Medical Dosimetry Professional Science Master's (PSM) Program Clinical Training Requirements

Pre-Clinical Screening:

Students must complete the pre-clinical screenings listed below within 12 months prior to enrolling in the clinical practicum. Upload the results of these screenings to Temple University's Patient Health Portal. These documents will be made available to the clinical settings upon request. For more information on the required immunizations, visit the Student Health Services website.

- Criminal background check from any background check vendor.
- Immunizations:
  - Meningococcal (meningitis) vaccine
  - Varicella (chickenpox) vaccine
  - Two vaccinations for Measles, Mumps, Rubella (MMR)
  - Tetanus/Diphtheria/Pertussis (Tdap) vaccination within 10 years or Tdap older than 10 years and Diphtheria/Tetanus (DT) within 10 years
  - Hepatitis A vaccine series
  - Hepatitis B vaccine series
  - Human Papillomavirus (HPV) vaccine series
  - Inactivated poliovirus vaccine (IPV)
  - COVID-19 vaccine
  - Influenza vaccine
- TB screening: Students can complete the Tuberculin Skin Test (PPD) in Student Health Services. IGRA blood tests are also acceptable.

Student Health Insurance:

Temple University requires all international students with F1 or J1 visa status to maintain health insurance. For information regarding the minimum coverage requirement, visit https://careers.temple.edu/hr-resources/our-functional-areas/benefits-administration/health-insurance-plans/student-health-0. All full-time graduate students have the opportunity to purchase one of Temple University's Student Health Insurance Plans at reduced group rates.

Radiation Safety:

Students must complete radiation safety training, including the principles of ALARA (As Low As Reasonably Achievable), before participating in clinical rotations. Upon completion, students are required to sign the Radiation Safety Training Acknowledgment Form (see Appendix D) and upload the signed form to Canvas. Radiation Protection is a topic sufficiently covered in many of the core courses, including PHYS 5103 - Ionizing Radiation on Living Systems and PHYS 5401 - Medical Dosimetry I. Additionally, students must receive a site-specific radiation safety orientation, which may be provided by the clinical preceptor or the clinical site's Radiation Safety Officer (RSO). Students must complete the form required by their assigned clinical site to receive their external

radiation monitoring badge (dosimeter). Students must wear the badge at all times while in the clinical department. Radiation safety expectations include:

- **No presence in treatment rooms during beam-on**: Students assisting in simulation or patient setup for treatment must not remain in the room during exposure.
- **Time, Distance, and Shielding**: When participating in brachytherapy or near radioactive sources, students are expected to apply proper time management, maintain safe distances, and use appropriate shielding.
- **Monitoring and Exposure Limits**: Records of badged student radiation exposure levels are maintained by the clinical site. Temple University's Environmental Health and Radiation Safety (EHRS) Department handles radiation exposure records for students enrolled in clinical training at Temple University Main Hospital. Exposure reports are available for review at EHRS and are distributed to badged students on an annual basis. If a student's reading exceeds the ALARA trigger level (see Policy 4.6) at any point, the student will be removed from the clinical setting, and an investigation will be conducted by the Radiation Safety Department or the RSO at the clinical training site. The student will be counseled by the Program Director and RSO before returning to clinical training.

MRI Safety:

Students must complete Magnetic Resonance Imaging (MRI) safety training prior to participation in clinical rotations at sites where MRI equipment is present. MRI safety content is covered in PHYS 5202 - Physics of Medical Imaging II. Upon completion of MRI safety training, students are required to sign the MRI Safety Training Acknowledgment Form (see Appendix E of the Student Handbook) and upload the signed form to Canvas. Students are also required to complete the MRI Safety Screening Protocol (see Appendix E2 of the Student Handbook) and upload the signed form to Canvas. Students must be aware that the MRI environment contains strong static magnetic fields that are continuously active, and these can present serious hazards to individuals with certain implants, devices, or metallic foreign bodies. Prior to entering any MRI environment, students must complete and submit a screening form to identify any potential contraindications. A student with any known or suspected contraindications must not enter the MRI environment until cleared by appropriate clinical personnel. Clinical sites may perform an additional MRI safety screening and/or orientation upon arrival. Students are expected to follow site-specific MRI safety protocols, including:

- Never entering the MRI suite without explicit authorization.
- Complying with all posted signs and safety warnings.
- Reporting immediately any implants, devices, or injuries involving metal.
- Following the instructions of the MRI technologists and the site safety officers at all times.

Pregnancy:

Students who are or suspect they may be pregnant are encouraged to review the U.S. Nuclear Regulatory Commission Regulatory Guide 8.13 – Instruction Concerning Prenatal Radiation Exposure and Temple University Policy for Pregnant Radiation Workers (Policy 4.9). A student is considered pregnant if, and only if, the student declares pregnancy in writing. The declaration of pregnancy is voluntary and may be withdrawn in writing at any time. A student who wishes to declare pregnancy must complete the pregnancy declaration form provided by the clinical training site. Students assigned to the Temple University Main Hospital must complete the Temple University's Declaration of Pregnancy form, available at the Radiation Safety Department (3307 N. Broad Street, # B49). Upon submission of this form, the Radiation Safety Department will:

- Evaluate the exposure history of the individual and her coworkers
- Provide information concerning risk and precautions
- Evaluate the working environment with respect to radiation exposure
- Make recommendations for reducing radiation exposure
- Monitor monthly radiation exposure following guidelines from the Nuclear Regulatory Commission (NRC) and the state of Pennsylvania

Additionally, the student must complete the Dosimetry Program Pregnancy Declaration Form (see Appendix F of the Student Handbook) and submit it to the Program Director, who will then arrange a meeting with the student to discuss options for school and clinical attendance. A declared pregnant student has the options to:

- Take a leave of absence (Appendix F of the Student Handbook, **Option A**). A Leave of Absence (LoA) allows an active student to interrupt enrollment without having to apply for re-enrollment and without changing the requirements of their degree program. Students who select this option will be readmitted to the program at the first available opening after delivery. For more information and for instructions on how to apply for LoA, visit https://registrar.temple.edu/leave-of-absence.
- Continue in the program with modified coursework and/or clinical training schedules (Appendix F of the Student Handbook, **Option B**). Declared pregnant students may consult with the Program Director to discuss the possibility of adjusting their course and/or clinical rotation schedules to reduce exposure risk or facilitate post-delivery recovery. Students who select this option should be aware that it may impact their education and potentially delay graduation, as some courses are only offered at specific times each year. Additionally, clinical hours cannot be made up by attending more than 10 hours a day (40 hours per week) or during holidays that are observed by the university. Time missed due to pregnancy and/or delivery will likely require completing missed coursework and/or clinical training in a different semester, which may extend graduation by up to a year.
- Continue coursework/clinical training without modification after signing a statement acknowledging risk (Appendix F of the Student Handbook, **Option C**). Students who select this option are strongly advised to consult their personal physician. Declared pregnant students whose delivery date falls within 10 days of the clinical rotation start date will not be eligible for this option, as they are likely to miss clinical training, which requires modification.

Direct supervision:

Direct supervision is required for all student participation in procedures involving patient contact or the generation of patient-specific data for treatment or clinical decision-making. A credentialed practitioner (e.g., Certified Medical Dosimetrist [CMD] or a Qualified Medical Physicist) must be present during the procedure to assist if necessary, review, and approve the outcome. This ensures patient safety, educational quality, and compliance with JRCERT standards. Students may observe only (without participating) when direct supervision cannot be provided. Direct supervision is required for any student involvement in procedures that include, but are not limited to:

- CT simulation and patient positioning
- Fabrication or use of immobilization devices
- Image registration and contouring for clinical use
- Treatment planning activities tied to an active patient case
- Patient-specific quality assurance preparation
- Any activity where a clinical decision may affect patient care

Attendance:

Students must arrive at their assigned clinical rotation on time and stay at the clinic for the hours specified by the schedule. Unexcused absences and tardiness demonstrate a lack of responsibility and professionalism, which are not tolerated. Three tardies of more than 10 minutes each count as one absence. Missing five clinical training days will lower the course grade by one letter (e.g., from A to B). Six or more unexcused absences will result in removal from the clinical training and the program. Students are responsible for notifying the clinical preceptor at least 30 minutes before the start of clinical training if they will be late or absent. All excused tardiness and absences must be made up. Students are allowed one personal day and one interview day and are not required to make up days missed due to the closure of the clinical site, such as for bad weather.

Clinical Curriculum Hours:

Students must track their clinical training hours using Trajecsys, a third-party online clinical management platform used by the Medical Dosimetry Professional Science Master's (PSM) Program. Students must clock in and out for each clinical training session, and clinical time records must be reviewed and approved by authorized clinical preceptors or program personnel.

A minimum of 880 clinical training hours is required to complete the program. Students are not permitted to attend clinical training for more than 10 hours per day, more than 40 hours per week, or on university-observed holidays.
A flat fee of $100 per student is required to use Trajecsys. Please follow the instructions below to register and obtain access.

1. Complete the registration form:
   - Registration page: https://www.trajecsys.com/programs/add_user.aspx
   - Educational Institution: Start typing "Temple" and select "Temple University - Medical Dosimetry Professional Science Master's (PSM) Program" from the dropdown menu.
   - Current/New Student: Select Yes.
   - Postal code: Enter the postal code for your home address.
   - Email: Use your Temple University email address.
   - Complete all other required fields, including creating a username and password.
   - Review your information for accuracy and submit the registration form.

2. Pay the $100 fee through the Trajecsys payment page:
   https://www.trajecsys.com/Payments.aspx

3. Obtain program access:
   - After registration, the program will authorize your student access.
   - Registration and payment do not replace this authorization step.

4. Log in to Trajecsys:
   - Once your student access has been authorized, log in at:
     https://www.trajecsys.com/programs/login.aspx
   - Important: Keep your login credentials secure and do not share your password with anyone. If you encounter difficulties with registration, payment, or account access, please contact Professor Kefene.

Dress Code:

Students are required to wear professional/business attire appropriate for a clinical setting. This includes neatly pressed, non-revealing clothes and dress shoes (no open-toe shoes). Students must also wear a white mid-length lab coat and the Temple University Student badge at all times. Students must maintain good hygiene, clean and neatly groomed or pulled back and fastened hair, and clean and trimmed fingernails (no longer than a quarter inch).