Undergraduate Degree Level Expectations for the Bachelor of Medical Radiation Sciences (BScMRS) Temerty Faculty of Medicine, University of Toronto

The Medical Radiation Sciences Program has implemented the degree level expectations outlined in the Ontario Council of Academic Vice-Presidents (OCAV) Guidelines, and the following details how these expectations are met for students attaining the degree requirements.

Depth and Breadth of Knowledge

Students develop a depth and breadth of knowledge and critical understanding of the key concepts, methodologies, current advances, theoretical approaches, and assumptions in medical radiation sciences, as well as in the stream-specific area of medical radiation sciences. Courses delivering foundational medical radiation sciences knowledge required in common by all three streams comprise the core curriculum. These core courses are interspersed throughout the curriculum and facilitates interdisciplinary learning across the three streams. Stream-specific courses allows for more in depth knowledge to be imparted, as well as stream-specific skills to be developed in the laboratory setting. A course dedicated to interprofessional education and collaboration has the students learning alongside, and develop an understanding of, other health care professionals and the role each plays in the care of the patient. Students develop the ability to gather, review, evaluate and interpret information throughout various courses in the program. A required foundational research course educates students on research methodologies, research ethics and critical analysis. This is then followed by an additional research course examining the influence of research in practice. An elective research methods course is available to students who wish to pursue clinical, evidence-based research.

Knowledge of Methodologies

Students acquire the practical knowledge to evaluate the appropriateness of differing approaches to solving problems using well established techniques. The development of clinical judgement encourages the students to assess the strengths and the shortcomings of various approaches to a clinical problem, allowing the student to rationalize their approaches to solving various problems. The field of medical radiation sciences is rapidly changing, and to ensure the students are kept abreast of current clinical developments and research, subject matter experts in practice contribute to the teaching of the medical radiation sciences students.

Application of Knowledge

The application of knowledge is scaffolded throughout the MRS program and students demonstrate the acquisition of that knowledge in a variety of settings. Lab based stream-specific courses allow the students the ability to demonstrate the application of knowledge on methodologies garnered through the didactic lecture courses. A dedicated clinical simulation semester further provides students the opportunity to develop their clinical skills in a safe learning environment, where they can apply their knowledge and improve their clinical skills. Students transition into the clinical learning environment to fully develop their competence (knowledge, skills, and judgement) and confidence within their stream-specific discipline.

Communication Skills

Throughout the program students are afforded the opportunity to develop their communication skills; written, verbal and non-verbal. The students participate in a variety of activities such as standardized patient interviews, group project work, presentations, portfolio, and individual reflective assignments which allows the students to frame ideas to disseminate information effectively.

Strong emphasis is placed on a student's ability to be able to communicate effectively and succinctly, as it relates to their stream of study within the MRS Program. Clinical simulation exercises, in addition to the experiential components of the program, provide students with the ability to demonstrate competency in interacting and teaching patients and their family members and developing collaborative skills required of a functioning member of the health care team.

Awareness of Limits of Knowledge

MRS students are supported to recognize and accept limitations in their knowledge, skills, and judgement and to seek guidance and feedback from the faculty and clinical practitioners. As a future regulated health care professional, students are encouraged to demonstrate a commitment to continuously improving their knowledge, skills, and judgement and to strive for excellence, in all aspects of their practice.

Autonomy and Professional Capacity

Students develop analytical, critical, and evaluative skills, which facilitates transferable skills across complex clinical contexts, for effective decision making and problem solving. Additionally, students develop the qualities required for effective teamwork, self-directed and lifelong learning, and employment by demonstrating initiative, personal responsibility, and accountability. Students are required to demonstrate several competencies, as defined by the Canadian Association of Medical Radiation Technologists (2014), related to ethical decision making and practicing in accordance with provincial Standards of Practice and Code of Ethics (College of Medical Radiation and Imaging Technologists of Ontario). The MRS Program requires students to adhere to the Code of Behaviour on Academic Matters to ensure students act with academic integrity.