

# BS in Public Health: Epidemiology (662543) MAP Sheet

Life Sciences, Public Health

For students entering the degree program during the 2023-2024 curricular year.



| University Core and Graduation Requirements                                         |          |          |                             | Suggested Sequence of Courses                                                                                                                                                                                                                                                                        |      |                                                                                                  |      |
|-------------------------------------------------------------------------------------|----------|----------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------|------|
| University Core Requirements:                                                       |          |          |                             |                                                                                                                                                                                                                                                                                                      |      |                                                                                                  |      |
| Requirements                                                                        | #Classes | Hours    | Classes                     | FRESHMAN YEAR                                                                                                                                                                                                                                                                                        |      | JUNIOR YEAR                                                                                      |      |
| Religion Cornerstones                                                               |          |          |                             | 1st Semester                                                                                                                                                                                                                                                                                         |      | 5th Semester                                                                                     |      |
| Teachings and Doctrine of The Book of Mormon                                        | 1        | 2.0      | REL A 275                   | 1st Year Writing OR A HTG 100                                                                                                                                                                                                                                                                        | 3.0  | HLTH 440**                                                                                       | 3.0  |
| Jesus Christ and the Everlasting Gospel                                             | 1        | 2.0      | REL A 250                   | Religion Cornerstone course                                                                                                                                                                                                                                                                          | 2.0  | Major elective                                                                                   | 6.0  |
| Foundations of the Restoration                                                      | 1        | 2.0      | REL C 225                   | HLTH 210                                                                                                                                                                                                                                                                                             | 3.0  | Religion elective                                                                                | 2.0  |
| The Eternal Family                                                                  | 1        | 2.0      | REL C 200                   | Arts or Letters elective                                                                                                                                                                                                                                                                             | 3.0  | MMBIO 221                                                                                        | 3.0  |
| The Individual and Society                                                          |          |          |                             | Global & Cultural Awareness elective                                                                                                                                                                                                                                                                 | 3.0  | General elective                                                                                 | 2.0  |
| American Heritage                                                                   | 1-2      | 3-6.0    | from approved list          | General elective                                                                                                                                                                                                                                                                                     | 3.0  | Total Hours                                                                                      | 16.0 |
| Global and Cultural Awareness                                                       | 1        | 3.0      | from approved list          | Total Hours                                                                                                                                                                                                                                                                                          | 17.0 | 6th Semester                                                                                     |      |
| Skills                                                                              |          |          |                             | 2nd Semester                                                                                                                                                                                                                                                                                         |      | HLTH 447**                                                                                       | 3.0  |
| First Year Writing                                                                  | 1        | 3.0      | from approved list          | 1st Year Writing OR A HTG 100                                                                                                                                                                                                                                                                        | 3.0  | Major elective                                                                                   | 3.0  |
| Advanced Written and Oral Communications                                            | 1        | 3.0      | WRTG 315 or 316 recommended | HLTH 312                                                                                                                                                                                                                                                                                             | 3.0  | CELL 210 or 220                                                                                  | 3.0  |
| Quantitative Reasoning                                                              | 0-1      | 0-3.0    | from approved list          | HLTH 313                                                                                                                                                                                                                                                                                             | 3.0  | Adv. Written & Oral Communication elective                                                       | 3.0  |
| Languages of Learning (Math or Language)                                            | 1        | 3.0      | STAT 121*                   | Religion Cornerstone course                                                                                                                                                                                                                                                                          | 2.0  | Religion elective                                                                                | 2.0  |
| Arts, Letters, and Sciences                                                         |          |          |                             | STAT 121 (Languages of Learning)                                                                                                                                                                                                                                                                     | 3.0  | General elective                                                                                 | 1.0  |
| Civilization 1                                                                      | 1        | 3.0      | from approved list          | General elective                                                                                                                                                                                                                                                                                     | 1.0  | Total Hours                                                                                      | 15.0 |
| Civilization 2                                                                      | 1        | 3.0      | from approved list          | Total Hours                                                                                                                                                                                                                                                                                          | 15.0 | SENIOR YEAR                                                                                      |      |
| Arts                                                                                | 1        | 3.0      | from approved list          | SOPHOMORE YEAR                                                                                                                                                                                                                                                                                       |      | 7th Semester                                                                                     |      |
| Letters                                                                             | 1        | 3.0      | from approved list          | 3rd Semester                                                                                                                                                                                                                                                                                         |      | HLTH 449*                                                                                        | 3.0  |
| Biological Science                                                                  | 1        | 3-4.0    | MMBIO 221*                  | HLTH 314                                                                                                                                                                                                                                                                                             | 3.0  | Civilization 1 elective                                                                          | 3.0  |
| Physical Science                                                                    | 1-2      | 4-7.0    | from approved list          | HLTH 345*                                                                                                                                                                                                                                                                                            | 3.0  | Religion elective                                                                                | 2.0  |
| Social Science                                                                      | 1        | 3.0      | from approved list          | Civilization 2 elective                                                                                                                                                                                                                                                                              | 3.0  | Arts or Letters elective                                                                         | 3.0  |
| Core Enrichment: Electives                                                          |          |          |                             | Social Science elective                                                                                                                                                                                                                                                                              | 3.0  | Physical Science elective                                                                        | 3.0  |
| Religion Electives                                                                  | 3-4      | 6.0      | from approved list          | General elective                                                                                                                                                                                                                                                                                     | 1.0  | General elective                                                                                 | 1.0  |
| Open Electives                                                                      | Variable | Variable | personal choice             | Religion Cornerstone course                                                                                                                                                                                                                                                                          | 2.0  | Total Hours                                                                                      | 15.0 |
| *THESE COURSES FILL BOTH UNIVERSITY CORE AND PROGRAM REQUIREMENTS (6 hours overlap) |          |          |                             | Total Hours                                                                                                                                                                                                                                                                                          | 15.0 | 8th Semester                                                                                     |      |
| Graduation Requirements:                                                            |          |          |                             | 4th Semester                                                                                                                                                                                                                                                                                         |      | HLTH 493***                                                                                      | 3.0  |
| Minimum residence hours required                                                    |          | 30.0     |                             | HLTH 315                                                                                                                                                                                                                                                                                             | 3.0  | Major elective                                                                                   | 3.0  |
| Minimum hours needed to graduate                                                    |          | 120.0    |                             | HLTH 316                                                                                                                                                                                                                                                                                             | 3.0  | General electives                                                                                | 6.0  |
|                                                                                     |          |          |                             | Major elective                                                                                                                                                                                                                                                                                       | 6.0  | Total Hours                                                                                      | 12.0 |
|                                                                                     |          |          |                             | Religion Cornerstone elective                                                                                                                                                                                                                                                                        | 2.0  | Prior to taking Hlth 493, the student must complete Hlth 210, 313, 314, 315, 345, 440, 447, 449. |      |
|                                                                                     |          |          |                             | General elective                                                                                                                                                                                                                                                                                     | 1.0  |                                                                                                  |      |
|                                                                                     |          |          |                             | Total Hours                                                                                                                                                                                                                                                                                          | 15.0 |                                                                                                  |      |
|                                                                                     |          |          |                             | Please check with departments for current availability of all courses.                                                                                                                                                                                                                               |      |                                                                                                  |      |
|                                                                                     |          |          |                             | We encourage students to take HLTH 440 and HLTH 447 as early as possible in the epidemiology emphasis to contribute to research opportunities and/or secure internship opportunities. HLTH 440, 447 and 449 should be taken in sequence; they should not be taken concurrently in the same semester. |      |                                                                                                  |      |
|                                                                                     |          |          |                             | * Offered FALL only                                                                                                                                                                                                                                                                                  |      |                                                                                                  |      |
|                                                                                     |          |          |                             | ** Offered FALL/WINTER only (not Spring/Summer)                                                                                                                                                                                                                                                      |      |                                                                                                  |      |
|                                                                                     |          |          |                             | *** Offered WINTER only                                                                                                                                                                                                                                                                              |      |                                                                                                  |      |
|                                                                                     |          |          |                             | Note: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, which could include spring and/or summer terms. Taking fewer credits substantially increases the cost and the number of semesters to graduate                                    |      |                                                                                                  |      |

## Program Requirements

### Requirement 1 —Complete 13 Courses

**Note: Prior to taking HLTH 493, the student must complete HLTH 210, 313, 314, 315, 345, 440, 447, 449.**

HLTH 210 - Foundations of Public Health 3.0

HLTH 312 - Intro to Plan, Interv, Eval 3.0

HLTH 313 - Intro to Data Coll & Analysis 3.0

HLTH 314 - Hlth, Disease & Determinants 1 3.0

HLTH 315 - Hlth, Disease & Determinants 2 3.0

HLTH 316 - Health Systems and Policy 3.0

HLTH 345 - Principles of Epidemiology 3.0

HLTH 440 - Statistical Computing in Epi 3.0

HLTH 447 - Introduction to Biostatistics 3.0

HLTH 449 - Epi Study Design and Analysis 3.0

HLTH 493 - Epidemiology Capstone 3.0

MMBIO 221 - General Microbiology 3.0

STAT 121 - Principles of Statistics 3.0

### Requirement 2 —Complete 1 of 2 Courses

CELL 210 - Human Anatomy (w/ virtual lab) 3.0

CELL 220 - Human Anatomy (with lab) 4.0

### Requirement 3 —Complete 6 hours

HLTH 322 - Environmental Health 3.0

HLTH 324 - Occupational Health & Safety 3.0

HLTH 420 - Injury & Violence Prevention 3.0

HLTH 450 - Women's Health 3.0

HLTH 456 - Families and Public Health 3.0

HLTH 460 - Substance Use Disorders 3.0

HLTH 466 - Hlth & the Aging Process 3.0

HLTH 480 - International Health 3.0

HLTH 481 - Applied International Health - *You may take up to 3.0 credit hours* 1.0v

NDFS 201 - Society Nutr Chronic Disease 3.0

NDFS 380 - International Nutrition 3.0

### Requirement 4 —Complete 12 hours

HLTH 199R - Global health Experiences - *You may take up to 3.0 credit hours* 0.5v

HLTH 434 - Adv Evaluation Methods 3.0

HLTH 482 - Medical Geography 3.0

HLTH 491R - Mentored Research - *You may take up to 3.0 credit hours* 0.5v

HLTH 492R - Directed Pub Hlth Readings - *You may take up to 3.0 credit hours* 1.0v

HLTH 494 - Program Planning Capstone 3.0

HLTH 496R - Academic Intern: EPI - *You may take 3 times* 0.5v

MATH 112 - Calculus 1 4.0

MATH 113 - Calculus 2 4.0

MATH 116 - Essentials of Calculus 1.0

SOC 300 - Methods of Research in Soc 3.0

STAT 124 - SAS Base Programming Skills 1.5

STAT 230 - Analysis of Variance 3.0

STAT 234 - Methods of Survey Sampling 3.0

STAT 240 - Probability and Inference 1 3.0

STAT 330 - Introduction to Regression 3.0

### Recommended Courses are not required to complete the program

WRTG 315 - Writing in the Social Sciences 3.0

WRTG 316 - Technical Communication 3.0

***Math 112, 113 are recommended for students who want a firm foundation in calculus and/or plan to pursue graduate education.***

## THE DISCIPLINE

Public health professionals work to create conditions that ensure the health and safety of individuals, families, and communities. Public health students are trained to inform, educate, and empower people about health issues;

mobilize communities to take ownership for their own health; monitor health status and diagnose and investigate health problems and health hazards; develop policies and laws to protect health and ensure safety; and link people to needed health services. The public health mission is carried out through organized, interdisciplinary efforts that address the physical, mental, and environmental health concerns of communities and populations at risk for disease and injury.

Four of several disciplines within public health are represented as emphases within the major: (1) the environmental/occupational health emphasis trains students to identify and control factors in the environment (air, water, food, toxins, etc.) or conditions at the workplace which affect health; (2) the epidemiology emphasis prepares students to investigate and discover what causes disease and disability and how diseases are spread or distributed across populations; (3) health promotion emphasis students are prepared to facilitate health behavior change among individuals and improves population health through policy, advocacy, education, and communication; and (4) the health science emphasis provides students with a strong public health foundation in the integration of public health with primary care and with other sectors, in cultural competency and health systems, health-related data analysis, and in upstream approaches to health inequities, particularly in vulnerable and diverse populations. Health science students pursue advanced degrees in medicine, dentistry, physician assistantship, or other allied health areas.

Epidemiologists are interested in understanding the distribution and determinants of disease, disability and other health related- events. Epidemiologists may be involved in planning and carrying out investigations or research studies to understand how disease or disability are distributed by person, place, and time factors and to identify genetic, behavioral, social, and environmental factors that either contribute to or prevent disease or disability. Epidemiologic investigations use data from surveys, interviews, and/or examinations to help answer these questions. As such, epidemiologists will spend time preparing and analyzing data to answer questions about disease distribution and determinants and communicating those results verbally and in writing.

## CAREER OPPORTUNITIES

Public health is an exciting field of study and a diverse and dynamic profession. It is filled with rewards associated with the pursuit of serving others. The development and delivery of population- based prevention programs will be the key to major advances in health improvement in the 21st century. Public health will continue to be called upon to monitor and assess health problems, prevent and control diseases and injuries, and protect the health of communities and worksites from various environmental and occupational risks associated with man-made and natural disasters and emergencies.

With the appropriate practice experiences, public health graduates have increased qualifications to work in governmental health agencies on the local and state level. Those wishing to work specifically in epidemiology generally require a master's degree. Likewise, jobs at the federal government and international levels often require work experience and a graduate degree. Private-sector employment can be found in a variety of businesses, community health agencies, managed care organizations, hospitals, clinics, research institutes, voluntary health agencies, and non-governmental organizations.

Opportunities for employment in public health are available, but recruiters will not typically come to campus to hire graduates. This means graduates must be organized and proactive in their career planning. Students can increase the likelihood of obtaining a position by balancing classroom

activities with voluntary or paid service to public health agencies. For epidemiology students, gaining experience with statistical methods and software applications may be particularly beneficial for success in finding entry-level positions.

While there are many specialties or disciplines in public health, most career opportunities are found in the tracks associated with the major. The skills acquired in the epidemiology emphasis can be applied in general public health jobs with widely variable salaries ranging from approximately \$35,000–\$60,00. Compensation will vary significantly depending upon the specific discipline, type of organization, and geographic location. However, entry-level salaries with a master's degree in epidemiology will range from approximately \$45,000–\$70,00 while those with more experience or a doctoral degree may earn more. More specific details about pay and careers in epidemiology can be found at <https://www.bls.gov/ooh/life-physical-and-social-science/epidemiologists.htm#tab-5>.

For more information on careers in your major, please refer to From Major to Career, a publication which is located in all college advisement centers.

## MAP DISCLAIMER

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

## DEPARTMENT INFORMATION

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## ADVISEMENT CENTER INFORMATION

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