

MASTER SYLLABUS

COURSE NO., HOURS AND TITLE: DH 440–3 Research Methodology

INSTRUCTOR: TBD

INSTRUCTOR CONTACT INFORMATION:

Telephone: TBD

E-mail: TBD

Office Location: TBD

Office Hours: TBD

COURSE DESCRIPTION: The course introduces the fundamental principles of research methodology with an emphasis on how these principles are applied for conducting research in the field of dental hygiene. A brief overview of the scientific method will be presented with a concentration on research planning, research designs, data collection, descriptive statistics, inferential statistics, and dissemination of research. Not for graduate credit. Prerequisite: DH 355, DH 355C.

COURSE OBJECTIVES:

Upon the completion of this course, the student will be able to:

1. Critique published articles in dental and non-dental journals by applying information presented in the text and in class
2. Discuss the parameters of the scientific method and evidence-based health research
3. Explain the scope of research planning including sampling, external validity, causation, and internal validity.
4. Compare and contrast true experimental research designs, quasi-experimental, and survey designs.
5. Describe single subject (system) and qualitative field research.
6. Identify data collection procedures that are appropriate for each research design.
7. Explain the statistical procedure that is appropriate for various research designs and research questions.
8. Explain the practical application the research findings have to clinical practice.
9. Apply appropriate protocol for developing and presenting a poster at a professional meeting.

CONTENT OUTLINE:

Topics	Percentages
I. Research Principles and Design	60%
A. Terminology	
B. Literature Review and Sources	
C. Human Subjects Protocol/IRB	
D. Data Collection (Qualitative and Quantitative)	
E. Analysis and Statistical Testing	
F. Dissemination of Findings (Reporting and Publishing)	
II. Critique/Critical Evaluation of a Research Article	20%
III. Development and Presentation of Poster at Professional Meeting	20%

TEXTBOOK:

Required:

Polgar, S. & Thomas, S.A. (2008). *Introduction to research in the health sciences (5th ed.)*. London: Churchill Livingstone.