

Criterion V: Instructional Programs

- ▶ **CRITERION V.A: THE SCHOOL SHALL OFFER PROGRAMS REFLECTING ITS STATED MISSION AND GOALS, LEADING TO THE MASTER OF PUBLIC HEALTH (MPH) OR EQUIVALENT PROFESSIONAL MASTER'S DEGREE IN AT LEAST THE FIVE AREAS OF KNOWLEDGE BASIC TO PUBLIC HEALTH. THE SCHOOL MAY OFFER OTHER DEGREES, PROFESSIONAL AND ACADEMIC, AND OTHER AREAS OF SPECIALIZATION, IF CONSISTENT WITH ITS MISSION AND RESOURCES.**

The Mission of the COPH focuses on the health and well-being of all Arkansans, and thus our education program emphasizes improving the knowledge and skills among the public health workforce within the state, and training additional public health scientists who are dedicated to addressing Arkansas' considerable health challenges. The COPH, under the auspices of the University of Arkansas, operates on a semester system, and awards credit hours that are equivalent to a minimum of 15 contact hours for each credit hour. The MPH is the COPH's largest degree program, both in terms of applicants and active students. It is offered as a generalist degree and as a specialist degree in each of the five core public health sciences. Originally, the MPH was also offered as a specialist degree in Maternal and Child Health; however, due to the interdisciplinary nature of Maternal and Child Health studies, limitations in resources, and the small number of faculty and students in the MCH program, this degree option was eliminated in January 2006. The mostly secondary and adjunct faculty in the Department of Maternal and Child Health were re-appointed in other COPH departments based on the best fit in terms of experience and expertise. Coursework emphasizing MCH issues remains an important part of the curriculum, and is included in the MPH program through the generalist track as well as the Health Behavior and Health Education specialty track and the Health Policy and Management specialty track.

The COPH also offers the MPH in combination with three other professional degree programs: a JD/MPH, a MD/MPH, and a PharmD/MPH. Each of these combined degree programs requires that students complete all degree requirements for the MPH. Commensurate with the expertise at the COPH in Environmental and Occupational Health (EOH) and the need to increase the state's capacity for response to environmental issues (including disaster and biological or chemical incident response), the COPH collaborates with the UAMS Graduate School to offer the Master of Science (MS) in Occupational and Environmental Health as an academic degree.

After strategic planning within the COPH identified a Mission-related need for doctoral-level training that integrated public health science, practice, and leadership, the COPH launched a DrPH in Public Health Leadership in January 2004. The DrPH program, a college-wide degree program with extensive interdisciplinary course work in the areas of Health Policy and Management (HPM) and Health Behavior and Health Education (HBHE), now enrolls a total of 15 students in four cohorts and focuses on developing leaders with exceptional public health science, management, and leadership skills.

In 2005, the COPH and the College of Professional Studies at the University of Arkansas at Little Rock (UALR) finalized an agreement that will transfer the existing Master of Health Services Administration (MHSA) degree from UALR to the COPH in Fall 2006. The decision to move this program was based on programmatic reasons related to the College's Mission and a desire to ensure that duplication of programs would not occur as the COPH's Department of Health Policy and

Management developed. This 51-credit hour program, accredited by the Commission on Accreditation of Healthcare Management Education, (CAHME), currently enrolls 36 students. CAHME has already approved this program transfer, and the faculty and staff from UALR's MHSa degree program have already transitioned to the COPH. COPH administration, faculty, and staff are working closely with MHSa faculty and staff to ensure a smooth transition, including curriculum revisions that will provide all MHSa students with a thorough and appropriate introduction to the five core public health sciences and other CEPH requirements for this equivalent degree program (see www.uams.edu/coph/degree%5Fprograms/mhsa/courses.asp for the MHSa curriculum).

In keeping with the COPH mission, in February 2006, the UAMS Graduate Council and the University of Arkansas Board of Trustees approved the establishment of two new PhD programs to be housed within the COPH and jointly administered by the UAMS Graduate School and the COPH. One program, the PhD in Health Promotion and Prevention Research, will complete its final review and approval process by the Arkansas Department of Higher Education (ADHE) in late October 2006, and, if approved, will enroll its first students in Fall 2007. The other program, the PhD in Health Systems Research, has received final approval by ADHE in spring 2006, and enrolled its first students in Fall 2006. The PhD in Health Systems Research focuses on how best to apply systems-level research and problem-solving skills to organize, finance, and deliver health services and interventions that will improve health and reduce the burden of disease and injury for populations across the state. As with all of the COPH degree programs, this PhD program emphasizes the application of student learning to health issues and health disparities within Arkansas as prescribed in our strong state-oriented Mission. However, the goal of all COPH programs is to train students who will be qualified to serve in a variety of roles throughout the public health system.

The COPH believes that the variety of degree programs offered provides an opportunity for new and experienced public health workers to acquire formal public health training at the level that is most appropriate for their role. As the COPH continues to grow, new programs may develop in a similar Mission-driven manner.

V.A.1. Identification in matrix form of all of the school's degree programs, including undergraduate degrees if any, showing the areas of specialization possible and distinguishing between those considered by the school to be professional degrees and those considered to be academic degrees. If the school offers degrees in a nontraditional format, these must be included in the matrix and identified as nontraditional.

Table V-1. COPH Degree Programs

Degree	Specialization	Professional/ Academic	Traditional/ Non
MPH	Generalist	Professional	Mixed
MPH	Biostatistics	Professional	Mixed
MPH	Environmental & Occupational Health	Professional	Mixed
MPH	Epidemiology	Professional	Mixed
MPH	Health Behavior and Health Education	Professional	Mixed
MPH	Health Policy and Management	Professional	Mixed
JD/MPH	Generalist or Specialist MPH	Professional	Mixed
MD/MPH	Generalist or Specialist MPH	Professional	Mixed
PharmD/ MPH	Generalist or Specialist MPH	Professional	Mixed
MHSa	Health Services Administration	Professional	Mixed
MS	Occupational and Environmental Health	Academic	Mixed
DrPH	Public Health Leadership	Professional	Mixed
PhD	Health Systems Research	Academic	Mixed

Table V-1 describes all current degree programs offered by the COPH, whether the degree is professional or academic, and which degrees are offered in

traditional, nontraditional, or mixed format.

V.A.2. The school bulletin or other official publication, which describes all curricula offered by the school for all degree programs.

The COPH Course Catalog (current edition is 2006–2008) is included as Appendix V.A. An additional copy is available for review in the Resource File. Revisions and curricular updates that occur between printings of the student catalog are published on the official COPH website at www.uams.edu/coph. This URL address is widely available to students and faculty, who are informed via email when curricular revisions are posted to the website. Printed copies of revisions and curricular updates are also available in the Student Services offices.

V.A.3. Assessment of the extent to which this criterion is met.

The COPH meets this criterion. For professional degrees, the COPH offers a generalist MPH degree and specialist MPH degrees in each of the five core public health disciplines, as well as a Post-Baccalaureate Certificate and the DrPH. Three combined professional degree programs (JD/MPH, MD/MPH, PharmD/MPH) also exist, and students in these programs must fully meet all MPH program requirements. The COPH also offers the MS in Occupational and Environmental Health; by UAMS policy, this academic program is administered through the Graduate School but based in the COPH's Department of Environmental and Occupation Health. The MHSa became a COPH professional degree program in Fall 2006, and this degree meets CEPH requirements as an equivalent degree program to the MPH. One new PhD program, in Health Systems Research is now actively enrolling students. Additionally, a PhD in Health Promotion and Prevention Research is currently pending final review and approval by the Arkansas Department of Higher Education, and is anticipated to enroll its first students in August 2007, pending final approval. These degrees were developed from strategic planning that was based on meeting the COPH's Mission and Vision to provide students with a variety of programs to meet both professional and academic goals.

- ▶ **CRITERION V.B: EACH PROFESSIONAL DEGREE PROGRAM IDENTIFIED IN V.A, AS A MINIMUM, SHALL ASSURE THAT EACH STUDENT A) DEVELOPS AN UNDERSTANDING OF THE AREAS OF KNOWLEDGE WHICH ARE BASIC TO PUBLIC HEALTH, B) ACQUIRES SKILLS AND EXPERIENCE IN THE APPLICATION OF BASIC PUBLIC HEALTH CONCEPTS AND OF SPECIALTY KNOWLEDGE TO THE SOLUTION OF COMMUNITY HEALTH PROBLEMS, C) DEMONSTRATES INTEGRATION OF KNOWLEDGE THROUGH A CULMINATING EXPERIENCE.**

V.B.1. Identification of the means by which the school assures that all professional degree students have a broad understanding of the areas of knowledge basic to public health. If this means is common across the school, it need be described only once. If it varies by degree program area, sufficient information must be provided to assess compliance by each program.

V.B.1.a. Master of Public Health

The COPH offers both specialist and generalist Master of Public Health (MPH) degrees. The specialist MPH tracks in each of the five core areas of public health consist of 42 credit hours of coursework. These hours include 18 credit hours of core coursework (the same courses used for the Post-Baccalaureate program), 18 credit hours of specialty coursework (which may include up to 3

credit hours of elective coursework outside the specialty area requirements, at the discretion of each department), 3 credit hours of field placement (preceptorship), and 3 credit hours of integration (capstone) project coursework. Students in the generalist MPH track take 18 credit hours of selective courses from a minimum of three different departments instead of the 18 credit hours of specialist courses; otherwise, the curricula are the same.

Table V-2. MPH Core Curriculum Course Descriptions

Core Knowledge Area	Course Title	Course Description
(Overview)	PBHL 5003: Introduction to Public Health	An introduction to basic and contemporary issues of public health, including tools of community-based health assessment, surveillance, health promotion, disease prevention, policy and ethics will be presented. This course provides an overview in the diverse areas of public health practice.
Biostatistics	PBHL 5013: Biostatistics I	Introductory topics in descriptive biostatistics and epidemiology, database principles, basic probability, diagnostic test statistics, tests of hypotheses, sample-size estimation, power of tests, frequency cross-tabulations, correlation, nonparametric tests, regression, randomization, multiple comparisons of means and analysis of variance for one- and two-factor experiments.
Environmental Sciences	PBHL 5113: Environmental and Occupational Health	This course provides students a detailed overview of the fields of environmental and occupational health, with an emphasis on the practical aspects of the recognition, evaluation and control of chemical, physical and biological hazards, including basic quantitative assessment of these hazards. Additional topics include significant legal and historical influences as well as currently important issues in the field.
Epidemiology	PBHL 5173: Epidemiology I	An introduction to epidemiology and the basic principles and methods of epidemiological research and practice. Overview of the history and the theoretical basis of epidemiology; measures of morbidity, mortality, disease transmission and risk; major study designs; measures of association; bias, confounding and interaction; evaluation of screening tests; inference; causality.
Health Policy and Management	PBHL 5123: The Health Care System	Provides an overview of the structure and function of the U.S. health system in delivering health services and public health interventions. Topics include organizational arrangements, financing, health status and system-level determinants of health, health insurance, the health workforce, health services costs and quality, access to care, and regulatory issues.

Core Knowledge Area	Course Title	Course Description
Social & Behavioral Sciences	PBHL 5133: Introduction to Health Behavior & Health Education (<i>course name changed from Health Behavior Research in Spring 2006</i>)	Introduction to health behavior, health education, theory, and practice; defines key terms/concepts; theories of individual health behavior; variables influencing responses to interventions; interpersonal theories examining elements in the environment affecting health behavior; basic planning models; and includes discussion of ethical principles and the application of theory in culturally distinct and/or other unique populations.

V.B.1.b. Doctor of Public Health (DrPH) in Public Health Leadership

The DrPH program requires that all of its students have successfully passed, with a grade of “B” or better, master’s level courses in biostatistics, epidemiology, health behavior, health policy, and environmental/occupational health before taking any courses toward the DrPH degree. In addition to these prerequisites, which help to ensure that all DrPH students have achieved basic competencies in the public health sciences, the DrPH degree requirements also include advanced-level courses in public health sciences and public health practice. These courses are described in Table V-3, below. Additional elective courses in public health practice and leadership development must also be completed. Finally, DrPH students are required to complete an intensive practicum experience and a culminating experience focused on a problem-solving approach that requires integration and application of public health knowledge learned throughout the curriculum. The full curriculum for the DrPH program is discussed in more detail in Section V.F.

Table V-3. Required DrPH Public Health Sciences and Public Health Practice Course Descriptions

Core Knowledge Area	Course Title	Course Description
Public Health Sciences: Epidemiology	PBHL 9013: Advanced Epidemiology (co-listed as PBHL 5373: Epidemiology II)	Includes and advanced review of epidemiological methods and issues; covers sampling and data collection strategies; study design concerns, including bias, confounding, stratification; students will gain practice in interpreting and reporting research results. Prerequisites: PBHL 5173: Epidemiology I or its equivalent; Doctoral student standing in the UAMS College of Public Health. Students who demonstrate proficiency in epidemiology methods beyond the level of this course will select, with assistance from the Chair of Epidemiology, another course in the department.
Public Health Sciences: Biostatistics	PBHL 9003: Advanced Biostatistics (co-listed as PBHL 5023: Biostatistics II)	This course covers experimental design and advanced linear methods of analysis; non-parametric analysis of variance, multiple regression and linear models, factorial analysis, repeated measures, and multiple covariates; logistic regression and survival analysis are also covered. Prerequisites: PBHL 5013: Biostatistics I or its equivalent; Doctoral student standing in the UAMS College of Public Health. Students who demonstrate proficiency in biostatistics beyond the level of this course will select, with assistance from the Chair of Biostatistics, another course in the department.

Core Knowledge Area	Course Title	Course Description
Public Health Sciences: Health Behavior	PBHL 9023: Advanced Health Behavior Theory	This course reviews the major theories of behavior change and explore the complex relationships between socio-demographic factors and theory constructs; students gain substantial experience in designing behavioral theory-based public health interventions. Prerequisites: PBHL 5133: Introduction to Health Behavior and Health Education or its equivalent; Doctoral student standing in the UAMS College of Public Health; or permission of instructor.
Public Health Sciences: Health Policy	PBHL 9033: Advanced Public Health Policy & Management	This course provides an advanced examination of issues related to the development, implementation, and impact of public policies and health system management strategies on population health. It includes an in-depth exploration of: (1) theories of policy development applied to health issues, including the often-competing influences of political, economic, and socio-cultural forces; (2) strategies for agenda-setting and policy formation in the health arena; (3) policy implementation and management approaches; (4) policy analysis methods and tools; and (5) policy and managerial decision-making strategies in health, including values-based and evidence-based perspectives; case studies of policy and managerial decisions made at national, state, and community levels provide opportunities for in-depth discussion and analysis. Prerequisites: PBHL 5123: Health Care System or its equivalent; Doctoral student standing in the UAMS College of Public Health; or permission of instructor.
Public Health Sciences: Environmental Health	PBHL9043: Advanced Environmental and Occupational Health	This course is designed to stimulate critical thinking about environmental and occupational health risk management, including their effectiveness, efficiency, and fairness; alternatives to traditional means of regulating and controlling environmental hazards are explored, along with issues regarding environmental justice and ethics and the role of participation by affected groups of citizens and workers. Prerequisite: PBHL 5113/OEHM 5023: Environmental and Occupational Health or its equivalent; Doctoral student standing in the UAMS College of Public Health; or permission of instructor.
Public Health Practice: Public Health Funding	PBHL 9123: Grantsmanship and the Peer Review Process	This course provides information and cultivates skills required to develop grant applications supporting health programs and preventive research; relevant topics that include: funding agencies and mechanisms; justifying proposals; rigorous assessment and intervention methods; and working on a research team; students gain experience in writing funding proposals and creating budgets. Prerequisites: Doctoral student standing in the UAMS College of Public Health; completion of the public health science core courses; including PBHL 9473: Health Services Research Methods; or permission of instructor.

Core Knowledge Area	Course Title	Course Description
Public Health Practice: Program Design	PBHL 9103: Community-Based Public Health Program Design/Evaluation (1) and PBHL 9113: Community Based Public Health Program Design/Evaluation (2)	<p>These courses are a two semester series integrating concepts of community-based program design and evaluation. This approach builds on the philosophy that evaluation should be considered simultaneously with program design. The first course focuses on concepts and theories, and the second focuses on application. The courses are taught using an interdisciplinary approach with an emphasis on the community-based participatory model, although traditional and hybrid approaches will also be addressed. Students learn about social and structural issues affecting both communities and the effectiveness of community-based public health programs. The role of the practitioner as a participant with communities in issue selection, data collection, and analysis are examined to learn how to apply these concepts and methods to program design and implementation. A range of interventions, as well as the levels they target, are described through illustrative case studies. Evaluation frameworks and logic models will be studied, and formative, process, impact, and outcome evaluation purposes and techniques are compared. The role of both quantitative and qualitative methods are explored. Prerequisites: Doctoral student standing in the UAMD College of Public Health; successful completion of three public health science core courses, including PBHL 9023: Advanced Health Behavior Theory or equivalent; PBHL 9473: Health Services Research Methods or equivalent; or permission of instructor(s).</p> <p><i>Note: PBHL 9103: Community-Based Public Health Program Design/Evaluation (1) must be completed prior to registration for PBHL 9113: Community-Based Public Health Program Design/Evaluation (2).</i></p>

Core Knowledge Area	Course Title	Course Description
Public Health Sciences: Health Research Methods	PBHL 9473: Health Services Research Methods	This course provides an overview of study design and methods for health services research (HSR) applied to health policy and public health problems. It will include exploration of : (1) study design principles with emphasis on the non-experimental and quasi-experimental designs most often employed in health policy and services research; (2) methodological problems often encountered in applied health policy and services research; (3) the "toolbox" of quantitative methods most often used in health policy and services research; and (4) principles and strategies for interpreting study results and communicating them to diverse stakeholders in public health. The course will emphasize hands-on exercises in using HSR methods and case studies of published HSR studies, with focus on health policy and public health topics. The course will focus on quantitative research methods grounded primarily in the disciplines of econometrics and statistics, while highlighting the many close connections to other methodological perspectives including epidemiology, sociology, demography, and political science. Prerequisites: Doctoral student standing in the UAMS College of Public Health; successful completion of three public health sciences core courses; or permission of instructor.

V.B.1.c. Master of Health Services Administration

The MHSA, which until Fall 2006 was offered by the University of Arkansas at Little Rock (UALR) requires coursework in health policy and management, epidemiology, environmental and occupational health, behavioral/social science, and biostatistics. These courses ensure that all MHSA students who matriculate into the MHSA program in Fall 2006 or thereafter (or students who were admitted to the program at UALR but who transfer to the COPH) have received training in all core public health sciences. Syllabi for these courses are available in the Resource File. (See www.uams.edu/coph/degree%5Eprograms/mhsa/courses.asp for the MHSA curriculum).

V.B.2. Description of the school’s policies and procedures regarding practice placements, including criteria for selection of sites, methods for approving preceptors, approaches for faculty supervision, and methods of assessment of students.

V.B.2.a. MPH Preceptorship Placements

The full guidelines for the MPH Preceptorship program are included in Appendix V.B as well as excerpted here.

Prerequisites for the MPH Preceptorship

Typically, students will have completed their core courses and at least half of their specialty or generalist courses before undertaking the preceptorship. This assures that they are well advanced in their program of studies and are familiar with the core areas of public health. However, the course and credit hour requirements for this experience are flexible enough to allow students to take advantage of unique or time-specific opportunities. In these special circumstances, the student’s academic advisor must approve or deny the student’s early enrollment in the preceptorship; a student

may appeal the advisor's decision to the Associate Dean for Academic Affairs. In all cases, a minimum of 18 credit hours must be completed prior to the preceptorship.

Requirements for Successful Completion of the MPH Preceptorship

The preceptorship is designed to be a service-learning experience; thus, preceptors and students must take into account both the student's professional and learning objectives for the experience as well as the potential contribution the student can make to the preceptorship site. Students must prepare a preceptorship plan that must then be approved by the faculty course advisor (a COPH faculty member who is not the site preceptor) and the site preceptor. The plan must be approved prior to initiation of any preceptorship activities, and "must outline: (1) the student's learning objectives and the activities that he/she will undertake to assure that these objectives are met through the preceptorship experience; and (2) what the student will do that makes a service contribution to the preceptorship site." To assure consistency in preceptorship plans across students and preceptorship sites, the Office of Student Services developed checklists and forms that guide students, preceptors, and faculty in preparing these plans. These are provided in Appendix V.C.

Students spend approximately 160 hours on the preceptorship course. At a minimum, 135 hours must be spent "in the field," either at the preceptorship site or working on specifically assigned preceptorship tasks. The 135 field hours do not include preparation of the preceptorship report. The preceptorship report includes a description of the objectives, activities, products, and outcomes of the experience, ways in which the student applied his or her formal coursework to the preceptorship, new learning that occurred during the preceptorship, and a list of relevant meetings attended (with the preceptor or related to the preceptorship activities). Students enrolled in the preceptorship are expected to meet regularly with the faculty course advisor and the site preceptor to evaluate progress towards the planned learning objectives, to identify any areas of strength or weakness in the student's performance, and to provide ongoing evaluation and supervision. The student's faculty course advisor will grade the preceptorship report with input from the preceptor regarding the student's performance.

Selection and Evaluation of MPH Preceptorship Sites and Preceptors

Each Department's faculty is responsible for reviewing and approving potential preceptorship sites and maintaining a list of approved sites in the Department Chairs' offices. In addition, the COPH Administrative Student Advisor maintains a central list of all approved preceptorship sites, by department, so that students in the generalist and specialist tracks of the MPH may have centralized access to this information. Students who identify a potential preceptorship site that is not already approved must request review of that site by the appropriate department prior to developing a preceptorship plan. In cases in which the determination of an appropriate department is unclear, the Associate Dean for Academic Affairs will determine the department that should review and approve a preceptorship site.

Preceptorship guidelines mandate that any activities proposed for a preceptorship at a student's place of employment must go beyond the regular demands of the student's job. Although the learning objectives for a preceptorship may closely align with a student's current career or work activities, preceptorship activities performed for credit should exceed duties normally performed during the course of their regular employment.

The Academic Standards Committee is responsible for the annual evaluation of both the preceptorship and the integrative experience courses. The evaluation of the preceptorship sites include interviews with preceptors and other site staff involved with the students during preceptorship, as well as faculty advisors and the students themselves. Site evaluations from students

and preceptor evaluations of the utility of the students' contributions to the site will be used to identify and resolve potential problems with weak preceptorship sites as well as sites and/or preceptors that may be overburdened.

Faculty Supervision of MPH Preceptorships and Student Assessment

Each preceptorship student identifies a faculty course advisor to supervise the preceptorship experience, in conjunction with the site preceptor. The faculty course advisor assists the student and site preceptor in formulating the preceptorship plan, including learning objectives, activities to address the learning objectives, required reports, and other assessments. All students are required to complete a reflective paper at the conclusion of their preceptorship experiences, regardless of other assignments identified by the site preceptor and faculty advisor. In this paper, the student must address the ways in which they applied their course-based learning to the problems or issues encountered in the preceptorship, ways in which they were able to provide service to the preceptorship site, and new learning that occurred during the preceptorship. Grading is conducted on a Pass/Fail basis. Additional assessments are conducted through qualitative evaluation forms provided to students, site preceptors, and faculty at the mid-point and end of the preceptorship period. These evaluation forms are provided in the Resource File.

V.B.2.b. DrPH Preceptorship Placements

The Doctoral Practicum consists 270 hours of field experience under the joint direction of a COPH faculty member and a practicing professional with leadership experience in a public health institution. A written report specifying activities, potential products, and outcomes of the experience is required upon completion of the practicum. The prerequisites for the preceptorship are completion of all public health science core courses and completion of PBHL 9103: Community-Based Public Health Program Design/Evaluation (1) and (2), or permission of the DrPH Faculty Leadership Committee Chair.

DrPH Practicum Plan Requirements

Each student will develop a practicum plan which must be approved by the field preceptor, faculty advisor, and Practicum Director before activities are initiated. Because of the wide variety of practicum opportunities, the nature of the Doctoral Practicum is not delineated in detail, so that it can accommodate the range of innovative, progressive, and unique service-learning experiences in which the students may participate. However, at a minimum, each approved practicum experience must include the following:

- the opportunity to work with practicing professionals who are functioning as leaders, or in similar capacities, for a public health institution, private agency, or organization; these professionals will be designated as a preceptor in the DrPH Program in the College of Public Health
- the opportunity to work with a variety of professionals in the organization(s), such as medical staff, administrators, health educators, epidemiologists, environmentalists, to gain a wide perspective about the types of issues, concerns, and processes that occur in the provision of public health
- one or more specific projects that the student has primary responsibility to carry out during the field practicum and that is (are) of value to the organization/community (the number and types of projects performed by the student are left to the discretion of the preceptor in recognition of the agency's needs, time constraints, and the student's interests and capabilities)
- an opportunity to develop an understanding of the political context within which public health activities are conducted

- regular meetings (at least biweekly) with the preceptor who will guide the student and serve as a role model
- preparation and submission of a written report of the practicum experience documenting activities, products (if any), and outcomes of the experience

As appropriate, the practicum plan may outline additional limited activities in which the student will participate that will give him/her additional insight into the organization and the complexities of the working environment at the practicum site. The Doctoral Practicum plan must be in compliance with UAMS IRB rules and regulations.

As needed, the faculty course advisor and Practicum Director will be available for consultation with either the student or preceptor regarding field practicum activities. The student is expected to perform at a high level and to meet the requirements specified by the preceptor. The preceptor is expected to assure that the student is monitored, is given adequate and appropriate work assignments, is provided with the day-to-day supervision of the student's work, verifies the completion of the 270 hour commitment, and provides the faculty course advisor and Practicum Director with specific feedback regarding the student's on-site performance.

Faculty Supervision and Student Assessment

The faculty course advisor will provide overall supervision of the field practicum activity including placement and evaluation follow-up. The preceptor will be asked to call the faculty course advisor or Practicum Director immediately if any significant problems arise.

At the conclusion of the Doctoral Practicum, the faculty course advisor will be responsible for assigning the student a grade of pass or fail. Students will be evaluated based on the quality of their performance during the practicum and the quality of their written reports. The faculty course advisor will consider the preceptor's and faculty advisor's evaluation of the student's performance. The faculty course advisor (and the Practicum Director, if necessary) will discuss with students any difficulties during the field practicum including failure to perform adequately, interpersonal problems, or other results of the working experience that might reflect on students' potential professional development. Suggestions for additional course work (e.g., in technical areas that might further contribute to the student's professional development and competence) will be provided by the faculty so that appropriate electives can be selected.

V.B.2.c. MHSA Administrative Residency/Directed Study

Students in the MHSA program are required to complete either an administrative residency or a directed study project during their curriculum. These provide specific opportunities for students to apply their course work in a health administration practice setting. Guidelines for the administrative residency and the directed study, including evaluation forms for these activities, are provided in Appendix V.D and are excerpted here.

The administrative residency is a three-month summer experience in which students are paired with a preceptor organization. The student is oriented to the organization, observes leadership and communication activities within the organization, and rotates through departments within the organization to learn their function and activities. In addition, the student will complete tailored assignments within the organization, based on student learning needs and organizational needs. The assignments require students to interpret and clarify a problem facing the organization, search for information relating to that problem and form a plan of action, make a recommendation for a particular response, and present this recommendation to the decision group within the organization.

Examples of sites where students have completed their residencies in the past three years include the following (residency supervisors listed in parentheses): St. Vincent’s Medical Infirmery of Little Rock (Ken Haynes, CEO); Rebsamen Regional Medical Center, Jacksonville, AR (Kurt Meyer, CEO); Central Arkansas Veterans Healthcare System (Tim Shea, Executive Director); Jefferson Regional Medical Center, Pine Bluff, AR (Bob Atchison, President and CEO); UAMS – Outpatient Services (Phillip Baroni, Director of Outpatient Services); Genesis Cancer Center, Hot Springs, AR (Jelinda Scott, CEO); and Arkansas Blue Cross, Little Rock (Penny Monical, Director of Managed Care Systems).

Organizations are authorized to offer administrative residencies upon recommendation of the faculty in the MHA program, based on the willingness of the organization to provide an educational experience to students and permit preceptors time to fulfill their responsibilities to the student. Once approved as an administrative residency site, organizations and interested students are matched, and organizations receive resumes of all students interested in their site. After an interview process, organizations collaborate with the MHA Program Director to make final matches between students and sites. A residency plan is developed in collaboration with the organization representatives and the MHA faculty coordinator, who is always a member of the MHA faculty. Students are assessed by their preceptor using preceptor evaluation forms (Appendix V.D) and based on faculty review of students’ residency diaries and a post-residency interview.

The directed study is a focused examination of a particular administrative problem or issue that will provide the student with exposure to operational issues in health institutions or agencies and support the development of specific problem-solving skills. The student works with a faculty member in the MHA program and an institution or agency to identify a critical issue and develop a plan to address that issue. The directed study plan (Appendix V.D) outlines the problem statement, the plan for surveying literature related to that issue, the methodology the student will use to address the problem, the data to be collected, a time schedule and definition of activities, and required resources. Students are expected to spend a minimum of a half-day per week during the semester working with the institution or agency on this project. Assessment is jointly conducted by the faculty sponsor and the institutional preceptor and is based on written and oral reports provided by the student.

V.B.3. Identification of agencies and preceptors used for formal practice placement experiences for students, by program area, over the last three years.

Table V-4 provides a list of preceptorship sites for MPH students over the past three years. The DrPH program will enroll students in preceptorship placements by Spring 2007. The MHA program transferred to the COPH effective Fall 2006; preceptorships for students admitted to this program under COPH auspices will begin in Spring 2007.

Table V-4. Agencies, Site Preceptors, and Faculty Advisors for COPH MPH Students* since 2003.

Academic Year	Student Discipline	Site	Preceptor	Faculty Advisor
2003-2004	BIO	UAMS-Center on Aging	Beverly, Claudia, PhD, RN, FAAN	Williams, Keith, PhD, MPH
2003-2004	BIO	UAMS-Arkansas Center on Health Improvement	Bost, Jim, PhD, MS	Williams, Keith, PhD, MPH
2003-2004	BIO	UAMS-Biostatistics	Williams, Keith, PhD, MPH	Williams, Keith, PhD, MPH
2003-2004	EOH	DOH-Epidemiology	Sutphin, Kim, MPH	Rimmer, Tom, ScD

Academic Year	Student Discipline	Site	Preceptor	Faculty Advisor
2003-2004	EPI	UAMS-Center on Aging	Beverly, Claudia, PhD, RN, FAAN	Phillips, Martha, PhD, MPH, MBA, EdS
2003-2004	EPI	DOH-Chronic Disease	Bourne, David, MD, MPH	Phillips, Martha, PhD, MPH, MBA, EdS
2003-2004	EPI	DOH-Agency Leadership Team	Haselow, Dirk, PhD, MS	Fischer, Ellen, PhD
2003-2004	EPI	DOH-Cancer Registry	Tapp, Catherine	Eigenbrodt, Marsha, MD, MPH
2003-2004	EPI	DOH-Epidemiology	Balamurugan, Appathurai, MD/MPH	Phillips, Martha, PhD, MPH, MBA, EdS
2003-2004	GEN	UAMS-Pediatrics/CARE	Aitken, Mary, MD, MPH	Wayne, John, PhD
2003-2004	GEN	UAMS-Arkansas Center on Cancer Research	Henry-Tilman, Rhonda, MD	Stewart, Katharine, PhD, MPH
2003-2004	GEN	UAMS, Cancer Outreach	Henry-Tilman, Rhonda, MD	Richter, Jan, EdD, CHES
2003-2004	GEN	DOH-Oral Health	Mouden, Lynn, DDS, MPH	Wayne, John, PhD
2003-2004	GEN	UAMS-Arkansas Center on Health Improvement	Thompson, Joe, MD, MPH	Stewart, Katharine, PhD, MPH
2003-2004	HBHE	UAMS-CLP Patient Education	Brunner, Barbie, MEd	Fox, Emogene, EdD
2003-2004	HBHE	UAMS-Poison Control Center	Foster, Howell, Med, CHES	Richter, Jan, EdD, CHES
2003-2004	HBHE	UAMS Medical Library	Richter, Jan, EdD, CHES	Stewart, Katharine, PhD, MPH
2003-2004	HBHE	LaCasa Health network	Robles, Eli	Pulley, LeaVonne, PhD, CHES
2003-2004	HBHE	DOH-HIV/AIDS	Roderick, T.	Stewart, Katharine, PhD, MPH
2003-2004	HBHE	Catherine's House for Teen Mothers	Sister Ann Hardcastle	Feild, Charles, MD, MPH
2003-2004	HBHE	UAMS-Arkansas Center for Health Improvement- New Directions	Tyson, Shirley	Wootten, Elaine, MA
2003-2004	HPM	UAMS-Arkansas Center for Health Improvement	Fickel, Jackie, PhD	Wayne, John, PHD
2003-2004	HPM	Pfizer Pharmaceuticals	Learned, Rick	West, Donna, PhD
2003-2004	HPM	DOH-Agency Leadership Team	Leslie, Lewis	Wayne, John, PhD
2003-2004	HPM	DOH-Oral Health	Mouden, Lynn, DDS, MPH	Wayne, John, PhD
2003-2004	HPM	UAMS-Act 1220 Evaluation-Child Obesity	Pulley, LeaVonne, PhD, CHES	Phillips, Martha, PhD, MPH, MBA, EdS
2003-2004	HPM	UAMS-Arkansas Center for Health Improvement	McCarthy, Suzanne, MPH	Thompson, Joe, MD, MPH
2003-2004	MCH	UAMS-Act 1220 Evaluation-Child Obesity	Phillips, Martha, PhD, MPH, MBA, EdS	Garner, Carole, MPH, RD, LD
2004-2005	EOH	UAMS-Clinical Engineering and Occupational Safety	Coleman, Mary Ann, MS	Rimmer, Tom, ScD

Academic Year	Student Discipline	Site	Preceptor	Faculty Advisor
2004-2005	EPI	DOH-Epidemiology	Balamurugan, Appathurai, MD, MPH	Pope, Sandra, PhD, MPH
2004-2005	EPI	UAMS-College of Medicine	Booth, Brenda, PhD	Fischer, Ellen, PhD
2004-2005	EPI	DOH-Oral Health	Mouden, Lynn, DDS, MPH	Eigenbrodt, Marsha, MD, MPH
2004-2005	EPI	UAMS-Arkansas Cancer Research Center	Ratnasinghe, Luke, PhD, MPH	Fischer, Ellen, PhD
2004-2005	EPI	DOH-Epidemiology	Williams, Sharon, DVM	Phillips, Martha, PhD, MPH, MBA, EdS
2004-2005	EPI	Mental Illness Research, Education, and Clinical Center-Veterans Administration Medical Center	Wiseman, Eve	Eigenbrodt, Marsha, MD, MPH
2004-2005	GEN	DOH-Southeast Pulaski County Hometown Health	Brown, Sandra	Wayne, John, PhD
2004-2005	GEN	Arkansas AIDS Foundation	Dearmon, Lawrence	Curran, Geoff, PhD
2004-2005	GEN	UAMS-Myeloma Institute for Research and Therapy	Phillips, Martha, PhD, MPH, MBA, EdS	Phillips, Martha, PhD, MPH, MBA, EdS
2004-2005	GEN	DOH-Aging and Adult Services	Sanderson, Herb, MPA	Stewart, Mary Kate, MD, MPH
2004-2005	HBHE	DOH-Healthy Aging Activities	Dillaha, Jennifer, MD	Richter, Jan, EdD, CHES
2004-2005	HBHE	New York City Department of Health and Mental Hygiene, The Bronx District Public Health Office, Bronx, New York	Katherine Clark, PhD Fernando Tirado, Program Director	Eigenbrodt, Marsha, MD, MPH
2004-2005	HPM	UAMS-Cancer Control	Henry-Tillman, Rhonda, MD	Wayne, John, PhD
2004-2005	HPM	UAMS-Arkansas Center for Health Improvement	McCarthy, Suzanne, MPH	Wayne, John, PhD
2004-2005	HPM	Arkansas Advocates for Children and Families	Sanders, Rhonda, MPH	Eudy, Ruth, PhD
2004-2005	MCH	Arkansas Baptist College Student Health Center	Robinson, Gail, MEd	Garner, Carole, MPH, RD, LD
2005-2006	BIO	Partners for Inclusive Communities	Whiteside-Mansell, Lee Ann, EdD	Williams, Keith, PhD, MPH
2005-2006	EPI	DOH-Epidemiology	Zohoori, Namvar, MBBS, PhD, MPH	Eigenbrodt, Marsha, PhD, MPH, MBA, EdS
2005-2006	GEN	Dunbar Community Gardens/Heifer International	Blain, Sylvia	Richter, Jan, EdD, CHES
2005-2006	GEN	DOH-Cardiovascular Disease	Faulkner, Linda	Nash, Creshelle, MD, MPH
2005-2006	GEN	UAMS, Family and Preventive Medicine	McKelvey, Kent, MD	Richter, Jan, EdD, CHES

Academic Year	Student Discipline	Site	Preceptor	Faculty Advisor
2005-2006	GEN	Arkansas General Assembly	Roebuck, Tommy, DDS, State Representative/Public Health and Welfare Committee	Ryan, Kevin, JD, MA, RN
2005-2006	HBHE	University of Nigeria School of Medicine, Enugu, Nigeria	Esther Ofegbu, MD	Richter, Jan, EdD, CHES
2005-2006	HBHE	DOH/UAMS Center for Health Promotion	Gannaway, Gail and Mary Aitken, MD, MPH	Richter, Jan, EdD, CHES
2005-2006	HBHE	UAMS-Family of Preventive Medicine	Kahn, Arlo, MD	Pulley, LeaVonne, PhD, CHES
2005-2006	HBHE	Arkansas Cooperative Extension Services	Kennedy, Russ	Pulley, LeaVonne, PhD, CHES
2005-2006	HBHE	UAMS Medical Library	Ryan, Mary, MPH	Richter, Jan, EdD, CHES
2005-2006	HBHE	UAMS, Stamp Out Smoking Quitline	Sheffer, Christine, PhD	Richter, Jan, EdD, CHES
2005-2006	HPM	Arkansas Children's Hospital, Polk County	Aitken, Mary, MD, MPH	Bourne, David, MD, MPH
2005-2006	HPM	DOH-Director of the Division of Health	Halverson, Paul, DrPH, MHSA	Halverson, Paul, DrPH, MHSA
2005-2006	HPM	MEMS-Metropolitan Emergency Medical Services	Hutchison, Mack	Wayne, John, PhD
2005-2006	HPM	DOH-Epidemiology	Phillips, Martha, PhD, MPH, MBA, EdS	Mays, Glen, PhD, MPH
2005-2006	MCH	UAMS/Environmental and Occupational Health	Ferguson, Alesia, PhD	Garner, Carole, MPH, RD, LD

*MHSA students will be undertaking Preceptorships through the COPH as of Spring 2007. DrPH students will be doing preceptorships by Spring 2007.

LEGEND: BIO = Biostatistics; EOH = Environmental and Occupational Health; EPI = Epidemiology; HBHE = Health Behavior and Health Education; HPM = Health Policy & Management; MCH = Maternal and Child Health; GEN = Generalist.

V.B.4. Identification of the culminating experience required for each degree program. If this is common across the school's professional degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

V.B.4.a. MPH Integration Project

The course guidelines for the integration course for the MPH degree program are provided in Appendix V.B. A summary of these guidelines is also provided here.

Prerequisites for the MPH Integration Project

In most cases, the integration course will be the last course taken by an MPH student. At a minimum, students are expected to have successfully completed all of their core courses and at least half of their specialty/generalist courses, including all of the methodologic and/or substantive courses that are required to prepare the student to undertake the integrative experience.

Requirements for Successful Completion of the MPH Integration Project

Each student selects at least three COPH faculty members to serve as his or her Integration Project Advisory Committee (IPAC), which guides the integration course for each student. The IPAC chair, who serves as the primary course advisor, should be selected by the student based on the IPAC chair's interest or expertise in the area of the student's project. Other IPAC members will collaborate with the chair and the student to guide the integration course experience. At least two COPH departments must be represented on the IPAC. The student must meet with the IPAC chair and/or full IPAC at regular intervals throughout the project period. The frequency of meetings may be determined by the chair and IPAC; however, a minimum of three in-person meetings is required during the project period.

The student must prepare an Integration Course Plan that must be approved by the IPAC chair and the student's faculty advisor prior to initiating integration course activities. The plan must outline the activities to be undertaken and the proposed product that will be presented at the end of the project period. Checklists and forms to assist students and IPAC members in the creation of an Integration Course Plan are provided in Appendix V.E.

The student must participate in the Integration Project Seminar, designed to provide students with guidance and support not only from COPH faculty but also from their peers who are also completing integration projects. The seminar consists of the following required meetings: (1) an initial "kick-off" meeting to discuss resources for and expectations of the integration experience and to form study, support, or sharing groups among students; (2) a mid-semester meeting to assess student progress and identify any problems that are interfering with student's progress; and (3) a "presentation day" at the end of the semester, at which students will present their final report to seminar students and faculty as well as interested others. The seminar will also include an on-line "conference" of enrolled students to link to resources and provide a question-and-answer "chat" to be monitored by a COPH faculty moderator.

Finally, the student must submit a successful final integration project product that reflects the student's ability to integrate the core areas of public health knowledge as they apply to a public health problem. This product, and its accompanying presentation during the Integration Project Seminar, will be evaluated by the student's IPAC based on the extent to which it demonstrates the student's ability to define a public health issue; collect, summarize, and interpret information relevant to the issue; integrate the core areas of public health knowledge in the context of the issue; and communicate effectively in writing and orally. Examples of appropriate integration project products include a manuscript appropriate for submission to a peer-reviewed journal, a technical report appropriate for submission by a grantee agency to a funding or oversight agency, a research proposal appropriate for submission to a granting agency, a public policy proposal, or other products that are equivalent in scope and required effort and that allow faculty to assess the student as described above.

V.B.4.b. DrPH Capstone Experience

The Doctoral Practicum and permission of the DrPH Faculty Leadership Chair is required prior to the initiation of the Doctoral Capstone Seminar and the Doctoral Capstone Project.

Doctoral Capstone Seminar

The Doctoral Capstone Seminar is designed to support the development of the capstone proposal for the Doctoral Capstone Project, which should originate and evolve prior to and during participation in the Doctoral Practicum or field experience. The seminar provides opportunities for workshops on

preparing, implementing, and completing a capstone project; an outlet for peer support; and a venue for the proposal and defense of DrPH Capstone Products.

Faculty Advising and Proposal Development

DrPH students will work with their DrPH faculty advisor and the Chair of the DrPH Faculty Leadership Committee to select a faculty member who is willing to serve as Chair of the Capstone Project. The Capstone Project Chair will then be responsible for providing guidance to the student, including guidance in the selection of remaining committee members. A Capstone Project Chair must be a DrPH faculty member with a primary appointment in the COPH and with a minimum faculty rank of assistant professor. A minimum of two additional committee members will be included on the committee. These members must have either a primary or secondary appointment in the COPH and hold the rank of assistant professor or above. This committee will guide the student and assist with the direction of the Doctoral Capstone proposal. This committee will have the ultimate authority in the direction of the capstone project, thus data collection if applicable will not begin until the committee approves the proposed capstone project.

The Doctoral Capstone Project proposal's focus will be stated as a research, theoretical and/or case-based question and the content should address new approaches to existing problems or apply existing approaches to a new problem. The proposal should emphasize the application of established theories of public health science and/or management to an important problem facing the state of Arkansas. Additionally, the proposal will include a literature review to produce an analytical synthesis that demonstrates the student's ability to critically evaluate the relevant literature as it relates to understanding the issue and identifying potential solutions. The proposal must include a detailed methodology that will be utilized during the project, identifying overall design and specific procedures, including a description of the appropriate assessment and evaluation tools. Methodology may include quantitative analysis of primary or secondary data, including secondary analysis of large data sets; qualitative data collection and/or analysis; mixed quantitative and qualitative techniques; or policy analysis.

The student will present the proposal to their Capstone Project Committee for approval, and then upon their approval, will present their proposal in the Doctoral Capstone Seminar.

Requirements for Successful Completion of the Doctoral Capstone Project

The Doctoral Capstone Project is a culminating experience that requires the student to synthesize and integrate knowledge by applying learned theories and principles to an area of public health practice relevant to the health needs of Arkansans. The Doctoral Capstone Project should demonstrate the candidate's mastery of the skills and knowledge required to lead an important health-related program, to create a substantial change in policy for the public's health, or to develop new methods that accomplish either of these two goals. The Doctoral Capstone Project will be a written product to be submitted and may take the form of a traditional dissertation, three manuscripts suitable for publication in a national-level public health journal, a technical report with supplemental materials, professional-level case studies from initiation to completion, and/or other similar scholarly documents approved by the DrPH Faculty Leadership Committee. The student may select among three emphasis tracks: community-based participatory public health; health policy change; management/leadership and/or the combination of these tracks. Other options for emphasis tracks must be approved at the proposal stage by the DrPH Faculty Leadership Committee.

Upon completion of the project and its written report, the Doctoral Capstone Committee Chair will work with the candidate to prepare a refined draft for an oral and public defense. The Chair will

authorize the candidate to distribute copies of the refined draft to committee members. At the Capstone Committee members' option, the student may rehearse a preliminary defense in a closed meeting with only committee members; however, the final defense must be advertised and an open door policy will apply. Any member of the audience at a final defense will be permitted to question the candidate regarding the Capstone Project. The candidate's performance in the final defense will determine whether the project meets the criteria for a scholarly work as outlined above. Successful completion of the Capstone Project is determined by a majority vote of the Doctoral Capstone Project Chair and Committee members.

V.B.4.c. MHSa Capstone Experience

The administrative residency/directed study requirement serves both as the practicum and capstone requirement for the MHSa program. The focus of the administrative residency and directed study are on the application of material learned in the classroom to an administrative problem or setting and requires the student to integrate and synthesize across multiple domains in order to meet the needs of the agency or organization with which they are working. Assessment is based on the extent to which, in the judgment of both preceptor and faculty sponsor, the student has achieved those objectives.

V.B.5. Assessment of the extent to which this criterion is met.

The COPH meets this criterion. Students in all professional certificate and degree programs, including the Post-Baccalaureate Certificate, MPH, and DrPH programs, must successfully complete core courses in all five of the basic public health sciences areas, as well as complete additional coursework appropriate to their programs. Now that the MHSa program has transferred to the COPH (as of Fall 2006), MHSa students also complete coursework in these five areas. Students in the MPH, DrPH, and MHSa degree programs must also complete practicum placements and integrative experiences that ensure their capacity for applying public health concepts to public health concerns or problems using an integrated approach.

► CRITERION V.C: FOR EACH PROGRAM AND AREA OF SPECIALIZATION WITHIN EACH PROGRAM IDENTIFIED IN CRITERION V.A, THERE SHALL BE CLEAR LEARNING OBJECTIVES.

V.C.1. Identification of a set of learning objectives for each program of study identified in the matrix for V.A. If individualized learning objectives are used, identification of a sample set that is typical of each program of study and that can be verified through on-site inspection.

V.C.1.a. MPH Core Learning Objectives

The Master of Public Health's core learning objectives are intended to provide an introduction to public health concepts and methods for students who are already employed or will be employed in public health practice settings. The overall goal of the MPH program's core learning objectives is to provide students with sufficient knowledge and skills in public health so that they may effectively function in modern public health practice settings with multidisciplinary colleagues. The six core courses, Introduction to Public Health, Biostatistics I, Environmental and Occupational Health, the Health Care System, Introduction to Health Behavior and Health Education, and Epidemiology I, comprise the required (18) semester credit hour core for all MPH specialty tracks in the MPH degree

program. Upon successful completion of the core courses in the MPH degree program, students will be able to achieve each of the following learning objectives:

- Define the components of community-based public health practice
- Describe basic and contemporary issues of public health, including tools of community-based health assessment, surveillance, health promotion, disease prevention, policy, cultural competency, and ethics
- Demonstrate the ability to complete descriptive analyses as well as nonparametric, regression, multiple comparisons of means and analysis of variance for one- and two-factor experiment biostatistics for datasets
- Demonstrate an understanding of core statistical concepts, including database principles, basic probability principles, diagnostic test statistics, tests of hypotheses, sample-size estimation, and power of tests
- Describe the elements of the common chemical, physical, and biological hazards in the occupational and community settings, along with the ways in which these hazards are evaluated, controlled, and regulated
- Define the major components of at least two models of health behavior change, i.e., the Health Belief Model, Transtheoretical Model, Social Cognitive Theory
- Describe the organizational arrangements, financing, health status issues, health insurance, health manpower, cost of health care, quality of health care, access and regulatory issues of the health care delivery system in the United States
- Describe the core concepts of epidemiology, including its history and theoretical basis; measures of morbidity, mortality, disease transmission and risk; major study designs; measures of association; bias, confounding and interaction; evaluation of screening tests; inference; and causality

In a retreat for teaching faculty in Fall of 2005, COPH faculty reviewed the core competencies for public health as developed by the ASPH Core Competencies project. The faculty reached consensus that the ASPH Core Competencies should be used as a guide for the COPH's MPH Core Curriculum. Faculty responsible for teaching the MPH Core courses reviewed the ASPH Core Competencies against their course objectives and activities and determined that their courses already addressed over 90% of the competencies. Upcoming teaching faculty retreats planned for early Spring 2007 will continue the process of integrating the ASPH Core Competencies into the MPH Core Curriculum. At that time, the faculty plans to revise as appropriate the objectives for the MPH core curriculum.

V.C.1.b. Generalist MPH Learning Objectives

The objective of the generalist MPH curriculum is to provide students with an opportunity to design a program of study that addresses their professional interests and goals, grounded in the core competencies for public health professionals as defined by the Conference on Linkages between Academia and Public Health Practice. Students choose six courses (in addition to the core courses, the preceptorship, and the integration course), representing at least three COPH departments, which are related to these interests and goals. Each student who elects the generalist MPH curriculum works with a faculty advisory committee (one chair and two other members, representing at least two COPH departments), who assist the student in developing a set of five or more learning objectives for his or her program of study. Students are encouraged to identify key professional competencies, such as a subset of those identified by the Council on Linkages between Academia and Public Health Practice, to guide the formation of their learning objectives. The student's six chosen generalist courses must address the student's program learning objectives. The student's learning objectives and associated program of courses, signed by all three members of the student's faculty advisory

committee, must be filed with the COPH Student Administrative Advisor prior to registering for non-core courses. A form, “Generalist MPH Learning Objectives and Course Plan,” provides a structure for recording this information, and is available in the office of the COPH Student Administrative Advisor and in the COPH Course Catalog. If a student wishes to make changes to his/her learning objectives or course plan, a new “Generalist MPH Learning Objectives and Course Plan” form, with all required signatures, must be filed with the Student Administrative Advisor before registration for new courses. Samples of generalist MPH learning objectives are located in Appendix V.F.

V.C.1.c. Specialist MPH Learning Objectives: Biostatistics

There exists a plethora of new analytical and statistical techniques available in biostatistics. Many individuals getting academic degrees in biostatistics have little opportunity to enhance their education with courses from other disciplines in public health. Consequently, the need for individuals to be the link between public health researchers, and statistical programmers and biostatisticians is increasing. The objective of the MPH degree with a biostatistics concentration at the COPH is to train individuals to be the bridge between scientist, researcher, statistician, and programmer.

In addition to the objectives described in Section V.C.1.a. (above), students completing an MPH degree with a concentration in biostatistics will be able to:

- Evaluate the research question(s) and recommend the appropriate experimental design and statistical analysis techniques. Grounded in the basics of statistical **theory**, the student will determine the types of data needed (discrete or continuous), the best way to acquire the data (sampling and sample design), the most appropriate analysis techniques (classical inference, nonparametric, and/or statistical modeling) and the best way to report results (tables or graphs).
- Determine the best way to collect and store data. With a fundamental knowledge of **data management** techniques, students will be able to work with all types of data including the large and intricate federal and state databases often used by public health researchers.
- Perform basic data **analysis** and modeling. A concentration in biostatistics provides the student with skills to do descriptive and inferential analysis and the ability to work with Master and PhD biostatisticians on more complex analysis projects.
- Assist with the **technical programming** required. Students will have hands on experience with popular statistical programs such as SAS and SPSS and be able to use them in future projects. More importantly, students in the program will have the statistical foundation to provide full time programmers with the algorithms needed for more complex design and analysis projects.
- Apply their **skills** and **experience** as health policy analysts, researchers and statisticians in academic, consulting, clinical, industrial, and public sector careers.

V.C.1.d. Specialist MPH Learning Objectives: Environmental and Occupational Health

MPH students electing to emphasize Environmental and Occupational Health are trained to recognize, evaluate and communicate risks associated with health hazards occurring in community and occupational environments. Graduates are trained to function as independent investigators and as members of multidisciplinary teams.

In addition to achieving the learning objectives described in V.C.1.a, above, students graduating with an MPH with a specialty in Environmental and Occupational Health will be prepared to:

- Describe the purpose, history, and use of epidemiology and epidemiologic methods for evaluation of environmental health hazards
- Evaluate environmental and occupational health-related research questions and recommend the appropriate experimental design and statistical analysis techniques

- Explain the standard concepts and methods of environmental hazard evaluations, including measurements and prediction techniques, statistical interpretation of sampling results, use of exposure limits and development of sampling plans
- Describe the characteristics and effects of potential chemical, physical, biological and ergonomic hazards in community and occupational settings
- Describe the general procedures for reducing the impact of potential occupational and environmental hazards, including such techniques as airborne contaminant control, respiration protection, electrical and mechanical safety, noise reduction and hazardous material remediation
- Describe the toxicological basis for government regulation of environmental hazards to public health
- Explain the process of assessment of chemical and drug related toxicity within the context of a public health framework
- Describe the legislative basis and history of environmental and occupational health regulations
- Conduct environmental and occupational health-related research
- Participate as a member of multidisciplinary research or evaluation projects;
- Design appropriate research protocols
- Select statistical analysis methods and techniques
- Utilize epidemiologic methodologies

V.C.1.e. Specialist MPH Learning Objectives: Epidemiology

The Mission of the UAMS CPH Department of Epidemiology is to contribute to improving the health and promoting the well-being of Arkansans, by applying the principles and practices of epidemiology in education, research, and service. Students who successfully complete an MPH with a concentration in epidemiology must demonstrate proficiency in the following areas, in addition to those identified in section V.C.1.a., above:

(1) Technical Skills

- Identify, describe, and discuss the advantages and disadvantages of common research study designs
- Calculate, interpret, and know when to employ common epidemiologic measures of risk and of association
- Describe and differentiate among common types of bias, explain their effect(s) on study data and interpretation of study results, and discuss standard approaches for minimizing bias in the design, implementation, and analytic phases of research
- Design and develop procedures and materials for implementing an epidemiologic study in the field
- Demonstrate an understanding of current issues in human subjects protection as well as procedures to assure adherence to ethical and legal principles in epidemiologic research and practice
- Determine sample size and power for standard research designs
- Select and interpret the results of standard univariate and multivariate statistical techniques
- Carry out statistical analyses using common statistical techniques
- Draw appropriate inferences from epidemiologic data
- Read, interpret, and critically evaluate scientific literature
- Demonstrate facility in the use of common statistical software supported through departmental courses
- Describe the purpose, history, and use of epidemiology and epidemiologic methods

- Describe the current state-of-the-art and gaps in knowledge related to the student’s area of epidemiologic interest
 - Identify the principles and limitations of public health screening programs
- (2) Communications Skills
- Review and synthesize relevant scientific literature
 - Prepare, present, and communicate epidemiologic and other scientific information effectively to lay and professional audiences, orally and in writing.
- (3) Organizational, Management, and Leadership Skills
- Collaborate in planning, developing, and submitting a research (including evaluation) proposal for external funding
 - Collaborate in implementation of epidemiologic research
 - Collaborate in implementation of public health activities and interventions
 - Interpret and use epidemiologic data

V.C.1.f. Specialist MPH Learning Objectives: Health Behavior and Health Education

The MPH with a specialty in Health Behavior and Health Education provides students with depth of training in health behavior and health education program planning, implementation, management, and evaluation. Didactics and preceptorship experiences are designed to develop students’ abilities to select and apply appropriate and culturally responsive behavioral and social change strategies to enhance health within communities and at-risk populations.

Upon satisfactory completion of the MPH with a specialty in Health Behavior and Health Education, graduates will be able to achieve each of the following learning objectives by fulfilling the related academic requirements and by demonstrating competence within preceptorship and capstone experiences. These objectives are in addition to the objectives outlined in Section V.C.1.a, above.

- (1) Theory
- Identify, describe, and apply major theories and concepts that are utilized in educational and behavioral approaches to health enhancement and risk reduction
 - Describe how cultural, economic, and other demographic factors may influence health behaviors and individuals’ responses to various types of behavioral and educational programs and interventions
 - Select and apply appropriate health behavior theories and related concepts for public health interventions
- (2) Methods
- Describe the advantages and disadvantages of various intervention research methodologies, such as qualitative vs. quantitative approaches, or pre-experimental vs. quasi-experimental vs. randomized/controlled designs
 - Design and apply a survey to assess the impact of a specific health behavior on a given population in a public health setting
 - Describe scales, scores, norms, reliability, validity, scale construction, and item analysis as they apply to survey development in public health research

- (3) Evaluation and Assessment
 - Discuss the general framework for evaluating community-based interventions and methodologies, addressing qualitative and quantitative approaches as appropriate
 - Design appropriate process, impact, and outcome evaluation strategies for community-based health behavior intervention programs
 - Describe appropriate evaluation strategies for population-directed social marketing and health communication interventions
- (4) Application/Best Practices
 - Evaluate peer-reviewed and non-peer-reviewed scientific and technical reports of behavioral and educational health programs, and assess the programs' designs, methodologies, and evaluation strategies, as well as the validity of the reports' conclusions
 - Describe the problem definition, program planning, program implementation, and evaluation components of the community-based participatory research model.

V.C.1.g. Specialist MPH Learning Objectives: Health Policy and Management.

In addition to the learning objectives for the MPH core classes, students with a specialization in Health Policy and Management will understand skills and values relevant to management in the public health sector and policy formulation, analysis, and implementation appropriate to the discipline. Students will have the opportunity to take classes that provide the following knowledge and/or competencies:

- An understanding of structuring, marketing, positioning, and governing of public health agencies and related organizations to achieve optimum performance
- A basic understanding of financial management of public health organizations
- Exposure to leadership theory and interpersonal relations skills
- Opportunities to practice and improve written and oral communications skills
- An understanding of the management of human resources in diverse public health organizational environments
- An understanding of managing information for public health decision-making, and policy formulation, analysis and implementation
- An understanding of economic and financial analysis to support decision-making, and policy formulation, analysis and implementation
- An understanding of legal and ethical analysis applied to public health decision-making, and policy formulation, analysis and implementation
- An understanding of governmental health policy formulation, regulation, and impact
- An understanding of the health status of populations, determinants of health and illness, and managing health risks and behaviors in diverse populations
- A basic understanding of the management of change in public health and community organizations in diverse population, drawing broadly on the social and behavioral sciences
- A basic understanding of the assessment of quality in public health delivery, focusing on outcomes measurements, process/outcome relationships, and methods for process improvement
- An understanding of community health planning, development and evaluation of community-based public health programs

- The ability to identify, interpret, and implement public health laws, regulations, and policies related to specific programs.

V.C.1.h. Master of Science in Occupational and Environmental Health learning objectives.

Students in the Master of Science program in Occupational and Environmental Health are trained to recognize, evaluate, and control health hazards encountered in the occupational and community environment. The program is intended for students from a wide variety of backgrounds, including biology, chemistry, physics, engineering, environmental science, medicine, and nursing. The program is tailored for professionals already working in the occupational health field to further their education while continuing to work, as well as for full- or part-time students new to the field. Upon graduating from the Master of Science program in Occupational and Environmental Health, students will be able to:

- Describe the purpose, history, and use of epidemiology and epidemiologic methods for evaluation of environmental health hazards
- Evaluate environmental and occupational health-related research question(s) and recommend the appropriate experimental design and statistical analysis techniques
- Apply the standard concepts and methods of environmental hazard evaluation, including concentration measurement and prediction techniques, statistical interpretation of sampling results, use of exposure limits, and development of monitoring plans
- Describe the characteristics and effects of potential chemical, physical, biological, and ergonomic hazards, in both occupational and community settings
- Develop detailed plans and procedures for reducing the impact of potential occupational and environmental hazards, including such techniques as airborne contaminant control, respiratory protection, electrical and mechanical safety, noise reduction, and hazardous material remediation
- Describe the scientific basis within toxicology for governmental regulation of environmental hazards to public health
- Develop a plan for assessment of chemical and drug-induced toxicity within the context of a public health framework
- Describe the legislative basis and history of occupational and environmental health regulations.

V.C.1.i. MHSA learning objectives.

The mission of the MHSA program is to provide a quality graduate level educational experience designed to prepare students for careers as executives, administrators, managers, or staff specialists in health institutions or agencies involved in the provision, financing, regulation, or insuring of health care; to contribute through research to knowledge of the administration of health care delivery systems and to apply knowledge to health administration needs in the State of Arkansas and beyond. This broad mission is achieved by (1) providing a CAHME-accredited master's level integrated curriculum in health administration, (2) achieving teaching excellence in the classroom and in the design of the curriculum, (3) providing opportunities for faculty and student research on significant issues related to the administration of health care delivery, and (4) providing opportunities to clarify and work toward solutions to health problems facing the State of Arkansas and beyond. Thus, the program has seven major goals:

- To provide an accredited masters level integrated curriculum in health administration for full- and part-time students
- To promote teaching excellence in the classroom and in the design of the curriculum

- To provide opportunities for faculty and student research on significant issues related to the administration of health services delivery
- To provide opportunities for faculty and students to clarify and work towards solutions to health problems facing the State of Arkansas and beyond
- To support and participate in educational programs to enhance the skills of faculty
- To develop and maintain experiential opportunities for students in health services organizations and agencies
- To develop financial support for graduate students.

Now that the MHSA program has transferred to the COPH administration in Fall 2006, these learning objectives will be revised to address additional student competencies, including the incorporation of coursework in the core public health disciplines, as well as links with nationally-recognized learning objectives in the field.

V.C.1.j. DrPH in Public Health Leadership Learning Objectives

Students in the DrPH in Public Health Leadership program are mid- to upper-level practitioners in public health who desire more extensive training in the public health sciences, public health practice, and leadership skills necessary to respond to the rapidly shifting, sometimes unanticipated challenges of the public health and health care systems. The focus of the DrPH program is in developing public health leaders who can integrate public health science into public health practice, apply models and theories in public health to chronic and emerging issues in practice, and demonstrate leadership in working with public health teams. Upon completing the DrPH program in Public Health Leadership, students will be proficient in the following areas.

- Demonstrating a commitment to community-based public health principles, including the processes involved in engaging community partners in assessing needs, planning and implementing programs, and evaluating those programs
- Anticipating and responding to the public health related needs of a community, population, or other stakeholder group by utilizing sound epidemiologic and statistical approaches to identifying, collecting, validating, and analyzing relevant data regarding health status, health risks and behaviors, environmental factors, health resources and policies that affect the community
- Formulating and effectively communicating community health priorities based upon community data and established theories or models of health
- Identifying appropriate funding resources for public health programs, and describing approaches to successful grantsmanship
- Serving as a mentor and leader to the public health workforce in developing, implementing, and evaluating public health programs and applying current public health science to practice
- Demonstrating a commitment to ensuring cultural sensitivity and competence within oneself, the public health workforce, and community programs
- Evaluating political and ethical aspects of public health practice, and contributing as a leader to political and ethical processes that support quality public health principles
- Understanding mechanisms to mobilize the broad public health community in response to unanticipated emerging public health disasters or crises
- Applying systems level thinking to problems and issues in communities and organizations

V.C.1.k. PhD in Health Systems Research

The Ph.D. Program in Health Systems Research is designed to provide students with the theoretical and methodological foundations necessary to conduct creative and independent research on health systems, with the ultimate goal of identifying pathways to improved health system performance through evidence-based policy and management. The program's focus on health systems encompasses the mechanisms for organizing, financing, and delivering health services and public health interventions as well as the complex interactions among these mechanisms. The program uses a broad definition of 'health system' that includes the full constellation of governmental and non-governmental actors that influence population health, including health care providers, insurers, purchasers, public health agencies, community-based organizations, and entities that operate outside the traditional sphere of health. Doctoral work involves intensive and focused study in the theoretical disciplines and methodological strategies relevant to studying health systems and their impact, including economics, political science, law, sociology, operations research, and management sciences. Through this program students will develop scholarly expertise in these disciplines, advanced skills in quantitative research methods, confidence in their teaching, and a high standard of scientific integrity and professionalism.

The program's overarching objectives are to prepare graduates to:

- Identify important research questions and generate testable hypotheses using relevant social science theories that will lead to an enhanced understanding of the health system and avenues for improving its performance and outcomes
- Design and implement creative and rigorous studies of health systems, policies, and services using advanced quantitative research methods that will yield new and valuable knowledge to support health improvement
- Communicate research evidence to relevant stakeholders within the health system—including health professionals, policy makers, and community representatives—and assist these stakeholders in translating this evidence into clinical, administrative, policy, and community actions that improve health.

V.C.2. A description of the manner in which learning objectives are developed, used, and made available to students.

COPH faculty develop learning objectives for COPH degrees that are reviewed and approved by the Academic Standards Committee. Learning objectives for specialist degrees and department-specific degrees (e.g., MHSA, MS and PhD programs) are developed by departmental faculty, with an emphasis on the competencies needed to ensure scientifically sound skills in the knowledge sets, methodologies, analytic techniques, and program implementation approaches necessary for specialized public health practice. Learning objectives are used to guide the formation of course-specific objectives within each degree program or specialty track. Prior to being approved by the Academic Standards Committee, all course syllabi must include clear identification of how each course objective is linked to overall degree objectives. Faculty are also strongly encouraged to link their course objectives to nationally-recognized competencies, such as the Linkages Competencies or the ASPH Core Competencies, and demonstrate this connection in their course syllabi, to facilitate students' awareness of the programmatic objectives that are addressed throughout their curricula.

The relationship between individual courses and overall learning objectives is a cyclical one. As program objectives shift in response to changing state or national needs in public health practice or science (see section V.C.3, below), and as students provide feedback regarding course content and

processes, course objectives may be modified to ensure that overall training objectives are addressed. Similarly, as courses are modified to reflect state-of-the-art public health practice and science, faculty are expected to incorporate these shifts into departmental learning objectives as well. Learning objectives are made available to students in course syllabi, and through student-advisor interactions both with the COPH advisor and with faculty advisors. The objectives are also reviewed during the exit interview process for graduating students.

V.C.3. A description of the manner in which the school periodically assesses the changing needs of public health practice and uses this information to establish the learning objectives for its educational purposes.

The COPH has a commitment to ensuring that our degree programs meet the needs of public health practice and science. Therefore, the Academic Standards Committee, along with departmental faculties, are encouraged to remain engaged with public health practitioners and scientists throughout their areas of specialization, and to maintain ongoing discussions about integrating new perspectives into the COPH learning objectives. This is accomplished by participation in national, regional, and state public health-related associations, committees, forums, and conferences. In addition, the COPH actively seeks input from our practice-based faculty and students, our community partners, and external consultants. As one example, as the ASPH Core Competencies Development project identified and refined MPH-wide learning objectives, the Associate Dean for Academic Affairs led the teaching faculty in a retreat that had as our goals to review the ASPH Core Competencies, evaluate the extent to which the COPH MPH curriculum addressed these Competencies, and identify ASPH Core Competencies that should be further incorporated into the COPH MPH curriculum. Additionally, as the ASPH Education Committee discussed the Institute of Medicine report's recommendation to incorporate training in eight new content areas (informatics, genomics, ethics, communication, cultural competence, community-based participatory research, global health, and policy/law) into public health programs, the Associate Dean for Academic Affairs has brought these issues to the Academic Standards Committee, which continues to evaluate ways to include these areas in the COPH programs and to engage departmental faculty in discussing how learning objectives may be modified to include these areas, as appropriate. Additional teaching faculty retreats are planned for the 2007 Spring Semester to continue the process of reviewing and revising learning objectives for the MPH Core and the specialty tracks.

Student feedback is included in assessing the appropriateness of COPH learning objectives. First, student feedback on course evaluations regarding the appropriateness of course content and processes is provided every semester to faculty, department chairs, and COPH administration. In addition, the COPH has instituted exit interviews with graduating students, and these interviews include evaluation of their departmental learning objectives, the extent to which students feel that they achieved those objectives, and the relevance of those objectives to their anticipated work duties. This feedback is provided to the Academic Standards Committee and department chairs. As the COPH develops an alumni base, alumni surveys will also be utilized to evaluate perceptions of changing needs in public health practice and science.

V.C.4. Assessment of the extent to which this criterion is met.

The COPH meets this criterion. Faculty carefully develop the learning objectives for each program with emphasis on ensuring that students develop skills in the scientific and practical aspects of public health within their degree program focus. The COPH has a strong commitment to maintaining degree programs that reflect the state-of-the-art in preparing students for high-quality public health

practice, and has developed mechanisms not only to receive feedback from students, the practice community, and the ASPH, but also to incorporate that feedback into our learning objectives and programs.

- ▶ **CRITERION V.D: THERE SHALL BE PROCEDURES FOR ASSESSING AND DOCUMENTING THE EXTENT TO WHICH EACH STUDENT HAS ATTAINED THESE SPECIFIED LEARNING OBJECTIVES AND DETERMINING READINESS FOR A PUBLIC HEALTH PRACTICE OR RESEARCH CAREER, AS APPROPRIATE TO THE PARTICULAR DEGREE.**

V.D.1. Description of the procedures used for monitoring and evaluating student progress in meeting stated learning objectives.

V.D.1.a. Evaluation of MPH Student Progress

MPH student performance is evaluated in a number of ways, including: monitoring student performance in courses; reviewing students annually by faculty advisors; monitoring student performance during practicum placements and integrative experiences through individual consultation between COPH faculty, field faculty, and students; and evaluating the final written papers that result from the practicum and integrative experiences. Students must maintain a 2.85 grade point average to maintain good student standing in the program and to graduate from the program. As described in section V.C.2, all course syllabi are required to map the course learning objectives onto the overall objectives for the MPH program, and this mapping is reviewed by the Academic Standards Committee to assure that students in the MPH program have ample opportunity to meet overall curriculum objectives through the coursework and capstone experiences. Exit interviews with MPH students began in December 2003, soliciting student feedback on the link between coursework, practicum and integrative experiences, and achievement of learning objectives.

V.D.1.b. Evaluation of MS Student Progress

MS students in Occupational and Environmental Health are evaluated through: monitoring student performance in required and elective courses; assessing student performance in research practicum experiences through individual consultations between departmental faculty and students; and evaluating performance in the implementation, analysis and a final defense of their master's thesis research projects. Students must maintain a 2.85 grade point average to maintain good student standing in the program and to graduate from the program.

V.D.1.c. Evaluation of MHSA Student Progress

MHSA student performance is evaluated through: monitoring student performance in courses; annual review by faculty advisors; monitoring student performance during directed study or residencies through individual consultation between COPH faculty, residency advisors, and students; and evaluating the final written papers that result from the directed studies or residencies. Students must maintain a 2.85 grade point average to maintain good student standing in the program and to graduate from the program. Exit interviews with MHSA students will begin in Spring 2007 and will solicit student feedback on the link between coursework, residency experiences, and achievement of learning objectives.

V.D.1.d. Evaluation of DrPH Student Progress

DrPH students are evaluated in several ways as they progress through the program, including: monitoring student performance in required and elective courses; monitoring student performance in

practicum placements through consultation between COPH faculty, field faculty, and students; evaluating performance on written and oral comprehensive evaluations covering coursework in public health sciences, public health practice, and leadership; and monitoring student performance in implementing, analyzing, and presenting the final doctoral project through consultation between project committee members (a combination of COPH faculty and field faculty), the students' academic advisors, and the students. As described in section V.C.2, all course syllabi are required to map the course learning objectives onto the overall objectives for the DrPH program, and this mapping is reviewed by the Academic Standards Committee to assure that students in the DrPH program have ample opportunity to meet overall curriculum objectives through the coursework and capstone experiences. Structured exit-interviews are in development for doctoral students to be in place prior to the first graduation. Information collected will include student feedback on the link between learning objectives and the doctoral program components.

V.D.1.e. Evaluation of PhD Student Progress

PhD students will be evaluated through coursework, comprehensive examinations, faculty advisor review, and defense of a final project. Success in coursework is defined as maintaining a 3.0 grade point average; students who earn less than a 3.0 grade point average on core coursework for the PhD do not maintain good standing in the program and may not sit for the comprehensive examinations until the grade point average is raised to 3.0 or above. Students must pass the comprehensive examination, which covers all areas of core coursework in the PhD program, as graded by a committee of the PhD program's faculty, in order to progress to dissertation research. Successful defense of the dissertation project before the dissertation committee and members of the COPH and Graduate School faculties, and a cumulative grade point average on all coursework of 3.0 or above are required for final award of the PhD. Exit interviews will also be developed for doctoral students, soliciting student feedback on the link between learning objectives and the doctoral program components.

V.D.2. Identification of outcomes which serve as measures by which the school will evaluate student achievement in each program, and presentation of data assessing the school's performance against those measures over the last three years.

In addition to carefully monitoring individual student performance and supporting student progress, the COPH monitors degree completion rates, average and range of time to degree, overall job placement, and public health-related job placement rates. The Office of the Associate Dean for Academic Affairs, in collaboration with the Assistant Dean for Student Affairs, is responsible for this data collection. Because the COPH opened to students in January 2002, and because over 90% of our students are part-time students who are employed full-time, data with respect to degree completion, time to degree, and job placement are limited. Table V-5 reports degree completion rates, time to degree, job placement, and public health-related job placement for students by the academic year in which the student enrolled.

Table V-5. Graduation Rates & Time to Degree for Professional Degree Students*

	Degree Program	Academic Year 2001-2002	Academic Year 2002-2003	Academic Year 2003-2004	Academic Year 2004-2005	Academic Year 2005-2006
Students First Enrolled	NDS**	11	39	37	23	31***
	MPH	26	57	23	27	15
	DrPH	0	0	3	3	4
Students who Withdrew at Any Point During Degree	NDS	0	0	0	0	0
	MPH	0	6	0	0	0
	DrPH	0	0	0	0	0
Students who have Graduated as of 12/22/2005	MPH	14 (54%)	20 (35%)	3 (13%)	2 (7%)	NA
	DrPH	NA	NA	NA	NA	NA
Average Time to Degree	MPH	2.8 years (σ 0.58)	2.3 years (σ 0.47)	2.2 years (σ 0.57)	1.8 years (σ 1.0)	NA
	DrPH	NA	NA	NA	NA	NA
Graduates Employed within 3 Months	MPH	13 (93%)	19 (95%)	2 (67%)	2 (100%)	NA
	DrPH	NA	NA	NA	NA	NA
Graduates in Public Health Related Employment	MPH	10 (71%)	18 (90%)	2 (67%)	2 (100%)	NA
	DrPH	NA	NA	NA	NA	NA

*Students who started in the Post-Baccalaureate Certificate program but matriculate to MPH are counted as MPH throughout this table.
 **NDS = Non-degree seeking student; MPH = Master of Public Health; DrPH = Doctor of Public Health.
 ***Does not include new non-degree students who will begin Summer 2005-2006.

V.D.3. If the outcome measures selected by the school do not include degree completion rates and job placement rates, then data for these two additional indicators must be provided, including experiential data over the last three years. If degree completion rates, in the normal time period for degree completion, are less than 80 percent, an explanation must be provided. If job placement rates, within 12 months following award of the degree, are less than 80 percent, an explanation must be provided.

Employment rates among students from academic year 2003-2004 are less than 80% due to the fact that one of the three MPH graduates is now enrolled in a PhD program that disallows employment.

V.D.4. Assessment of the extent to which this criterion is met.

The COPH meets this criterion. Evaluation and support of student progress and degree completion are critical to our activities, and procedures are in place for each degree program to assure that students advance in a timely and productive manner towards completion of degree requirements and are well-equipped with the competencies needed by public health professionals. The COPH is committed to monitoring in a proactive manner the success of our graduates not only within our degree programs, but also in obtaining public health-related employment or placement in desired advanced-study academic programs. We have begun to benefit from feedback from our first cohorts of graduating students, who have proven to be quite invested in the COPH’s development, and this information is now being utilized to address the COPH curriculum and ancillary services.

- ▶ **CRITERION V.E: IF THE SCHOOL ALSO OFFERS CURRICULA FOR ACADEMIC DEGREES, THEN STUDENTS PURSUING THEM SHALL HAVE THE OPPORTUNITY AND BE ENCOURAGED TO ACQUIRE AN UNDERSTANDING OF PUBLIC HEALTH PROBLEMS AND A GENERIC PUBLIC HEALTH EDUCATION. THESE CURRICULA SHALL COVER AS MUCH BASIC PUBLIC HEALTH KNOWLEDGE AS IS ESSENTIAL FOR MEETING THEIR STATED LEARNING OBJECTIVES.**

V.E.1. Identification of all academic degree programs, by degree and area of specialization. The matrix in V.A may be referenced for this purpose

The COPH offers two academic degree programs; in addition to the MS in Occupational and Environmental Health (OEH), the PhD in Health Systems Research opened in Fall 2006 (see Table V-1).

V.E.1.a. Master of Science in Occupational and Environmental Health (OEH)

The MS in OEH was founded in 1990, with a grant from the Kellogg Foundation. The program was originally a joint program between UALR and UAMS, housed on the UAMS campus in the Graduate School, within the Department of Pharmacology and Toxicology (located in the UAMS College of Medicine). The program became exclusively based on the UAMS campus in 1997. During the initial planning for the COPH, the faculty within the MS program and the College planning committee members agreed that this program would be appropriately housed in the new COPH. In 2003, the COPH officially became the home of the MS program in OEH.

The OEH MS is designed to train students and health professionals in the recognition, evaluation, and control of health hazards encountered in the occupational and community environment and to provide educational opportunities to physicians and nurses seeking a career in occupational and environmental medicine. The full range of possible hazardous agents is covered, including chemical, biological, physical, and ergonomic risk factors. The program is intended for students from a wide variety of backgrounds including biology, chemistry, physics, engineering, environmental science, and nursing. The program is tailored for professionals already working in the occupational health field to further their education while continuing to work, as well as for full or part-time students new to the field. The master's thesis project may be based on either a laboratory research project or a field experience in which the student will have the opportunity to study the evaluation and control of specific health hazards in an actual community or workplace setting.

The OEH MS program consists of 36 credit hours; required courses include Environmental and Occupational Health, Biometrical Methods I, Principles of Toxicology in Public Health, Environmental Exposure Assessment, Quantitative Epidemiology I, Government Regulation of Environmental Health, Occupational and Environmental Hazard Control, and seminar. In addition, students must register for six thesis hours, and an acceptable thesis based on relevant field experience or independent investigative research is required. Additional courses in toxicology, pharmacology, instrumentation or other basic sciences may be taken as electives to fulfill the 36 credit hour degree requirements.

V.E.1.b. Doctor of Philosophy in Health Systems Research (HSR)

The PhD in HSR provides students with the theoretical and methodological foundations necessary to conduct creative and independent research on health systems, with the ultimate goal of identifying pathways to improved health system performance through evidence-based policy and management.

The program's focus on health systems comes as a direct response to the urgent need within Arkansas to address large and persistent gaps in the quality, efficiency, and accessibility of health services and public health interventions for populations across the state. Closing these gaps will require new approaches for organizing, financing, and delivering health services that can only be identified through timely and insightful research applied within Arkansas' health care and public health delivery systems. Improving the performance of Arkansas' health system will require a larger base of evidence on how best to organize, finance, and deliver health services across the state and region, along with the skills necessary to translate this evidence into effective health policies and health management strategies. The PhD in HSR will build a cadre of scholars in Arkansas and throughout the mid-South region who have the institutional knowledge and methodological skills necessary to develop and apply this evidence within the health system.

The HSR PhD is modeled after several existing training programs in health services research and health policy located at other universities across the country. We chose to structure the program around "health systems research" rather than the narrower field of "health services research" in order to allow for scientific inquiry that goes beyond the study of health care service delivery to encompass the many other activities, organizations, and processes that influence health—including the public health system, the health insurance system, education and social service systems, labor markets and economic systems, and health-related activities in other spheres of human endeavor.

The HSR PhD allows students to specialize in one of two disciplinary areas of research, including health economics and quality and health outcomes research. A total of 70 credit hours are required for completion of the degree, and applicants must hold an MPH or related master's or doctoral degree. The PhD can be completed within a three-year period of full-time study and must be completed within seven years. Five core areas of coursework are required during the first two years of the program: (1) nine credit hours of coursework in health system theory and applications; (2) 13 credit hours of course work in health system research methods; (3) 15 credit hours of course work in a disciplinary concentration (health economics, or quality and health outcomes research); (4) six credit hours of course work scholarship skills (grantsmanship and peer review, and instructional methods); and (5) nine credit hours of directed research conducted in conjunction with faculty in the Ph.D. program. Upon completion of this coursework students will be required to pass a doctoral candidate examination demonstrating mastery of all five core areas before progressing to dissertation work.

Doctoral candidates will be required to complete 18 hours of dissertation research in conjunction with a Doctoral Advisory Committee of faculty. As part of the dissertation research process, candidates must first successfully develop and defend a proposal of their dissertation, and subsequently develop and defend the dissertation research itself. The dissertation must represent valid, independent research conducted by the candidate that makes a significant contribution to health policy, health system management and practice, and/or health system research methodology.

V.E.2. Identification of the means by which the school assures that students in research curricula have the opportunities and are encouraged to acquire a public health orientation. If this means is common across the school, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

As part of the course requirements for the MS in OEH, students must complete courses in Biostatistics, Epidemiology, and Toxicology and Government Regulations, in addition to basic and

advanced coursework in Environmental and Occupational Health. Notably, several of these courses are cross-listed between the COPH and the Graduate School so that MS students may be enrolled in these classes at the same time as MPH students. Thus, students in the program are required to take courses in four of the five public health sciences. In the core area in which students are not required to take a formal course (Health Behavior and Health Education), students are exposed to behavioral health issues within related coursework. Worker behaviors influencing exposures and risk of injury, and methods to modify those behaviors, are addressed in two courses: Environmental and Occupational Health, and Occupational and Environmental Hazard Control. Students may also take one of several courses within the COPH Department of Health Behavior and Health Education (including Health Behavior Research, the MPH core course from this department) as an elective course within the MS program.

In the PhD program in HSR, successful applicants are expected to demonstrate a background in public health sciences, typically by holding an MPH or related master's degree. The PhD is strongly focused on developing student skills in the discipline of health systems, but the curriculum also is designed to encourage interdisciplinary learning within the public health sciences. Several courses, including research methods, public health grantsmanship and funding, and advanced health policy and management, are shared among the PhD program and the DrPH program. Seminars are also designed to foster the understanding of how the scientific curriculum of the PhD program can be applied to the range of public health problems and issues faced within the State and beyond.

V.E.3. Identification of the culminating experience required for each degree program. If this is common across the school's academic degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

The MS in OEH requires successful completion of a final comprehensive examination, as well as successful completion and defense of a master's thesis, to receive the degree. The master's thesis project may be based on a field experience in which the student will have the opportunity to observe actual workplace problems, or it may be a laboratory research project conducted under the direction of a UAMS or National Center for Toxicological Research faculty member. The master's thesis committee must be composed of three faculty members (the chair and two others with related experience or expertise) at a minimum. However, students are encouraged to include community practitioners with expertise in the thesis area as additional committee members.

For the PhD in HSR, as part of the dissertation research process, candidates must first successfully develop and defend a proposal of their dissertation, and subsequently develop and defend the dissertation research itself. The dissertation must represent valid, independent research conducted by the candidate that makes a significant contribution to health policy, health system management and practice, and/or health system research methodology. The Committee must include at least five faculty members—including at least three COPH primary faculty members—all of whom must have UAMS Graduate School standing. The Committee must be chaired by a COPH primary faculty member with Graduate School standing. At the time the Committee is appointed, notification of the committee membership must be forwarded to the Graduate School Office. With a program's submission of an outside member form and C.V. to the Graduate School office, and approval of the UAMS Graduate Council, one person who is not a UAMS Graduate Faculty member may serve as a required committee member but not as chair. The dissertation research may include analysis of existing, secondary data and/or analysis of primary data collected by the candidate. Acceptance of the dissertation proposal will require approval by all members of the Doctoral Advisory Committee after

the candidate's oral defense of the proposal. Acceptance of the dissertation and award of the Ph.D. will require approval by at least 80% of the Doctoral Advisory Committee after the candidate's oral, public defense of the dissertation.

V.E.4. Assessment of the extent to which this criterion is met.

The COPH meets this criterion. The MS in Occupational and Environmental Health provides students with a significant orientation to the majority of public health sciences as part of its curriculum. The PhD program in Health Systems Research offers considerable interdisciplinary learning opportunities, with an emphasis on the application of scientific skills to public health problems and issues, and require dissertation research that addresses the health policy aspects of public health issues.

► CRITERION V.F: THE SCHOOL SHALL OFFER AT LEAST ONE DOCTORAL DEGREE, WHICH IS RELEVANT TO ONE OF THE FIVE SPECIFIED AREAS OF BASIC PUBLIC HEALTH KNOWLEDGE.

V.F.1. Identification of all doctoral programs offered by the school, by degree and area of specialization. The matrix in V.A. may be referenced for this purpose. If the school is a new applicant and has no active doctoral program, a description of plans and a timetable for offering a doctoral program must be presented, with university documentation supporting the school's estimate.

As shown in Table V-1, the COPH currently offers the DrPH in Public Health Leadership and a PhD in Health Systems Research. The DrPH is a college-wide, interdisciplinary degree that emphasizes the application of skills in community-based public health research and practice and of leadership skills to public health problems facing Arkansas. Fifteen students in four annual cohorts are currently enrolled in the DrPH program, with the first cohort expected to complete comprehensive examinations in Fall 2006. The PhD in Health Systems Research, jointly administered per UAMS policy by the COPH and the UAMS Graduate School, is led by faculty in the COPH Department of Health Policy and Management, and was approved by the UAMS Board of Trustees in January 2006, and students first enrolled in the program in Fall 2006. The COPH anticipates that we will graduate our first doctoral students from the DrPH program in May 2008, and our first doctoral students from the PhD program in May 2010.

V.F.2. Assessment of the extent to which this criterion is met.

The COPH meets this criterion. We have developed and implemented a professional doctoral program that provides advanced-level study in the core public health sciences, public health practice, and public health leadership. Students in the DrPH program are completing comprehensive examinations in Summer and Fall 2006. The College also has developed an academic doctoral program that emphasizes the public health sciences of health systems which has enrolled two students for Fall 2006.

CRITERION V.G: IF THE SCHOOL OFFERS JOINT DEGREE PROGRAMS, THE REQUIRED CURRICULUM FOR THE PROFESSIONAL PUBLIC HEALTH DEGREE SHALL BE EQUIVALENT TO THAT REQUIRED FOR A SEPARATE PUBLIC HEALTH DEGREE.

V.G.1. Identification of joint degree programs offered by the school and a description of the requirements for each.

The COPH offers no joint degree programs as defined by the University of Arkansas. Joint degree programs are “blends” between two programs, but stand alone as programs separately approved by the Arkansas Department of Higher Education. Students receive one diploma for completing a joint degree program.

However, the COPH does offer combined degree programs, in which the degrees remain separate from one another, although some courses count toward both degrees. (The number of transfer credits accepted within the different combined degree programs varies, with a maximum of 20%–25% overlap.) The student is admitted to each degree program separately, receives two diplomas, and abides by the policies of each program. The combined degree programs currently offered by the COPH in conjunction with our institutional partners include the JD/MPH (with the UALR Bowen School of Law), the MD/MPH (with the UAMS College of Medicine), and the PharmD/MPH (with the UAMS College of Pharmacy). Preliminary planning is underway to develop a MSW/MPH (with the UALR School of Social Work).

V.G.1.a. JD/MPH

The UALR William H. Bowen School of Law and the COPH offer a combined JD/MPH degree program leading to the JD and the MPH degrees. There are currently five students enrolled in the JD/MPH program. Students must be admitted separately to both programs and may elect either the generalist or any available specialty track for the MPH degree. Students in this combined degree program complete all requirements of the MPH. Up to 15 credit hours of selected School of Law courses may be applied toward the MPH degree. The list of courses in the School of Law that are approved as potential transfer credits for the MPH degree is reviewed and approved biannually by the COPH Academic Standards Committee (chaired by the Associate Dean for Academic Affairs) and the UALR Bowen School of Law Associate Dean for Academic Affairs (see Appendix V.G).

V.G.1.b. MD/MPH

The UAMS Colleges of Medicine and Public Health offer a combined MD/MPH degree program leading to the MD and the MPH degrees. Student admission to the COPH is separate from that to the MD program, and students are required to meet all degree requirements of the MPH. There are currently nine students enrolled in the MD/MPH program. Students may elect either the generalist or any available specialty track for the MPH degree. Up to 18 credit hours of selected medical college coursework may be applied toward the MPH degree. The list of courses in the medical college that are approved as potential COPH credits for the MPH degree is reviewed and approved biannually by the COPH Academic Standards Committee and the College of Medicine Executive Associate Dean for Academic Affairs (see Appendix V.H).

V.G.1.c. PharmD/MPH

The UAMS Colleges of Pharmacy and Public Health have recently established a combined PharmD/MPH degree program leading to the PharmD and the MPH degrees. Students must be admitted separately to each program and are eligible to pursue the generalist track in the MPH program. Twelve credit hours of selected College of Pharmacy courses are expected to be applied toward the MPH degree. The list of approved courses is reviewed and approved biannually by the COPH Academic Standards Committee and the College of Pharmacy Curriculum Committee (see Appendix V.I). One student is currently enrolled in the PharmD/MPH program.

V.G.2. Assessment of the extent to which this criterion is met.

The COPH meets this criterion. For all combined degree programs offered by the COPH, requirements for admission and degree completion are the same as for the separate public health degree. Future combined degree programs will maintain this policy.

- ▶ **CRITERION V.H: IF THE SCHOOL OFFERS DEGREE PROGRAMS USING NONTRADITIONAL FORMATS OR METHODS, THESE PROGRAMS MUST A) BE CONSISTENT WITH THE MISSION OF THE SCHOOL AND WITHIN THE SCHOOL'S ESTABLISHED AREA OF EXPERTISE, B) BE GUIDED BY CLEARLY ARTICULATED STUDENT LEARNING OUTCOMES THAT ARE RIGOROUSLY EVALUATED, C) BE SUBJECT TO THE SAME QUALITY CONTROL PROCESSES THAT OTHER DEGREE PROGRAMS IN THE SCHOOL AND UNIVERSITY ARE; AND D) PROVIDE PLANNED AND EVALUATED LEARNING EXPERIENCES THAT TAKE INTO CONSIDERATION AND ARE RESPONSIVE TO THE CHARACTERISTICS AND NEEDS OF ADULT LEARNERS. IF THE SCHOOL OFFERS NONTRADITIONAL PROGRAMS, IT MUST PROVIDE NEEDED SUPPORT FOR THESE PROGRAMS, INCLUDING ADMINISTRATIVE, TRAVEL, COMMUNICATION, AND STUDENT SERVICES. THE SCHOOL MUST HAVE AN ONGOING PROGRAM TO EVALUATE THE ACADEMIC EFFECTIVENESS OF THE FORMAT, TO ASSESS TEACHING AND LEARNING METHODOLOGIES, AND TO SYSTEMATICALLY USE THIS INFORMATION TO STIMULATE PROGRAM IMPROVEMENTS.**

V.H.1. Identification of all degree programs that are offered in a nontraditional format, including those offered in full or in part through distance education in which the instructor and student are separated in time or place or both. The matrix in V.A may be referenced for this purpose.

The COPH does not offer any full degree programs through a nontraditional format; however, it does offer selected courses through distance learning methods. Those degree programs that require courses that may occasionally be offered through these techniques are labeled as “mixed” traditional/non-traditional in Table V-1.

V.H.2. Description of the nontraditional degree programs, including an explanation of the model or methods used, the school's rationale for offering these programs, the manner in which it provides necessary administrative and student support services, the manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to traditional degree programs, and the manner in which it evaluates educational outcomes, as well as the format and methodologies.

The COPH encourages our instructors to offer courses, especially core courses, through distance-learning formats, in keeping with our Mission to serve the entire state of Arkansas. Offering at least some courses through distance-accessible formats, such as compressed video and web-based courses or weekend/executive scheduled courses, minimizes the potential that students who move to Little Rock to attend multiple classes might remain in Little Rock and not contribute to building a state-wide public health network across Arkansas' largely rural regions. Offering some courses through these

formats also minimizes the time and travel burden on currently employed public health practitioners across the state who wish to continue their employment while earning their degree. These distance-accessible courses are offered through compressed video, WebCT, or weekend/executive scheduling formats and focus on a collaborative-learning approach. Additional opportunities for collaborating with the DHHS Division of Health and utilizing the satellite links among all public health units throughout the state are being developed. Courses using this satellite technology will permit courses to be conducted “live” in the DOH Auditorium in Little Rock while students throughout the state may participate synchronously by linking in from any other public health unit in Arkansas. The COPH has already made a strong commitment to distance education as a means of facilitating statewide access to public health education in Arkansas, but is committed to continuing to expand this access. In February 2006, the College established the Office of Educational Technology, directed by Dr. Tom Rimmer (Department of Environmental and Occupational Health) and charged this Office with supporting COPH faculty in their continued use of educational technologies to provide high-quality education either through traditional or non-traditional formats.

Faculty who teach the courses in traditional format are the faculty for these nontraditional courses, and they individually ensure that the content of the courses is comparable between modes. Courses that are taught in non-traditional formats are carefully evaluated by Department Chairs and the Academic Standards Committee, and students in these courses complete course evaluations in the same way as traditional courses. As part of the exit interview process that has been developed for graduates, students will be surveyed regarding their satisfaction with any distance learning-based courses in which they were enrolled, as well as their evaluation of the success of the course in helping them meet course-related programmatic learning objectives. This feedback, along with the regular course evaluation data, will be used by faculty, departmental chairs, the Academic Standards Committee, and the Office of Educational Technology to support ongoing development and improvement of nontraditional and off-site courses.

V.H.3. Assessment of the extent to which this criterion is met.

The COPH meets this criterion by offering nontraditional courses for working public health practitioners. The ongoing introduction of distance learning-based courses into the COPH curriculum is a direct result of the implementation of the COPH Mission and is conducted in a manner that ensures the equivalence of courses between traditional and non-traditional formats. Ongoing evaluation of the nontraditional courses is in place.