requirements (16-19 SH)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPA 465</td>
<td>Health Information and Decision Support Systems</td>
<td>4 SH</td>
</tr>
<tr>
<td>HPA 481</td>
<td>Development of Public Health Surveillance Information Systems</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 450</td>
<td>Public Health Informatics Certificate Integrative Paper</td>
<td>0 SH</td>
</tr>
</tbody>
</table>

Select at least **three** of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPA 483</td>
<td>Management of Communication Systems for Public Health Informatics Applications</td>
<td>4 SH</td>
</tr>
<tr>
<td>HPA 485</td>
<td>Legal and Ethical Issues in Public Health Informatics</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 486</td>
<td>Survey of Public Health Information Systems</td>
<td>4 SH</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>SH</td>
</tr>
<tr>
<td>------------</td>
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</tr>
<tr>
<td>HPA 487</td>
<td>Public Health Informatics Methods</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 488</td>
<td>Public Health Information Systems Evaluation and Project Management</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 563</td>
<td>Web-Based Public Health Information Systems</td>
<td>4 SH</td>
</tr>
<tr>
<td>HPA 564</td>
<td>Geographic Information System Application in Public Health</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 565</td>
<td>Datamining Applications in Public Health</td>
<td>3 SH</td>
</tr>
</tbody>
</table>

**Contact Information**
For further information about the Public Health Informatics certificate please contact:

Rocelia Viramontes  
Online Program Coordinator, Health Policy and Administration  
(312) 413-3760  
rviram1@uic.edu
PUBLIC HEALTH MANAGEMENT

The School of Public Health offers a Certificate in Public Health Management to qualified professionals in a completely online format. This certificate program provides public health professionals with a greater understanding of how to manage in any public health environment. The core learning experience in all of the courses is student and faculty interaction, accomplished through online discussion groups and the use of virtual collaboration sessions. This learning experience models the way in which public health programs are implemented through team efforts and collaborations.

Participants will gain knowledge of the underlying managerial skills and tools needed to adequately and successfully manage public health personnel. In addition, this knowledge will help public health professionals identify opportunities for gains in operational efficiency and effectiveness.

**Learning Objectives**
The Public Health Management (PHM) certificate graduates will have the skills necessary to:

1. Implement the core functions of management: planning, organizing, controlling and leading
2. Design and conduct a strategic planning process which will align their organization with its strategic issues, generate new ideas and develop a consensus among stakeholders
3. Design and utilize budgets to increase organizational consensus, evaluate performance and maintain accountability
4. Match their leadership styles to the needs of their public health organization and to the needs of the communities that their organization serves
5. Make resource management decisions that enhance effectiveness, while maintaining the ethical values of their organization and while taking into account the political landscape in which those decisions are made

The academic certificate in Public Health Practice requires 12-13 semester hours (SH) and is designed for completion in as little as four semesters by completing one course each semester. This certificate requires the following courses:

**Certificate Program Requirements (12-13 SH)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPA 400</td>
<td>Principles of Management in Public Health</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 444</td>
<td>Strategic Planning and Budgeting</td>
<td>3 SH</td>
</tr>
<tr>
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<td>Select at least two of the following courses:</td>
<td></td>
</tr>
<tr>
<td>HPA 445</td>
<td>Organizational Leadership in Public Health</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 446</td>
<td>Public Health Resource Management: Methods, Ethics and Policy</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 460</td>
<td>Introduction to the Economics of Health and Healthcare</td>
<td>3 SH</td>
</tr>
<tr>
<td>HPA 465</td>
<td>Health Information and Decision Support Systems</td>
<td>4 SH</td>
</tr>
</tbody>
</table>

Contact Information
For further information about the Public Health Management certificate please contact:

Rocelia Viramontes
Online Program Coordinator, Health Policy and Administration
(312) 413-3760
rviram1@uic.edu
The Public Health Practice Campus Certificate at Rockford, sponsored by the Community Health Sciences (CHS) Division in the School of Public Health, targets individuals with a bachelor’s degree who are currently working in community health, public health or other related fields; and medical, nursing and pharmacy students enrolled at the College of Medicine Rockford site. Courses are offered in an online format. Students will be required to register for online sections of CHSC 400, CHSC 401, and CHSC 470 or CHSC 480 taught by Rockford public health faculty. Students will register for online sections of BSTT 400 and EPID 400 or 403 taught by faculty from the School of Public Health in Chicago.

The program is designed to provide essential public health knowledge and skills to clinical and administrative personnel in Northwest Illinois and students in the health professions, enhancing protection and improvement of community health in the Rockford region and beyond. Courses completed as part of the certificate program may be applied toward the Master of Public Health (MPH) if the student is later admitted into the MPH program; although successful completion of the Certificate program does not guarantee admission into the degree program.

**Learning Objectives**
Through this campus certificate program learners will acquire basic knowledge, attitudes and skills that are important for public health practice. These include:

1. An understanding and appreciation of the basic principles of public health as a system and social enterprise
2. Basic principles of epidemiology and of the social and behavioral determinants of health and illness in populations
3. Familiarity with basic statistics and the role of statistics in carrying out the core functions of public health
4. The role of health education and health promotion in improving population health

For students interested in obtaining the certificate with a rural focus additional learning objectives include:

1. An understanding of the essential components of the rural health system
2. Knowledge of population, epidemiologic and environmental factors that are unique to rural areas

The academic certificate in Public Health Practice requires 16 semester hours (SH) and is designed for completion in approximately three semester (two courses each in the fall and spring semester and one in the summer) or five semesters (one course per semester). This certificate requires the following courses:

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Certificate Program Requirements (16 SH)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSTT 400</td>
<td>Biostatistics I</td>
<td>4 SH</td>
</tr>
<tr>
<td>CHSC 400</td>
<td>Public Health Concepts and Practice</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 401</td>
<td>Behavioral Sciences in Public Health</td>
<td>3 SH</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
<td></td>
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<tr>
<td>CHSC 470</td>
<td>Introduction to Rural Health Systems and Policy</td>
<td>3 SH</td>
</tr>
<tr>
<td>CHSC 480</td>
<td>Health Education and Health Promotion</td>
<td>3 SH</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPID 400</td>
<td>Principles of Epidemiology</td>
<td>3 SH</td>
</tr>
<tr>
<td>EPID 403</td>
<td>Introduction to Epidemiology: Principles and Methods</td>
<td>3 SH</td>
</tr>
</tbody>
</table>

Contact Information
For further information about the Public Health Practice Campus Certificate at Rockford please contact:

Vicki Weidenbacher-Hoper
UIC College of Medicine - Rockford
(815) 395-5854
vweide1@uic.edu