



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Radiologic Technology Department

RA749 Practical Training in Nuclear Medicine And Computed Tomography - JNQF Level: 9

Second Semester 2022-2023

Course Catalog

3 Credit Hours. This course provides hands-on clinical experience in the application of nuclear medicine and computed tomography in diagnostic and therapeutic settings. Students will rotate through clinical departments, gaining practical skills in patient preparation, radiopharmaceutical administration, imaging acquisition, and post-processing techniques. Emphasis is placed on integrating NM and CT modalities in hybrid imaging systems (e.g., PET/CT, SPECT/CT) for accurate diagnosis and treatment monitoring. Key areas of focus include quality control, radiation safety, dosimetry, and patient care protocols. Students will engage in supervised practice to interpret clinical cases, collaborate with healthcare professionals, and develop effective communication skills in multidisciplinary settings. The course aims to bridge theoretical knowledge with clinical practice, fostering competence and confidence for professional roles in radiologic and nuclear medicine environments.

Teaching Method: On Campus

Text Book

| | |
|--------------------------|---|
| Title | Computed Tomography for Technologists: A Comprehensive Text |
| Author(s) | Romans LE. 2011 |
| Edition | 15th Edition |
| Short Name | ct |
| Other Information | |

Course References

| Short name | Book name | Author(s) | Edition | Other Information |
|------------|--|-----------------|-------------|-------------------|
| NM | Nuclear Medicine and PET/CT: Technology and Techniques | Waterstram-Rich | 8th Edition | |

Instructor

| | |
|-----------------|-------------------------------------|
| Name | Dr. Mustafa Alhasan |
| Office Location | Faculty of Applied Medical Sciences |

| | |
|--------------|---|
| Office Hours | Mon : 15:30 - 16:00 Tue : 14:30 - 16:30 Wed : 15:30 - 16:00 Thu : 12:30 - 13:30 Thu : 14:30 - 16:30 |
| Email | mkalhasan@just.edu.jo |

| Class Schedule & Room |
|--|
| Section 1: Lecture Time: Mon, Wed : 12:30 - 15:30 Room: HOSPITAL |

| Teaching Assistant |
|---------------------------|
| Rasha Elshayib(Section 1) |

| Tentative List of Topics Covered | | |
|----------------------------------|---------------------|------------|
| Weeks | Topic | References |
| Weeks 1, 2, 3, 4, 5, 6 | Training on CT scan | |
| Weeks 7, 8, 9, 10, 11, 12 | Training on NM | |

| Mapping of Course Outcomes to Program Outcomes and NQF Outcomes | Course Outcome Weight (Out of 100%) | Assessment method |
|---|-------------------------------------|-------------------|
| Gain practical skills on CT scan [1PLO M7] [1L9S1] | 25% | mid, final |
| Understand and discuss advanced CT imaging techniques [1PLO M1] [1L9K1] | 25% | mid, final |
| Gain practical skills on NM [1PLO M2] [1L9S3] | 25% | final |
| Understand and discuss advanced NM imaging techniques [1PLO M5] [1L9K3] | 25% | final |

| Relationship to Program Student Outcomes (Out of 100%) | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| PLO M1 | PLO M2 | PLO M3 | PLO M4 | PLO M5 | PLO M6 | PLO M7 |
| 25 | 25 | | | 25 | | 25 |

| Relationship to NQF Outcomes (Out of 100%) | | | |
|--|------|------|------|
| L9K1 | L9K3 | L9S1 | L9S3 |
| 25 | 25 | 25 | 25 |

| Evaluation | |
|-----------------|--------|
| Assessment Tool | Weight |
| | |

| | |
|-------|-----|
| mid | 60% |
| final | 40% |

| Policy | |
|------------------------------|---|
| Statement on Professionalism | Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during lecture, leaving a lecture prior to its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class. |
| Cheating | University regulations will be applied on cases of cheating and/or plagiarism |
| Cell phone | The use of cellular phone is prohibited in class rooms and during exams. The cellular phone must be switched off in class rooms and during exams. |
| Attendance | No points will be count for points attendance of this class, however attending the lectures will greatly enhance your grade. The student is responsible for any information discussed in lecture sessions. It is imperative to attend all classes! |
| Absences | University regulations will be applied. Students are not allowed to be absent for more than 20% of lectures for any reason or excuse. If a student exceeds the absence limit, he or she will not be allowed to sit for future course exams. (Please review university regulation for more details) |
| Make-up Exam | Make-up exams is entitled for students who miss the exam with accepted legal or medical excuse endorsed by the instructor within 24 hours after the scheduled exam (Please review university regulation for more details) |
| Feedback | Concerns, complaints, questions, and/or feedback are appreciated and will be important for the instructor. You can contact your instructor using the e-mail or during office hours |

Date Printed: 2024-10-29