

# **Medical Dosimetry Program**

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# GRADUATE PROGRAM IN MEDICAL DOSIMETRY CLINICAL INSTRUCTORS HANDBOOK 2020-2021

8/10/2020

This handbook will be superseded by all versions bearing subsequent dates.

## TABLE OF CONTENTS

A. Preceptor Description	3
B. Clinical Instructor Description	3
C. Clinical Education Attendance	3
D. Student Direct Supervision	5
E. Competencies	5
F. Grading	5
G. Preceptor Perks	
H. Site Visits & Phone Calls	6
I. Clinical Instructor Meetings	6
J. Coursework	6
K. Research Project	6
L. Student Placements	7
M. Remote Clinical Education Policy	7
N. Contact Information	
Immediate Dismissal Policy	10
Above and Bevond Form	

#### A. PRECEPTOR DESCRIPTION

The Clinical Preceptor is designated by the clinical site and may include more than one person. Their resume is submitted with the JRCERT application for approval. The following are the duties and requirements given by the JRCERT:

#### **Clinical Preceptor Duties:**

- -Is knowledgeable of program goals
- -Understands the clinical objectives and clinical evaluation system
- -Understands the sequencing of didactic instruction and clinical education
- -Provides students with clinical instruction and supervision
- -Evaluates students' clinical competence
- -Maintains competency in the professional discipline and instructional and evaluative techniques through continuing professional development
- -Maintains current knowledge of program policies, procedures, and student progress

### Clinical Preceptor Requirements:

- -Is proficient in supervision, instruction, and evaluation
- -Documents two years clinical experience in the professional discipline
- -Holds Medical Dosimetrist Certification Board registration or equivalent. Equivalent qualifications are certification by the American Board of Radiology (ABR) as a radiation oncologist or the American Board of Medical Physicists as a medical physicist.

#### **B. CLINICAL INSTRUCTORS DESCRIPTION**

Clinical instructors are any staff that provides students with clinical instruction.

#### C. CLINICAL EDUCATION ATTENDANCE

Exact start and end times, lunch and break schedules, etc. are determined by the clinical education center. Clinical education centers are expected to schedule students for clinical hours for attainment of academic credit as specified by the program. Clinical experience hours must not exceed 10 hours/day and 40 hours/week (including class time and clinical hours) at any time and students must not receive compensation from the clinical education center as employees during student clinical hours. The JRCERT defines the operational hours of traditional programs as Monday - Friday, 5:00 a.m. - 7:00 p.m.

Clinical Education will be scheduled only during university class sessions. Clinical education schedules will follow the university calendar, including holidays, and breaks. No clinical education is scheduled between terms. Clinical Instructors may adjust the student schedule according to department patient load or special case availability with the approval of the program director. The current Grand Valley State University academic calendar available at <a href="https://www.gvsu.edu/registrar/academiccalendar.htm">https://www.gvsu.edu/registrar/academiccalendar.htm</a>

The students will be attending a virtual synchronous online class every Wednesday from 9am EST – 10am EST through video conference. The students will be excused from clinic during this time and will not be required to make-up the time up.

#### Schedule Rules:

- Lunch breaks do not count towards clinical hours. (For example: 8am-4:30pm, with a 30 minute lunch = 8 hours of clinical education.) A lunch break is required for more than 5 hours of clinical education.
- Clinical experience hours must not exceed 10 hours per day and the total didactic and clinical involvement to not more than 40 hours/week at any time (typical max is 32 hours per week during the semester).
- Students may not receive compensation from the clinical education center as employees during student clinical hours.
- Clinical hours can only be in 1 section per day and a minimum of 4 hours. During the designated lunch time, students cannot work as employees. (Meaning students cannot go back and forth between being an employee and student).
- Clinical hours must be directly supervised (staff must be present and able to train).
- The national dosimetry program accreditation agency, JRCERT, defines the operational hours of traditional programs as Monday Friday, 5:00 a.m. 7:00 p.m.
- Part-time students are required to do a minimum of 12 hours per week for the Fall semester, and 16 hours in Winter and Spring/Summer.

# CLINICAL ROTATION MASTER PLAN (Full-time Option)

- 1st term (Aug-December) 14 weeks x 3 days per week x 8 hrs per day = 336 clinical contact hours (42 days) Tuesday, Wednesday, Thursday\*
- 2nd term (Jan-April) -14 weeks x 4 days per week x 8 hrs per day = 448 clinical contact hours (56 days) Monday, Tuesday, Wednesday, Thursday\*
- 3rd term (May-August)- 12 weeks x 4 days per week x 8 hrs per day = 384 clinical contact hours (48 days) Monday, Tuesday, Wednesday, Thursday\*
- 4th term (optional) additional available time for students who have not completed all mandatory competencies or who require clinical support for theses/projects

Total = 1168 clinical contact hours (146 days or  $\sim$ 7.5 months of full time experience)

Additional clinical education may be required if all mandatory competencies are not achieved in three semesters or the student is approved by program faculty to attend clinical experience part-time. Part time clinical can be no less the half hours of full time option. These hours must be approved by the educational coordinator and program director prior to class registration. 8 clinical hours per week equals 1 semester credit.

\*Unless other arrangements have been made and approved by the Educational Coordinator and Clinical Instructors.

Clinical Education will be scheduled only during university class sessions. Clinical education schedules will follow the university calendar, including holidays, and breaks. No clinical education is scheduled between terms.

Students **may not** be in clinic when GVSU is closed (dates below). Also, note that if GVSU closes for any reason (weather, etc) students may not be in clinic.

September 7, 2020	Labor Day
November 26-27, 2020	Thanksgiving
December 24, 2020 – January 1, 2021	Holiday Break
May 24, 2021	Memorial Day
July 2, 2021	Independence Holiday

#### D. STUDENT DIRECT SUPERVISION

All Medical Dosimetry students shall be under direct supervision during their clinical hours. The JRCERT defines direct supervision as student supervision by a credentialed practitioner (e.g., registered radiation therapist, credentialed medical physicist, licensed radiation oncologist) during all aspects of the procedure. All medical dosimetry calculations and treatment plans must be approved by a credentialed practitioner prior to implementation and a certified person must be in the room during patient contact. Direct patient contact procedures (e.g., simulation, fabrication of immobilization devices, mold room etc.) must be also performed under the direct supervision of a credentialed practitioner. Under no circumstances shall any student ever provide indirectly supervised care or treatment of any patient.

Observation sites may be used to see the operation of equipment and/or procedures. These sites provide opportunities for observation of clinical procedures that may not be available at recognized clinical settings. Students may not assist in, or perform, any aspects of patient care during observational assignments.

#### E. COMPETENCIES

The student must successfully complete 22 mandatory clinical competencies and 5 optional competencies during clinical experience. Students are expected to observe a qualified medical dosimetrists or physicist perform each procedure, practice the procedure independently until they believe they can meet the competency expectations of an MDCB qualified medical dosimetrist, then request and pass at 100% level a competency on each of the identified mandatory procedures. Clinical competencies are achieved by performing planning on patient data for treatment delivery during clinical education. The competency will be done independently and in a reasonable amount of time. The observation and evaluation of the student's procedural skills is done by certified medical dosimetrists who are clinical preceptors, staff medical dosimetrists, or university faculty.

The student is responsible for notifying staff that they are ready to perform a competency. Competencies may be performed on new scans, previous scans or on scans in the GVSU database. Once competencies are graded, they are considered confidential and need to be kept secure until given to student (example: in a locked drawer).

Competencies may be signed by any of the Clinical Instructors (does not have to be the Preceptor), and the evaluator must be a Certified Medical Dosimetrist or Certified Medical Physicist.

#### F. GRADING

Grades are done by the GVSU faculty instructor. Students are responsible for uploading paperwork to Blackboard. There is no penalty for failing a competency. All failed competencies are uploaded to Blackboard.

#### G. PRECEPTOR PERKS

Clinical preceptors and instructors are eligible to sign up for the GVSU Preceptor Perks Program. The GVSU title for clinical preceptors are Affiliate Clinical Faculty. Follow the link to sign up for the program: <a href="http://www.gvsu.edu/vphealth/preceptor-perks-16.htm">http://www.gvsu.edu/vphealth/preceptor-perks-16.htm</a>

#### H. SITE VISITS AND PHONE CALLS

During each semester, the GVSU faculty instructor will be in contact (phone call) with the clinical instructors and students a minimum of three times. For new clinical sites, when possible, an in-person site visit will take place. If needed for any reason, more frequent communication will occur until the situation is resolved. Clinical instructors and students are encouraged to contact the GVSU faculty instructor or Educational Coordinator at any time.

#### I. CLINICAL INSTRUCTOR MEETINGS

Clinical Instructor Meetings are held once a semester by the Educational Coordinator through Zoom or Blackboard Collaborate. Attendance and feedback is encouraged, although the meetings are recorded for those who cannot attend.

#### J. COURSEWORK

Below are the courses the students are taking per semester. The syllabus for each course will be emailed to the clinical instructors.

Fall	Winter	Spring/Summer	
*STA 610 Applied Statistics for Health	*RMD 632 Medical Dosimetry II (3)	*RMD 670 Professional Issues in Medical	
Professions (3) (offered online or hybrid)	*RMD 633 Medical Dosimetry II Lab (1)	Dosimetry (3)	
*RMD 630 Medical Dosimetry I (3)	*PH 550 Public Health Epidemiology (3)	*PH 575 Quantitative Research in Public	
*RMD 631 Medical Dosimetry I Lab (1)		Health (3)	
*RMD 693 Medical Dosimetry Research	Project or *RMD 695 Medical Dosimetry Project or *RMD 695 Me Thesis (2-6)	*RMD 693 Medical Dosimetry Research	
Project or *RMD 695 Medical Dosimetry		Project or *RMD 695 Medical Dosimetry Thesis (2-6)	
Thesis (2-6)	RMD 662 Medical Dosimetry Clinical		
RMD 661 Medical Dosimetry Clinical	Education II (4) (56 days)	RMD 663 Medical Dosimetry Clinical III (4) (48 days)	
Education I (3) (42 days)		(10 days)	
Total: 12 credits	Total: 13 credits	Total: 12 credits	

#### K. RESEARCH PROJECT

If the student chooses to use clinical patient data for their Medical Dosimetry Research Project, Institutional Review Board (IRB) approval will have to be obtained from the clinical site and GVSU. The IRB process

typically takes about 3 months to complete. The students are encouraged to start the IRB process early and may require assistance from clinical staff. The student's advisor and GVSU's Associate Dean of Research will also provide guidance and assistance.

#### L. STUDENT PLACEMENTS

In an effort to bring equity to all students in the program, cost and experience, new equipment deliveries, procedures completed, and distance from campus are considered by the Program Director and Educational Coordinator when assigning students to clinical locations. Upon agreeing to take a student for the following cohort, clinical sites accept the student the Program Director places. Students will be allowed to request clinical sites based on their geographical location, but the ultimate decision for clinical placement will be nondiscriminatory and at the discretion of the Program Director and Educational Coordinator.

#### M. REMOTE CLINICAL EDUCATION POLICY

This policy is adopted due to the COVID-19 pandemic, and will only be in place during its duration. At any point, JRCERT or GVSU may update/create new policies which will require changes to this policy.

\*If students are allowed to be in clinic (by both the hospital and university), then they will be given the option of in-person or remote clinicals. There will be no penalty for choosing remote education. Students may do both remote and in-person during the semester, but first must have approval from the program director. Students must inform the Program Director of their option, and if they change at any point in the semester. If students are doing in-person clinical education, they *must* be proved the appropriate PPE by the hospital.

\*If any student is determined (or suspected) of not following the Remote policies, they will lose the privilege for remote clinical education and will have to complete their clinical education in-person once it's possible. This may cause a delay in graduation.

#### **JRCERT Policy:**

- Medical dosimetry programs may permit students to participate in remote clinical education that is delivered via distance education without JRCERT approval.
- Students must still be supervised appropriately according to the 2014 Standards for an Accredited Educational Program in Medical Dosimetry (Standard Four, Objective 4.4 Assures that all medical dosimetry calculations and treatment plans are approved by a credentialed practitioner prior to implementation).

#### **Direct Supervision**

- All medical dosimetry calculations and treatment plans must be approved by a credentialed practitioner prior to implementation.
- Students have to communicate (email, phone call, etc) to their clinical instructor when a clinical plan is ready to be reviewed (that will be used for treatment), so that the dosimetrist can review and approve the plan before implementation.
- To ensure direct supervision is occurring, students and their clinical instructor must be able to log into a video conferencing system that has the capability to share screens. The video does not need to be turned on, but the screen must be shared during plan review. See Communication section.

#### **Communication:**

- Must use a video conferencing system to share screens (Zoom, BB Collaborate, etc)
  - o Treatment plans have to be reviewed using this system.
- Verbal Communication Frequency: At a minimum, the students and clinical instructors must be verbally communicating twice a day. The students should receive communication of the following, at the beginning of their clinical day:
  - o Expectation for planning/workload.
  - O What should be accomplished by the end of the day.
  - When the instructor is available for questions.

#### **Attendance:**

- Students must follow their "Clinical Education Schedule Worksheet" that they have submitted. If their schedule changes, they still have to email the Program Director and Clinical Instructor for permission.
- The standard "Clinical Education Attendance Record" time sheet will still be used.
- It is also expected that students attend regular staff meetings that are now remote, as available and appropriate (tumor board, peer review, etc).

#### **Journals**

• In addition to attendance, students must journal a summary of their daily activity for each clinical day they attend. The journal must be a Google doc, and grant both the clinical instructors and GVSU faculty access. It should include the date and 1-2 sentences summarizing the activities of the day and completed every clinical day- do not include patient information. The journal will be checked by the GVSU faculty once a week.

#### **Planning System**

- Students must have access to a planning system to gain clinical hours. They can either use the hospitals' planning system or the GVSU Eclipse treatment planning system.
  - o If using the GVSU Eclipse treatment planning system, the clinical instructors also must have access.
- Competencies and clinical hours can be gained using practice patients / non-clinical patients.

#### **Documentation**

• All of the standard documents (attendance, evaluations, etc) will still be collected at the end of the semester.

#### **Elective Activities**

- 5 elective activities are still required. The exception is that activities that say "(Plan and Tx)", only the planning process will be necessary and not the treatment.
  - O Students may need to use the "clinical dosimetrist assignment". Some ideas are composite planning, re-irradiation, previous treatment, different body site planning than the required competencies, hand calculations, deformable fusion, ProKnow plans, etc.

#### **Hours and Competencies**

• Both the required number of clinical education hours and number of competencies for the semester must be completed either through remote education or in-person to gain credit for the course.

#### N. CONTACT INFORMATION

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## **Immediate Dismissal Policy**

I understand that all students are to be treated as students during clinical hours, even if they are employees. The following list of requirements must be adhered to at all times from all students. If at any time these policies are violated, it will result in **immediate dismissal from the program**.

- 1. Students are not allowed to "sign off" on any plans. This includes, but is not limited to, plans in the treatment planning system, electronic charts and paper charts. There must always be a supervising dosimetrists or physicist signing the plans.
- 2. Clinical hours can only be in 1 section per day and a minimum of 4 hours. During the designated lunch time, students cannot work as employees. (Meaning students cannot go back and forth between being an employee and student).
- 3. Students cannot change from their submitted Clinical Education Schedule Worksheet without prior approval from both the program director and clinical instructor.
- 4. Students may not receive compensation from the clinical education center as employees during student clinical hours.

I understand and agr	ee to this policy:		
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Printed Name	Preceptor Signature	Date	



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Grand Valley State University
Medical Dosimetry Program
Recognition
-Above and Beyond-

If you observe a Grand Valley student performing above and beyond expectations, please take a moment to complete the form below:

Student Name	Name of person that observed performance
Date	Clinical Educational Center
Description of the performance that is above and beyond	expectations
Clinical Instructor comments	
Clinical Instructors giornature	Data
Clinical Instructors signature	Date