Course Number and Name: Research Methods 4715

Course Type: Lecture
The majority of material will be presented in a lecture format. Class discussion will be encouraged to facilitate the student's comprehension of specific concepts in research methodology. Current scientific publications will be cited throughout the course and used as examples.

Course Director(s): Janice P. DeWald, BSDH, DDS, MS

Other Participating Faculty:
Lecture Ms. Patricia Campbell
Dr. Eric Solomon

Year/Semester Offered: Fall

Course Description: Identification of research problems and variables; sampling; research design; statistical testing of data; critical review of dental literature; table clinic development for presentation to the public and professional groups.

Course Goals:
1. To provide the student with a fundamental knowledge of the scientific methods employed in research.
2. To develop evaluative skills for the critical analysis of research proposals and scientific publications.
3. To develop ideas for a table clinic presentation and a research proposal.

Course Objectives:
1. Identify the purposes of oral health research.
2. Appreciate the role of the dental hygienist in oral health research.
3. Compare and contrast the following types of research: descriptive, historical, experimental, correlational, quasi-experimental and epidemiological.
4. Apply principles of the scientific method and scientific report writing to the evaluation of scientific publications.
5. Value legal and ethical concerns in oral health research.
6. Value the importance of research in dental health care.
7. Evaluate statistical techniques and the analysis of data.
8. Be able to critique research articles and make decisions on changes to dental and dental hygiene care.

Related Competencies:
Domain I - Professionalism:
1.1 Apply ethical reasoning to dental hygiene and practice with professional integrity.
1.2 Serve all patients and the community without discrimination.
| 1.3 | Provide humane and compassionate care to all patients. |
| 1.4 | Maintain honesty in relationships with patients, colleagues and other professionals. |
| 2.1 | Solve problems and make decisions based on accepted scientific principles. |
| 2.2 | Critically analyze published reports of oral health research and apply this information to the practice of dental hygiene. |
| 2.3 | Evaluate the safety and efficacy of oral health products and treatments. |
| 2.4 | Communicate professional knowledge verbally and in writing to patients, colleagues and other professionals. |
| 2.5 | Employ the principles of scientific writing. |
| 2.6 | Commit to self-assessment and life long learning to provide contemporary clinical care. |
| 3.2 | Expand and contribute to the knowledge base of dental hygiene. |
| 3.3 | Assume the roles of the profession (clinician, educator, researcher, change agent, consumer advocate, administrator), as defined by the ADHA. |
| 3.4 | Promote the values of the profession to the public and other organizations and professionals outside of dentistry. |

**Domain II – Health Promotion and Disease Prevention:**

5.3 Influence the public (consumer groups, businesses and government agencies) to support health care issues.

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**Evaluation Criteria/Methods:**
Exams -2  
Each exam is 35% of the final grade.
Table clinic– 30%

Assignments -2  
I will use your performance on the two assignments to round your end of course score to the next highest grade if applicable, e.g., 83.2 C+ to 84 B.

**Attendance Policy:**
There is no attendance policy but it is to your advantage to attend the lectures, participate in class discussions and hear announcements.

**Learning Materials:**

**Course Manual**

**Remediation Policy:**
If the student is eligible, remediation will occur during Spring Semester.