Cross Cutting Competencies

- Define public health and articulate the elements in the public health approach to ensuring the health of our public;
- Explain the historical developments of the field;
- Explain the core public health functions;
- Explain how the core public health functions are operationalized at the global, national, state and local levels;
- Describe the public health infrastructure within the United States and beyond (global);
- Define the five core knowledge areas of public health: biostatistics, environmental health sciences, epidemiology, health policy and management, and social and behavioral sciences;
- Explain how state and local governmental public health agencies ensure availability of the ten essential services;
- Describe the history and current status of the interactions between medicine and public health;
- Explain the status of the public health workforce and efforts to expand and ensure the quality and diversity of this workforce;
- Articulate the current issues within the field.

Biostatistics Competencies

- Provide the biostatistical components of the design of a public health or biomedical experiment by: clarifying the research objectives or questions; determining data and endpoints to be collected appropriate for the objectives; translating the objectives into biostatistical questions via hypothesis testing or confidence interval frameworks; determining the appropriate sample size; and writing the statistical analysis section of the experiment.
- Apply appropriate statistical analysis methods using SAS to analyze both categorical and quantitative data.
- Develop written and oral reports to communicate effectively to research investigators pivotal aspects of a study, including its design, objectives, data, analysis methods, results and conclusions ensuring that results and conclusions are valid and reliable and address the research objectives.
- Create a collaborative environment for working on written and oral reports and developing critical thinking skills.
- Describe key concepts and theory underlying biostatistical methodology used in probability and inferential, analytical and descriptive statistics.

Environmental Health Competencies

- Describe major environmental health hazards (physical, chemical and biological), and assess their genetic, physiologic, and socio-economic impacts on vulnerable and susceptible populations with special emphasis on rural and underserved communities.
- Apply research ethics and current research principles, including hypothesis development, experimental design, and current research methodology, to the qualitative and quantitative measurement and analysis of environmental health hazards.
- Apply the outcomes of environmental monitoring and environmental impact assessments to prevent, mitigate and/or forecast future exposures to environmental hazards and utilize this information to support or advocate for environmental health policy development.
- Apply current health risk assessment methods, utilized by federal, state, and local regulatory programs, and non-governmental guidelines and authorities directed toward management of environmental hazards and provide technical assistance and leadership to address the concerns of communities including environmental justice and equity.
- Apply current research methodology for community based intervention studies, assessing exposure to environmental factors as well as for the identification, quantification, and understanding of potential adverse effects on human health and ecosystems that might result from complex exposure to environmental stressors.
- Communicate environmental health hazards and associated health outcomes to community, stakeholders and professional audiences through oral and written communication and community-based intervention studies.
Epidemiology Competencies
- Identify key sources of data for epidemiologic purposes.
- Identify the principles and limitations of public health screening programs.
- Describe a public health problem in terms of magnitude, person, time and place.
- Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues.
- Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.
- Apply the basic terminology and definitions of epidemiology.
- Calculate basic epidemiology measures.
- Communicate epidemiologic information to lay and professional audiences.
- Draw appropriate inferences from epidemiologic data.
- Evaluate the strengths and limitations of epidemiologic reports.

Health Policy and Management Competencies
- Define the main components and issues of the organization, financing and delivery of public health systems in the US and compare the economic, professional, social and legislative influences to include safety preparedness.
- Describe the legal, values and ethical dilemmas in public health that are inherent in efforts to control cost, while assuring access and quality of services for the public.
- Compare the policy development, assessment, and evaluation process for improving the health status of populations; compare the potential impacts of policy and management on the conduct of public health research and practice.
- Describe the principles of program development, management, budget preparation with justification and evaluation as related for public health initiatives; in that effort, define quality, cost benefit and performance improvement concept to address organizational performance issues in public health as well as trends in planning, resource allocation, and financing their effects on consumers, providers and payers in public health.
- Define principles of strategic planning and marketing in public health and define how “systems thinking” can contribute to solving public health organizational problems.
- Compare leadership skills for building partnerships in public health and demonstrate health policy and management effectiveness using appropriate channels and technologies.

Social and Behavioral Sciences Competencies
- Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.
- Identify the causes of social and behavioral factors that affect health of individuals and populations.
- Identify individual, organizational and community concerns, assets resources and deficits for social and behavioral science interventions.
- Identify critical stakeholders for the planning, implementation and evaluation of public health programs, policies and interventions.
- Describe steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions.
- Describe the role of social and community factors in both the onset and solution of public health problems.
- Describe the merits of social and behavioral science interventions and policies.
- Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.
- Apply ethical principles to public health program planning, implementation and evaluation.
- Specify multiple targets and levels of intervention for social and behavioral science programs and/or policies.

The Curriculum
The M.P.H. is an applied professional/graduate degree designed for highly motivated students who have a substantial interest in public health. Unique sequencing of courses, community-based program activities, and field/laboratory research provide students with multiple opportunities to develop the public health competencies.

The M.P.H. program requires a minimum of 45 credits and is offered on both a full-and part-time basis. The overall curriculum model includes:

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<th>Credit Hours</th>
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<tr>
<td>Public Health Core</td>
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<tr>
<td>Concentration</td>
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<tr>
<td>Electives</td>
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<tr>
<td>Practicum in Public Health</td>
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<tr>
<td>Integrated Capstone Experience</td>
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<tr>
<td>Total Credit Hours</td>
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In addition, all students are required to take an introduction to public health. An important practical experience in a public health venue is a field practicum in a community, a public health facility, a government agency, or related setting. The culminating experience is a course that requires the student integrate their specialization with public health practice.

Admission Requirements
Admission into the graduate program is competitive and based upon academic background, performance on the Graduate Record Examination (GRE), professional experience, interest in the field, a history of service, a personal statement, and letters of recommendation. All applicants must apply through the Schools of Public Health Application Service (SOPHAS).

Degree Admission Requirements

Regular
- Completion of an application in SOPHAS.
- Completion of a Bachelor’s degree from an accredited institution
- Minimum cumulative undergraduate GPA of 2.75/4.0 scale
- Official scores on the Graduate Record Examination
- TOEFL scores are required for international applicants
- A resume that includes the following:
  a. educational experiences,
  b. professional goals and objectives,
  c. work history,
  d. professional experiences, memberships and/or participation in professional organizations,
  e. experiences in public health programs
• Three letters of reference
• Statement of Purpose (500-1000 words) that conveys the applicant's reasons for pursuing graduate study in public health and how admission into the program relates to the applicant's professional aspirations

Provisional
Applicants may be admitted provisionally, based upon an evaluation of their application materials. Provisional admission is for applicants who do not satisfy requirements for regular admission, or those who require prerequisite coursework prior to entering a particular program of study.

Non-Degree Admission Requirements
An applicant may be admitted to the COGS as a non-degree student to earn credit hour in Public Health graduate courses without working toward the M.P.H. Interested applicants should consult the Jack N. Averitt College of Graduate Studies for the types of Non-Degree admission as well as the requirements for admission in this category.

Advisement: M.P.H.
Graduate students are advised by the Coordinator of Student Services and mentored by a faculty member from the Student's concentration areas.

Grades
M.P.H. level degree seeking students are required to maintain a cumulative GPA of at least 3.0 to remain in good academic standing and to be eligible to graduate. In the event the cumulative GPA falls below 3.0, the student will be placed on academic probation. Students have nine (9) credits to elevate the cumulative GPA to at least 3.0 or will be excluded from the program. Students earning grades of "D" or below will be excluded from the program.

Transfer Credit Hours
Students may request that up to, but no more than, six (6) graduate credits be applied toward the 45 credits required for the M.P.H. Transfer credit must also satisfy the same requirements as courses taught for masters training within the Jiann-Ping Hsu College of Public Health (e.g., minimum grade of "B"), be consonant with the student's approved program of study, and have been received from a regionally accredited college or university. Thesis and dissertation credits cannot be transferred. The student must provide documentation in support of equivalence, such as a course syllabus, transcript, term paper, and/or instructor testimony. Equivalence is determined by the Division Director. Credit hour reductions do not influence the residency and enrollment requirements or comprehensive examination procedures.

Course Time Limit
All requirements for the M.P.H. must be completed within seven academic years from the date of the first enrollment for study following admission to the master’s program. For transfer students, the seven-year time limit commences with the semester during which transfer credit hour was earned.

Experiential Learning Opportunities
All M.P.H. students are required to complete a public health practicum and complete the Integrated Capstone Experience. The practicum permits the student to receive practical experience in a selected public health-related setting. The practicum requires 300 hours of service. The Integrated Capstone Experience requires students to integrate basic principles and practices of public health in a case-based format.