



COURSE OUTLINE: HTH105 - BASIC EPID

Prepared: Kay Vallee

Approved: Rebecca Keown - Dean

Course Code: Title	HTH105: BASIC EPIDEMIOLOGY
Program Number: Name	3401: HONOURS BSCN 3405: BSCN BRIDGE
Department:	BSCN - NURSING
Academic Year:	2024-2025
Course Description:	This is an introductory level course and is intended to provide students with a working knowledge of the basic concepts and methods of epidemiology. Learners are required to integrate new and prior learning.
Total Credits:	3
Hours/Week:	3
Total Hours:	36
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. EES 3 Execute mathematical operations accurately. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 6 Locate, select, organize, and document information using appropriate technology and information systems. EES 7 Analyze, evaluate, and apply relevant information from a variety of sources. EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others. EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals. EES 10 Manage the use of time and other resources to complete projects. EES 11 Take responsibility for ones own actions, decisions, and consequences.
Course Evaluation:	Passing Grade: 50%, A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation &	In order for students to receive a final grade for HTH105, all evaluation components must be



Assessment Requirements: completed. Please refer to the evaluation processes and HTH105 learning activity package for additional information.

Books and Required Resources: Basic Epidemiology by Bonita, R., Beaglehole, R., Kjellstrom, T.
 Publisher: World Health Organization Edition: 2nd
 Free Online Resource

Supportive Readings

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
1. Understand basic epidemiology terminology and use epidemiological concepts to determine the health status of a population.	1.1 Define epidemiology in terms of its scope and application. 1.2 Explore the origins of epidemiology as a field of study. 1.3 Define key epidemiological concepts used in defining and measuring health and disease frequency (e.g. risk, prevalence, fatality, incidence, odds). 1.4 Understand the information available to measure health and disease and limitations. 1.5 Compare the occurrence of disease using absolute and relative methods.
Course Outcome 2	Learning Objectives for Course Outcome 2
2. Understand the basic concept of epidemiological studies including their uses and limitations.	2.1 Differentiate between study designs (e.g. observational: cohort, case-control, cross-sectional, experimental: randomized control trials, reviews: meta-analysis, best practice guidelines). 2.2 Describe the strengths and limitations of various epidemiological study designs. 2.3 Identify the basic components of an epidemiological study (e.g. research question, hypothesis, objectives). 2.4 Interpret the main results of epidemiological studies (e.g. relative risk, odds ratios, confidence intervals, p-values). 2.5 Examine basic biostatistics concepts and tools using descriptive and inferential statistics. 2.6 Discuss the utility of reviews and best practice guidelines (e.g. meta-analysis) in epidemiology.
Course Outcome 3	Learning Objectives for Course Outcome 3
3. Read, understand, and critically appraise epidemiological papers in literature.	3.1 Practice research literacy skills as applied to epidemiological studies. 3.2 Critically appraise the appropriateness of epidemiological study designs and adequacy of the methodology used. 3.3 Assess the rigour of epidemiological studies by evaluating sources of bias (e.g. selection, information, confounding). 3.4 Evaluate the generalizability of epidemiological studies. 3.5 Gain exposure to the steps in planning an epidemiologic research project.
Course Outcome 4	Learning Objectives for Course Outcome 4
4. Understand the basic concepts of chronic and communicable disease epidemiology.	4.1 Explore the chain of infection and how the different aspects play a role in growth, investigation, and control of epidemics. 4.2 Explore the concept of causation in epidemiology. 4.3 Explore the role of epidemiology in prevention of chronic

and communicable disease.
4.4 Define and discuss the levels of prevention relative to epidemiology.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignment	30%
Course Participation	20%
Final examination	25%
Mid-term examination	25%

Date:

May 9, 2025

Addendum:

Please refer to the course outline addendum on the Learning Management System for further information.

