

Department of Clinical Laboratory & Medical Imaging Sciences Radiologist Assistant Program, BSMIS RIM & RIM Certificate MSRA 5400 Research for the Imaging Sciences

Course Description

The course is designed to teach students the basics of writing a paper in APA Style, search techniques, research methodologies, increase awareness of ethical standards related to publication, reporting standards for scientific writing, and recommended practices for communicating the results of scholarly inquiries. This course examines quantitative and qualitative research methodologies to prepare learners to apply them to a variety of research questions. Topics include an overview of the research process, developing problem statements, framing research questions, conducting a literature, and plagiarism.

Content aids in the development of inquiry, professional growth and research skills in support of evidence-based practice. Learning research skills and conducting research projects benefits the individual and the profession. The individual benefits by learning new knowledge and skills; the profession benefits by adding to the professional body of knowledge. One method of meeting this professional obligation is to review and synthesize professional literature or conduct research.

Credits/Modes of Instruction

3.0 Web Based

Prerequisites

General Requirements

The expectation is that students are graduates of an accredited entry level Radiologic Technologist program. Course content is delivered via the Internet; therefore, students are expected to be self-directed learners capable of functioning effectively in a distance learning environment.

Technical Requirements

Students should possess basic computer skills such as: Internet browsing and searching, emailing, word processing, and file transfer (uploading/downloading). Participants must also have remote (off-campus) access to Internet services: including at least Internet browsing capability and e-mail.



Course Goals and Objectives:

Goals

The goal of the course is to provide the tools necessary to get students involved in research. The tools will aid in the development of inquiry, professional growth and research skills in support of evidence-based practice. When students are versed in research skills and are able to participate in or conduct research projects the students add to the body of knowledge of the professions.

Objectives

The student will be able to:

- 1. Improve professional knowledge and clinical performance through research and self- reflection.
- 2. Evaluate current trends in health care and medical imaging.
- 3. Develop research skills.
- 4. Improve patient care and clinical outcomes through integration and dissemination of evidence- based research.
- 5. Apply ethical principles and legal requirements of research.
- 6. Conduct a comprehensive literature review for evidence of best practices.
- 7. Critique the research results for bias and study validity.
- 8. Analyze the validity of references.
- 9. Comprehend and utilize the correct method of APA style of writing.
- 10. Correlate "endnote" software with APA style of writing.
- 11. Select an adequate question for research topics.
- 12. Describe the structure of the manuscript, with a focus on function and format.