**Medical Dosimetry Program**
Phone 616-331-5753
College of Health Professions
Center for Health Sciences
301 Michigan Street, Suite 410
Grand Rapids, MI 49503

# GRADUATE PROGRAM IN MEDICAL DOSIMETRY
# *STUDENT HANDBOOK 2024-2025*

5/31/2024
This handbook will be superseded by all versions bearing subsequent dates.

# Table of Contents

**Medical Dosimetry Program**
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## Statement of Understanding:

### Receipt of Student Handbook

I have received a copy of the current Student Handbook. It is my understanding that if I have any questions concerning material in this handbook I may contact any of the Grand Valley State University Medical Dosimetry faculty for further clarification. I am responsible for all the information contained in this handbook as well as any subsequent additions, and I understand and agree to follow the policies during my enrollment in the program, including all clinical education policies.

| Date | Student Signature | Printed Name |
|---|---|---|

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## Statement of Understanding:

### Student Physical Examination and Associated Information Release

I hereby give my permission for the release of my physical examination and associated information (including but not limited to laboratory results, TB skin test results, drug screening and background checks) to any GVSU Medical Dosimetry clinical education center to which I am assigned. I realize that I may rescind this permission by providing a written statement to that effect to the Medical Dosimetry Program Director/Clinical Coordinator but understand that any information previously released with my permission may be retained by the clinical education center that received it.

| Date | Student Signature | Printed Name |
|---|---|---|

Under the Federal Family Educational Rights & Privacy Act of 1974 (Buckley Amendment), students have the right to inspect and review any and all official records, files and data pertaining to them. Adequate and reasonable notice of intent to inspect must be given and access may require the physical presence of a university official during normal operating hours.

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## Statement of Understanding:

### Clinical Education and Hybrid Course Meeting Travel

By my signature below, I acknowledge my understanding of the following program travel requirements.

I acknowledge my understanding that my clinical education may include assignment to clinical education sites not located within reasonable driving distance from GVSU's Center for Health Sciences due to a hybrid program format utilizing remote clinical sites. Additionally, I understand that completion of assigned clinical hours does not include travel time and are my responsibility.

While it is the intent of the university to assure beneficial clinical experiences within reasonable travel distance for the student, the student should be aware that special travel accommodation is neither assured nor guaranteed.

Additionally, I acknowledge my understanding that the program follows a hybrid format that requires students to attend face-to-face course meetings at predetermined times during the program. While the university will work with the local community to assure the most reasonable financial cost to the student, it is the responsibility of the student to ensure that travel arrangements are made for attendance. Also, **attendance is mandatory** at onsite meetings to facilitate maximum educational benefit. Onsite meetings may be located at GVSU campus or an affiliated clinical site. Students will be given ample notice of meeting dates, times, and locations for onsite meetings. Additional onsite meetings may be required for JRCERT accreditation site visits.

| Date | Student Signature | Printed Name |
|---|---|---|

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## Statement of Understanding:

### Clinical Hours

By my signature below, I acknowledge my understanding of the following program clinical requirements.

I acknowledge my understanding that while I am documenting clinical hours I may not be paid as an employee at the clinical site. Additionally, I understand that during those clinical hours I must adhere to the GVSU Medical Dosimetry Student Handbook and JRCERT regulations.

I acknowledge my understanding that while documenting clinical hours I will adhere to the JRCERT direct supervision policy. 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. All medical dosimetry calculations and treatment plans must be checked and signed off by a certified dosimetrist or physicist before treatment delivery 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.

| Date | Student Signature | Printed Name |
|---|---|---|

**Medical Dosimetry Program**
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## Statement of Understanding:

### 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 certified dosimetrists or certified 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 GVSU Clinical Coordinator and the clinical instructor (this includes time changes greater than 30 minutes, change of location, day and remote/in-person).

4. Students may not receive compensation from the clinical education center as employees during student clinical hours. Students cannot be used as a replacement for employees.

I understand and agree to this policy:

| Printed Name | Student Signature | Date |
|---|---|---|

## MISSION STATEMENT

The program's mission is to provide graduates with the knowledge, clinical skills, and professional behaviors for a career in Medical Dosimetry. The goals of the program are to graduate students who will:

1. demonstrate clinical competence.
2. communicate effectively.
3. develop critical thinking and problem solving skills.
4. demonstrate professional behavior in clinic and the profession.

The program provides students opportunities to develop technical knowledge and personal skills necessary for a career in the radiation sciences. The curriculum is designed to combine compassion with integrity in order to shape a student into a professional. The program provides a unique learning environment which includes state of the art equipment. By recruiting the help of highly qualified Radiation Oncology faculty, students acquire skills necessary to become successful Medical Dosimetry Professionals.

### Student Learning Outcomes

The students/graduates of the Medical Dosimetry program will be able to:

1. apply didactic knowledge to treatment plans.
2. generate clinically acceptable IMRT/VMAT treatment plans.
3. communicate effectively with healthcare staff.
4. communicate effectively through written work.
5. evaluate, critique, and recommend changes to the radiation therapy plan as necessary.
6. participate in the development of optimal treatment strategies.
7. demonstrate professional behavior in the clinic.
8. engage in the medical dosimetry profession.

## JRCERT STATEMENT

The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The program adheres to the standards which are posted on their website. You have the right to notify the JRCERT if you believe the university is not adhering to these standards. The Standards are available for review at https://www.jrcert.org/accreditation-information/accreditation-standards-2021/. Additionally, a list of the current Standards can be found in the Appendix of this Handbook. The JRCERT may be contacted at 20 N. Wacker Dr.

Suite 2850, Chicago, IL 60606 -3182, phone 312-704-5300 or www.jrcert.org.

## NOTICES

Students are responsible for all information posted to email, class list servs, Blackboard pages and/or announced in class.

## ADDITIONAL COSTS

The following list, while not exhaustive, includes the additional costs beyond tuition, living, and travel expenses that are necessary for the medical dosimetry program:

- AAMD Student Membership ($80)
- Health Compliance (varies, minimum for Health Portal and Background Check- $60)
    - Health Portal $25
    - Background check $35
    - Drug Screen $45
- Textbooks (minimum $90)
- Technology Requirements (personal laptop, mouse, webcam, microphone, speakers and high-speed internet, calculator)
- Lab Coat (~$20)
- Optional: AAMD Annual Meeting

## ANTI-DISCRIMINATION POLICY

Note that the program adheres to university policies regarding student admission including policies regarding anti-discrimination toward all persons (See the current University Undergraduate and Graduate Catalog at http://www.gvsu.edu/catalog/ for policy details).

The university policy is also described below:
Grand Valley State University is an affirmative action, equal opportunity institution. It encourages diversity and provides equal opportunity in education, employment, all of its programs, and the use of its facilities. It is committed to protecting the constitutional and statutory civil rights of persons connected with the university.

Unlawful acts of discrimination or harassment by members of the campus community are prohibited. In addition, even if not illegal, acts are prohibited if they harass or discriminate against any university community member(s) through inappropriate limitation of access to, or participation in, educational, employment, athletic, social, cultural, or other university activities on the basis of age, color, disability, familial status, height, marital status, national origin, political affiliation, race, religion, sex/gender, sexual orientation, veteran status, or weight. Limitations are lawful if they are: directly related to a legitimate university purpose, required by law, lawfully required by a grant or contract between the university and the state or federal government, or addressing domestic partner benefits.

## OUTSIDE EMPLOYMENT

If a student plans on engaging in employment in addition to participating as a Medical Dosimetry student, the program recommends a schedule of less than 10 hours per week. Students should remember that academic and clinical schedules will not be revised for their employment requirements. Additionally, students must be aware that they cannot be paid as employees from their clinical site during student clinical education hours.

## TECHNOLOGY

Required for the successful completion of all clinical and didactic courses for each student is a personal laptop, webcam, microphone, speakers and high-speed internet that can be utilized by the student for remote access. The laptop must have virus protection, updated operating system, sufficient memory and be able to contain CITRIX access software. The student will be required to access the Internet and utilize treatment planning software and GVSU University Blackboard for assignment completion. A minimum screen resolution of 1920 x 1080 is required to see the entire Eclipse Treatment Planning program (an external monitor may be used to achieve the required screen resolution). The Medical Dosimetry Program uses Respondus Monitor for tests, quizzes and exams. Note: both Mac and PC Windows will work for the program, but some students have found that Mac's do not work as well with the treatment planning software (Eclipse). Chromebooks do not work with Eclipse and some institutions have firewalls that will block GVSU Eclipse.

## PROFESSIONAL CERTIFICATION

Students who receive a M.S. degree in Medical Dosimetry from GVSU will be eligible for the Medical Dosimetrist Certification Board (MDCB). While not required, the university expects students to sit for the MDCB Medical Dosimetry examination. It is difficult to practice Medical Dosimetry without the appropriate professional registration. More information on these examinations and your eligibility is available at https://www.mdcb.org/.

## STUDENT SAFETY POLICIES

Emergency Preparedness Manual: https://www.gvsu.edu/cms4/asset/4E1EDE14-CCD7-E36A-C1461EF14C472362/19f_nfo_emergency_preparedness_handout.pdf
Campus Safety: https://www.gvsu.edu/safety/
Emergency Preparedness: https://www.gvsu.edu/emergency/
Harassment: https://www.gvsu.edu/policies/policy.htm?policyId=7E08654A-ACE7-9AC9-5B933125DDA72033&search=harassment
Communicable Diseases: https://www.gvsu.edu/healthcompliance/
Substance Abuse: https://www.gvsu.edu/policies/policy.htm?policyId=78E189F7-E50F-4E48-1463A96500A74A3E

## ACADEMIC REQUIREMENTS

All students are also held to GVSU's Graduate Education Policies and Procedure Manual found at https://www.gvsu.edu/gs/policies-and-procedures-58.htm. Important policies

include:

- All graduate students are expected to maintain a minimum of a 3.0 graduate program grade point average at all times.
- The university may award a graduate degree only when a student meets all program requirements and their graduate program grade point average (GPA) is equal to or greater than a "B" (3.0) average.
- Credit at the graduate level will only be awarded for grades of C (2.0) or better. Grades below C will be calculated in a student's GPA, but the credits will not count toward the degree. Individual programs may have more stringent requirements, please refer to your specific program policies for more information.
- The student must fulfill all requirements for the degree within a period of eight consecutive years. The date of entry into the first graduate course counted towards the degree is viewed as the starting point of the eight-year period.

## Course Waiver Policy

From the Graduate Education Policies & Procedure Manual: "Course waivers are not acceptable in the Medical Dosimetry Program because nationally all programs are autonomous and meet the Accreditation Standards set forth by JRCERT in unique ways. Because of each program's individuality and uniqueness, individual courses are not equal across institutions, so medical dosimetry courses cannot be waived."

If an academic policy exception is made and approved (https://www.gvsu.edu/gs/exception-to-policy-requests-56.htm), students must still acquire the 38 credits required to graduate from the Medical Dosimetry Program.

## Grade Scale

Course grades are assigned as follows per university policy.

| Passing Grades | Failing Grades |
|---|---|
| 100.0 - 94.0% A | 79.9 - 78.0% C+ |
| 93.9 - 90.0% A- | 77.9 - 74.0% C |
| 89.9 - 88.0% B+ | 73.9 - 70.0% C- |
| 87.9 - 84.0% B | 69.9 - 68.0% D+ |
| 83.9 - 80.0% B- | 67.9 - 60.0% D |
| | 59.9 - 0.0% F |

Grades are taken to one decimal point and are not rounded up or down.

## Standards of Achievement

1. For each program required course or discrete unit of instruction in the professional curriculum, a minimum proficiency level of 80 percent on all course evaluations as described in each RMD course syllabus is required. A minimum course grade of "B-" or higher is required for passing all RMD courses. In addition, the GPA must never drop below 3.0 in any semester or the student may be placed on academic probation or dismissed from the program. Demonstration of completion of the 38 credits in the professional curriculum is required for the student to be granted the M.S. in Medical Dosimetry degree.

2. Credit at the graduate level will only be awarded for grades of C (2.0) or better. A minimum proficiency level of C (2.0) is required for non-RMD courses in the program.

3. Course Failure/ Repeats Policy in the Medical Dosimetry Program Courses at GVSU
    a. Courses required for completion of the professional program may be repeated only once (all RMD and non-RMD courses).
    b. Clinical education that needs to be repeated will be scheduled only when clinical positions are available at sites with university clinical education agreements. Students may be required to attend a different clinical site location than their original placement.

## Academic Probation, Remediation Policy and Dismissal

A graduate student who is at risk of, or does not achieve a course grade of "B-" or higher in an RMD program required course, a "C" in a non-RMD course, has a cumulative GPA fall below 3.0 in any semester, when there is concern for the academic, clinical or professional behavior, or meets any of the ground for dismissal qualification will be referred to the RMD Remediation Committee. The committee will determine if the student shall be placed on programmatic academic probation or dismissed from the program. This policy does not constitute grounds for university probation, but only applies to the Medical Dosimetry Program. Program probationary documents will not become part of a student's university record on student transcripts.

> Probation is a status that can be assigned to students who have had academic or professional (behavioral) problems (both didactic and clinical education courses) and have been referred to Remediation Committee for disciplinary action.
>
> Remediation Committee is comprised of the Program Director and Clinical Coordinator. The purpose of the Remediation Committee is to monitor the progress of students, both individually and collectively.

### Grounds for Dismissal from the Medical Dosimetry Program

Any one of the following items, but not limited to, **will** constitute grounds for dismissal from the program:

i. More than 1 course grade of "B-" or lower in an RMD course, or a "C" in a non-RMD course.
ii. Failure to complete remedial work, as specified in the remediation contract.
iii. Any violation of the Clinic Immediate Dismissal Policy.

Any one of the following items, but not limited to, **may** constitute grounds for dismissal from the program:

i. Not achieving a grade of "B-" in a clinical education course (RMD 661, 662, 663).
ii. Two consecutive semesters of probation.
iii. Receiving one or more "Usually Not True" marks on a Clinical Evaluation of Student Form in a clinical education course (RMD 661, 662, 663).

iv. Evidence of unethical or illegal behavior.
v. Dismissal from the clinical education site.
vi. Any violation of the University, Graduate School, or Program policies

### Procedure

The Remediation Committee will assemble for any student in danger of dismissal from the program and then contact the student in question to discuss the issues at hand. The final decision regarding dismissal will be made by the Program Director. The Remediation Committee will generate a written document that includes:

- summary account of the meeting
- the circumstances under which the meeting was convened
- detailed steps for remediation and/or dismissal action
    - remediation may include, but not limited to:
        - remedial work
        - additional assignments
        - retaking the courses
        - additional courses outside of the RMD curriculum
        - additional clinical hours
- signatures of both the Program Director and student

During the period of probation, the Program Director or Clinical Coordinator will monitor the student's progress; however, the student is ultimately responsible for completion of the terms of the remediation plan.

### Appeal Process

Should a student decide to appeal a decision for dismissal, the student must submit a written appeal to the Program Director within 30 days after receiving the letter of dismissal. The defense should contain any new information which the student may have and a clarification of old information. The defense will be considered by the Program Director in consultation with the Clinical Coordinator within 15 days of receipt of the appeal letter and a decision given to the student. If the student is still not in agreement with the plan, then the student may elect to appeal their dismissal with the university. Refer to the University Catalog Student Academic Grievance Procedures for further details.

### Readmission

Students who have been dismissed from the Medical Dosimetry program are not eligible to reapply for the program.

## GVSU Student Code: Statement of Student Rights and Responsibilities

All students are held to the GVSU Student Code: Statement of Student Rights and Responsibilities: https://www.gvsu.edu/policies/category.htm?categoryId=2D0C8EF7-9959-9B01-959C403E725313F3. In the event of behavior which violates the values of the University and the responsibilities enumerated in the Statement, the policies in the document will be followed. Below is the excerpt from the Academic Misconduct Procedures.

## Academic Misconduct

The Office of Student Conduct and Conflict Resolution (OSCCR) works collaboratively with all GVSU faculty members to address academic misconduct concerns. Academic misconduct procedures apply to any allegation of academic misconduct that happens in a course, program of study, or research.

Academic misconduct is defined as any action or behavior that misrepresents one's contributions to or the results of any scholarly product submitted for credit, evaluation, or dissemination. The following behaviors contradict the values of the University community and are subject to action under the Statement: cheating, collusion, dual submission, falsification and plagiarism.

If an instructor suspects any instance of academic misconduct, the instructor must notify and meet with the student to discuss the incident. Based on the outcome of that meeting, the instructor may find there was no act of academic misconduct and take no further action. If the instructor finds there was an act of academic misconduct and the instructor would like for corrective action to be taken, the instructor must report the matter to OSCCR with sufficient evidence to substantiate their finding, and with a recommendation for a corrective action as listed below:

- Impose additional course requirements;
- Require the student to redo the work in question;
- Reduce the student's grade on the work in question;
- Impose a failing grade for the assignment, examination, or the entire course.

The remainder of the procedures (evidence, hearing, appeal and final resolution) through OSCCR can be found here: https://www.gvsu.edu/osccr/faculty-resources-on-academic-misconduct-43.htm#academicmisconductprocedures

## Clinical Education Misconduct

To assure Clinical Education Centers that students do not compromise their high standards of health care, a student may be dismissed from clinical education immediately (with recommendations for advising or charges of misconduct forwarded to the Clinical Preceptor or Program Faculty later) by any clinical education center authority for any of the following reasons:

1. Insubordination to institutional or university personnel.
2. Failure to comply with the policies, rules and regulations of the institution or university.
3. Unprofessional conduct.
4. Unauthorized schedule changes.

The time missed due to dismissal from clinical education for misconduct cannot be made up and may result in a fail for the affected course. Dismissal from clinical education may result in dismissal from the Dosimetry program. Students may not return to clinical education until they have received permission from the Program Clinical Coordinator, Program Director, and Clinical

Preceptor and will depend upon the details of the dismissal.

### Grievance Procedures

The two main types of student grievances are academic (e.g. procedures, policies, and grades in courses) and clinical education.

### Academic Grievance Procedures

The Academic Grievance Procedures full policy can be found in the course catalog: https://www.gvsu.edu/catalog/2020-2021/navigation/academic-policies-and-regulations.htm. In summary filing of a grievance is required by the end of the following regular semester after notification of grade or receipt of adverse decision. The resolution of academic grievances is based on two principles: first, that the resolution of a grievance should be sought at the lowest possible level, and second, that pathways for appeal exist for both faculty members and students.

### Clinical Education Grievance Procedures

Students who are unsatisfied with conditions or procedures during clinical education should first use the following chain-of-command to seek redress:

1. The person who caused the problem
2. The healthcare practitioner who is directly supervising the student
3. The Clinical Education Center Clinical Preceptor
4. The university Medical Dosimetry Clinical Coordinator
5. The university Medical Dosimetry Graduate Program Director
6. The university Chair of the School of Interdisciplinary Health

For instances where the student cannot discuss the problem with the person who caused it, the student may go to the next person on the list. However, it is considered professional and polite to inform the person in advance that you are going to proceed with a complaint. You do not need to ask their permission to do this, but it is recommended that you inform them of your intentions in advance. In cases that might be considered harassment we do not recommend informing the person causing the problem.

Students who decide to file official clinical education grievances must follow the guidelines and procedures of the Academic Grievance Procedures https://www.gvsu.edu/catalog/2020-2021/navigation/academic-policies-and-regulations.htm.

### JRCERT Grievance

The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). For program complaints that cannot be satisfactorily handled by the university and/or are related to program nonadherence to JRCERT accreditation standards, anyone may contact JRCERT at 20 N. Wacker Dr. Suite 2850, Chicago, IL 60606 -3182, phone 312-704-5300 or www.jrcert.org. The Standards are available for review at https://www.jrcert.org/accreditation-information/accreditation-standards-2021/. The program

director prefers that the grievant contact the program director prior to submission of a complaint to the JRCERT to determine if it is a noncompliance issue. Additionally, the program director will assist in the complaint submission process and work collaboratively with the grievant, university, and JRCERT representatives to resolve the issue satisfactorily.

## CLINICAL EDUCATION

The overall guideline for all clinical education policies is that students are expected to conduct themselves in a professional manner at all times during clinical education. These policies simply indicate the exact elements of professional behavior and conduct for GVSU students.

The Grand Valley State University Medical Dosimetry Program is currently affiliated with a number of Clinical Education centers. Students may be required to change clinical site rotations throughout the program as needed to assure a comprehensive learning experience.

Because the university has an obligation to assure clinical education centers that patient care standards will not be compromised by students, no student will be allowed to continue in clinical education if objectives from previous courses are not met. Note that this includes the achievement of satisfactory performance on clinical affective evaluations from self-assessment as well as from clinical practitioners, preceptors, and instructors at educational sites and the demonstration of professional behavioral development.

Clinical education is correlated with didactic and laboratory courses each academic semester as currently outlined in the degree emphasis plan of the university. This plan outlines which didactic courses and their accompanying laboratories are prerequisites and co-requisites for each clinical course. Each clinical course is designed to place students into a clinical environment that will provide adequate clinical cases, appropriate CMD personnel, and various Medical Dosimetry equipment as defined by the Standards and Guidelines of the Joint Review Committee on Education in Radiologic Technology consistent with instruction previously or concurrently provided in the courses and laboratories at the university.

Clinical correlation is achieved by requirements that students are expected to study, listen to lectures, provide feedback, and successfully meet didactic assessment standards at an 80.0% or higher level for each didactic course. Students should apply didactic and laboratory information in their clinical courses where they are expected to observe a qualified medical dosimetrist 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 competency on each of the identified mandatory procedures. Additionally, the student will be expected to complete the specified number of elective activities as directed by the qualified medical dosimetrist. Students must also successfully achieve affective behavioral competence goals to progress in clinical achievement.

The program adheres to an education philosophy that recognizes that adult learners may not learn in a linear or outline fashion. Constructivism is an approach to teaching and learning based on

the premise that cognition is the result of mental construction in which students learn by fitting new information together with what they already know. We support this philosophy by making it possible for a student to learn how to perform a specific procedure in a clinical environment prior to its presentation in a course or laboratory at the university because there is a diverse range of procedures performed daily at the clinical sites. Students are permitted to achieve clinical competency before laboratory or didactic competency but are not excused from the course and lab follow up.

All students are subject to the rules and regulations established by the affiliating Clinical Education Center as well as university and program policies and procedures. Students are responsible for their own transportation to and from the Clinical Education Center as well as all personal needs while at the institution. This includes parking expenses. Students are required to have reliable transportation. Students are also responsible for meeting all GVSU Health Compliance requirements for attendance in a clinical education course. Students who are not meeting all the requirements will not be allowed to attend clinic.

## Student Direct Supervision

All Medical Dosimetry students shall be under direct supervision of a certified staff member at all times. Under no circumstances shall any student ever provide indirectly supervised care or treatment of any patient. All medical dosimetry calculations and treatment plans must be approved by a credentialed practitioner prior to implementation. 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.

## Clinic Immediate Dismissal Policy

All students are to be treated as students during clinical hours, even if they are employees at the clinical site. 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. All students are to be treated as students during clinical hours, even if they are employees at the clinical site. 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.**

i. 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 certified dosimetrists or certified physicist signing the plans.
ii. 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).
iii. Students cannot change from their submitted Clinical Education Schedule Worksheet without prior approval from both the GVSU Clinical Coordinator and

the clinical instructor (this includes time changes greater than 30 minutes, change of location, day and remote/in-person).

iv. Students may not receive compensation from the clinical education center as employees during student clinical hours. Students cannot be used as a replacement for employees.

## Clinical Placements

i. Clinical placement will be determined by the Program Director and Clinical Coordinator in consultation with the student and clinical preceptors at the time of admissions.

ii. Students are informed in advance of the assigned site of clinical rotation. This schedule is distributed to students and the Clinical Education Centers. This schedule is at the discretion of GVSU faculty.

iii. Clinical faculty at the clinical education centers determine the student rotations at a particular institution based on direction from the university. This may include several locations in the same hospital system. Clinical Instructors may adjust the student schedule according to department patient load or special case availability with prior approval from the Program Director or Clinical Coordinator.

## Observations

Observation sites may be used to witness the operation of equipment and/or procedures. An observation site is used for student observation of equipment operation and/or 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. During the last semester of clinical education, students are limited to a maximum 2-week observation/rotation. The observation/rotation cannot occur during the last week of clinical education.

## Scheduling

i. The university will determine the total number of clinical hours required of each student for each rotation and/or academic term and is specified in the clinical course syllabi.

ii. 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.

iii. No students may be in clinic when the university is closed. These dates will be posted in the syllabus, and students are expected to register for "GVSUAlert" to be informed of unanticipated closures.

iv. In the event of a "remote closure" status at the university, students have the option to attend the clinic but are not obligated to do so.

I. Students impacted by inclement weather should refrain from visiting the clinic in person and instead have the option to participate in remote clinical education if it has been established.

II. Students not impacted by inclement weather can choose whether they would like to attend clinic. They have the option to participate either remotely or in-person, but it is not mandatory.

v. All changes in clinical schedules must be cleared in advance with the Clinical Preceptor at the appropriate institution and Program Director or Clinical Coordinator.

vi. Clinical schedules will not be changed to accommodate student work schedules. Students in the Part-time option must ensure that their student schedule is approved in advance by program faculty and the clinical site preceptor.

vii. Clinical schedules may be changed to accommodate course attendance required for the Medical Dosimetry degree or any previously approved courses at the university when advanced notice of at least 2 weeks is given to the clinical preceptor.

viii. Students should be allowed the same time as radiation oncology staff in the institution for breaks and lunch.

ix. Banking of clinical hours may only be used in special circumstances to complete clinical education requirements in advance of missing clinical education with the approval of program faculty, program director and clinical preceptor in extenuating circumstances. This includes achievement of clinical competency credits.
    1. The banked hours may be used to replace only those hours missed from a clinical education course.
    2. The banking option may be used to plan for pregnancy (maternity and paternity leave).

x. Students are expected to attend clinical education each week as specified. Students are expected to adhere to a schedule consistent with the expectations of the clinical education center and will depend on whether the student has selected full-time or part-time options. All students must fill out the Clinical Education Schedule Worksheet. Exact start and end times, lunch and break schedules, etc. are determined by the clinical education center, and thus may vary by the day, the center, and the semester.

xi. Part-time students enroll for the full clinical course and will receive an "X" (deferred) grade at the end of the semester. The grade will be changed to a letter grade once the part-time student completes the course requirements (hours, mandatory competencies, assignments, etc). Students may use the days in-between semesters to make-up missing clinical hours but may not use the days in-between semesters to bank clinical hours for the next semester (same as all other students).

### Clinic 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 6 or more hours of clinical education.
- Time is recorded in 30-minute increments.
- 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 clinical 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 16 hours per week during the semester.

CLINICAL ROTATION MASTER PLAN
(Full-time Option)

- 1st term (Aug-December) - 14 weeks x 4 days per week x 8 hrs per day = 448 clinical contact hours (56 days)

- 2nd term (Jan-April) -14 weeks x 4 days per week x 8 hrs per day = 448 clinical contact hours (56 days)

- 3rd term (May-August)- 12 weeks x 4 days per week x 8 hrs per day = 384 clinical contact hours (48 days)

- 4th term (optional) - additional available time for students who have not completed all mandatory competencies or who require clinical support for theses/projects

Total = 1280 clinical contact hours (160 days or ~8 months of full-time experience)
Additional clinical education may be required if all mandatory competencies are not achieved in three semesters for full-time students or the equivalent for part-time students (see Remediation). Part time clinical education can be no less than half the hours of the full-time option. These hours must be approved by the Clinical Coordinator and Program Director prior to class registration. The program adheres to the 112 clinical education hours per 1 semester credit ratio.

## Record of Clinical Education Time

a. Time records are used at all Clinical Education Centers. The time of arrival and time of departure must be recorded appropriately.
b. All students are required to be present in their assigned areas for clinical education during the hours established with the Clinical Preceptor.
c. Students may not leave the Clinical Education Center without notifying the Clinical Instructor or the Clinical Instructor's designee first.
d. Falsification of time records is considered cheating and is a breach of university and professional ethics and will merit appropriate disciplinary action up to and including dismissal from the program.
e. Students may attend clinical education for only the number of days (semester hour credits) for which they are registered except for time voluntarily requested by the student AND pre-approved by the Program Director for specific learning objectives. No clinical grading requirements may be accumulated during clinical education time attended under this policy (e.g., competencies, proficiencies, etc. cannot be achieved during excess

voluntary clinical education time.)

## Absence from Clinical Education

All students must meet the required course objectives and clinical hour requirements of the course in order to receive credit. The required number of hours will be listed on the syllabus. Each student is required to meet the minimum required hours to pass the course.

Students must call or email in advance for all absences, or within 1 hour of the scheduled starting time. An email to both the clinical instructor and program director should be sent to document the absence. This information must be noted on the Clinical Education Attendance Record (See Forms in Appendix). For scheduled absences, the clinical instructor and program director must be notified 24 hours in advance.

Excessive or unwarranted clinical education absences will result in corrective action. Determination of excessive or unwarranted unexcused absences will be by the Program Clinical Coordinator. Vacations and other absences during clinical courses are strongly discouraged.

**Excused** absences do not have to be made up, but may be if the student desires additional time for competency credit completions:

- GVSU Holidays: https://www.gvsu.edu/registrar/academiccalendar.htm
- Strikes and other unanticipated university closures (up to two days (16 hours) over the entire duration of clinical education)
- Funerals- up to two days (16 hours) in case of death in the immediate family. Additional time will be considered unexcused and must be made up.
    - Immediate family is defined as spouse, child (including miscarriage), parent, grandparent, brother or sister, brother or sister-in-law, mother or father-in-law, aunt, uncle, nephew or niece
- Attendance at professional meetings or GVSU student activities when approved in advance by the Program Director.
- Three personal days (24 hours) are granted over the entire duration of clinical education
- Two interview days (16 hours) are granted over the entire duration of clinical education for medical dosimetry employment

**Unexcused** absences must be made up:

- jury duty
- military duty
- absence for extenuating circumstances as approved by program
- maternity and paternity leave
- extended illnesses
- Strikes and other unanticipated limitations to clinical attendance (such as tornadoes, snow storms, or other acts of God, etc.) beyond the initial excused two days (16 hours)
    - The university will attempt to place all students affected by a strike or other unanticipated limitation in clinical attendance at another appropriately recognized

clinical education center as reasonable.

- Students will not be allowed to reduce the total clinical education time due to a strike or other unanticipated limitation to clinical attendance. **It is possible that students may need to make arrangements to attend clinical education during additional semesters due to a strike and other unanticipated limitations (tornado, snow storm, etc.) to clinical attendance.** All students are expected to achieve the same level of attendance.

## Make-Up Time

Make-up time is permitted with advanced approval of the Clinical Preceptor and Medical Dosimetry Program Clinical Coordinator. Students may make up clinical education time outside the university schedule and this time will be considered part of the university clinical education schedule. Any make up time must not require the student to be present in the clinic more than 10 hours per day and the total didactic and clinical involvement to not more than 40 hours/week at any time (typically a maximum of 32 clinical hours). Additionally, make up time must follow all program and university policies in place for medical dosimetry students. Make-up time is not permitted for "no-show", where the clinical preceptor and Program Director were not notified in advance of the absence.

## Tardiness

Tardiness is defined as arriving more than 10 minutes late or leaving more than 10 minutes early. Clinical Preceptors may define the exact place where arrival or departure is permitted. Students are required to notify the clinical education center Clinical Preceptor of tardiness the day it occurs. This notification may be made verbally to the Clinical Preceptor. If the student does not see the Clinical Preceptor that day, notification must be left in writing. Corrective action will be taken for repeated tardiness, including, but not limited to, verbal warning, written warning, referral to RMD Remediation Committee, and course failure.

## Leave of Absence

The Graduate Education Policies & Procedures Manual outlines the Leave of Absence policy, in which a graduate student may request a leave of absence for a maximum of two years from a graduate program for good cause. Examples of cause include, but are not limited to, medical issues, caring for family members, non-optional military commitments, maternity, and work requirements.

## Dress Code

a) Students are expected to follow the clinical education centers dress codes in addition to GVSU's dress code. Students not adhering to institutional standards for dress may be removed from clinical education until their dress meets these requirements. Clinical education time lost as a result of dress code violations will be required to be made up.
b) A clean and pressed lab coat over professional business clothes are to be worn at all times when engaged in clinical education. Scrubs may be worn if the medical dosimetrists wear them.
c) Clothes worn under the lab coat must adhere to usual, acceptable, reasonable and professional dress as defined by the Clinical Preceptor.

d) All non-professional pins, badges, and other symbols are prohibited during clinical education. This includes holiday, spirit, political, and any other non-professional items. Accepted cancer organization symbols (i.e., the pink breast cancer ribbon) are considered professional and are therefore exempted from this policy.
e) Grooming
    a. Cosmetics should be worn in moderation. Perfume/ cologne should not be worn.
    b. Hair should be worn professionally. Facial hair should be kept neat.
    c. Loud or flashy jewelry should not be worn with the uniform at any time, and jewelry should be in moderation at all times.
    d. As students engaged in clinical education may be in close proximity with patients and staff, acceptable personal hygiene must be maintained at all times.
    e. Students may be required to remove rings, other jewelry, or other items before being allowed into specific situations (i.e. surgery, MRI).
    f. Fingernails should be kept trimmed and neat with no artificial nails.
f) Name Badge
    a. Each student is given a GVSU name badge during orientation that includes the first and last name and the word "Student" along with the Grand Valley State University logo. Students are required to wear their name badge during clinical education hours and may be required to wear an additional name badge from the clinical education center.
    b. GVSU name badges are not to be worn outside of assigned clinical education for the university.

## Health Compliance

University policy, state and federal statutory regulations, and accreditation standards for academic programs and affiliated organizations, require students enrolled in health/health related programs comply with certain health, safety, and legal requirements. GVSU is contractually required to ensure all students achieve full compliance **prior** to participation in experiential learning and until program completion.

Health compliance requirements are to be completed by the program's identified due date. Failure to complete these items on time may impact a student's ability to participate in experiential learning. No student will be allowed to attend clinical education until all health compliance requirements are met.

GVSU utilizes Viewpoint Screening, a third-party vendor, for monitoring health compliance, as well as completion of background checks and drug screens, when required. Blackboard is used for training modules. The Health Compliance Officer provides students with directions for creating a Viewpoint Screening account and submitting documents, as well as with instructions to access the training modules.

**Requirements:**
Students are required to submit documentation of health compliance items prior to the due date communicated by the Health Compliance Officer. A full description of each requirement can be found in the GVSU Health Compliance Policy at https://www.gvsu.edu/healthcompliance/

It is recommended that students begin submitting health compliance documents as soon as possible as some requirements may take several weeks, or months, to complete.

Requirements may include, but are not limited to:

- Physical exam (required for most programs)
- Immunizations and/or titers (bloodwork) to check for immunity
- Tuberculosis screening
- Influenza vaccine (annually)
- Cardiopulmonary Resuscitation (CPR)
- Training Modules-completed online annually via Blackboard

Criminal Background Checks, Drug Tests and Fingerprinting:

- All students in the Medical Dosimetry Program are required to take a criminal background check, drug test and/or fingerprinting. The GVSU Health Compliance Officer informs the students on how to complete these tests. Students can be dismissed from the program based on the results of these test findings.
    - Criminal Background Check and Drug Tests must be completed through Viewpoint Screening.
    - Criminal Background Check includes: Seven Year Residency History, County Criminal Records, Statewide Criminal Records, Nationwide Sex Offender Index, Nationwide Healthcare Fraud and Abuse Scan.
    - Drug tests are 10-panel including: Amphetamines, Barbiturates, Benzodiazepines, Cocaine Metabolites, Marijuana Metabolites, Methadone, Methaqualone, Opiates, Phencyclidine and Propoxyphene.
    - Some sites require background checks and/or drug tests within a specific timeframe (i.e. 30 days prior to placement date), which may require students to undergo an additional background check and/or drug test.
    - Fingerprinting must be completed through the Grand Rapids Community College (GRCC) Police Department. Students outside of west Michigan may contact the Health Compliance Officer for other approved locations.

  Results of Criminal Background Checks and Fingerprinting are reviewed in accordance with the state regulations on mandatory exclusions. Conviction of a crime on the mandatory exclusion list, or presence of a substance on the drug test, may impact a student's ability to complete experiential learning as required for program progression.

  If there is illegal activity in the background check/finger printing, or if there is evidence of one or more prohibited substances in the drug test, the clinical sites have the right to refuse a student's placement, a factor which may negatively impact a student's ability to progress in the Medical Dosimetry Program. Students are required to notify the Program Director if any new illegal activity arises during the course of the program. If the student feels the results are in error, they have the right to appeal to the program director and clinical staff representative.

## Health Compliance Costs

Students are responsible for the cost of obtaining/maintaining health compliance. Health care

costs vary widely, with estimates ranging from $250 to $550 depending upon the type of services required and location received. Some services may be covered by health insurance. Students with limited, or no insurance coverage, may find the GVSU Family Health Center or local health department cost effective options.

## Clinical Conduct

In addition to being expected to follow the rules and regulations established by the clinical education center and students are also expected to practice professional ethics set forth by the AAMD, the American Hospital Association's Patient's Bill of Rights, and to be compliant with HIPAA regulations.

Consider all aspects of the Medical Dosimetry program in the Clinical Education Centers and all information concerning patients to be totally confidential. THESE ASPECTS ARE NOT TO BE DISCUSSED WITH OTHER STUDENTS, FRIENDS OR FAMILY OUTSIDE OF THE CLINICAL EDUCATION CENTERS. Violation of this professional trust will result in charges of misconduct from the university and/or may also result in legal action from victims of your actions. There are severe penalties for violating patient's rights to confidentiality. Students are responsible for their own actions under these laws (which includes all HIPAA regulations). Students are strongly advised to adhere to generic descriptions of all patients, health care professionals, and other medical staff when completing assignments involving clinical experiences. Never use the name or a unique description of a patient or professional that is so specific it would violate their confidentiality rights.

In addition, the program also requires:

- Students are not permitted in hospitals or other health care institutions during non-clinical education hours unless on specific business not related to university clinical education.
- Avoid personal telephone calls on institutional phones except in the case of an emergency. Personal phones are to be used for all non-institutional business. **Additionally, no texting, tweeting or other use of social media is allowed during clinical hours.** Remember that many health care institutions have specific policies about cell phones and that you are responsible to make sure your phone is turned off in those areas.
- No smoking, alcohol, or non-prescription stimulant or depressant substance use is permitted during clinical education. The use of prescribed substances may also be restricted during clinical education courses. Check with your Clinical Preceptor before attending any clinical assignments under the influence of anything. Clinical education center policies and procedures apply to these rules in addition to all university policies and procedures.
- Clinical education experience is designed to encourage responsibility in a professional and an ethical environment and this includes behavior such as cooperation, accepting constructive criticism, and dependability.
- Patterns of behavior indicating an attitude of irresponsibility to self, patient, profession, university, or clinical site may result in dismissal from the program.

## Incidents

It is very important that hospitals have a record of all incidents (accident, injury, destruction of property, etc) in case of litigation. The prescribed format must be followed according to hospital policies for reporting incidents:

a. An institutional incident report and the Incident/Injury Form (in Appendix) must be completed by a designated clinical instructor immediately.
b. The Incident/Injury Form must then be immediately sent to the Clinical Coordinator.
c. A copy of the institutional incident report must be requested to be sent to the university.
d. Students will be subject to corrective action for failure to follow this procedure.

## Patients with Infectious Diseases

Students are required to follow the exact procedures established by our Clinical Education Centers (standard precautions, blood borne pathogen precautions, etc.) in caring for these patients. Students are required to report any contact with communicable disease in accordance with the policies of the Clinical Education Center in which the contact occurs.

## Students with Infectious Diseases

Students with an infectious disease may not attend clinical education. They should inform both the Clinical Preceptor immediately upon diagnosis. They may not return to clinical education until a doctor's release has been presented to the Clinical Preceptor and copied to the Clinical Coordinator. Absence due to infectious disease is considered unexcused until extenuating circumstances are granted by the Clinical Preceptor and Clinical Coordinator.

## Malpractice Insurance

All students must be covered under a malpractice insurance policy prior to beginning clinical education. Grand Valley State University provides professional liability insurance for students while engaged in student clinical learning activities. The coverage ranges up to $3,000,000.00 depending on the incident. Student malpractice insurance is available privately should the student desire additional coverage. The university malpractice insurance plan does not cover a student who may work in institutions outside of scheduled clinical education time.

## Health Insurance

While encouraged, GVSU does not require students to have health insurance. Some clinical sites may require proof of insurance as a condition of placement at the site. Lack of insurance coverage could impact a student's ability to participate in experiential learning at sites with this requirement. For information about optional GVSU student health plans that may be purchased please use this link https://www.gvsu.edu/campushealth/student-health-insurance-23.htm. The student must inform the Health Compliance Office immediately should coverage be discontinued for any reason.

Students are not covered by a site's workman's compensation coverage during their experiential learning. All health care costs if exposed to a medical condition that requires assessment, monitoring or treatment, or if injured while working with a patient/client, are the student's responsibility. Emergency medical services may be provided by the Clinical Education Centers

when needed, but students are responsible for payment for all services rendered by the institution. Neither the Clinical Education Centers or Grand Valley State University assumes responsibility for medical expenses that may be charged students for incidents occurring during clinical education (i.e., puncture wounds from contaminated needles, contagious diseases, etc.).

## Clinical Evaluation System

Students must be competent in both the art and science of Medical Dosimetry. Students must complete all competencies and elective activities prior to graduation and are strongly encouraged to complete as many proficiencies as possible. Clinic evaluation is composed of mandatory competencies, elective activities, assignments, affective behavior and clinical instructors' evaluations of the student.

### Mandatory Competencies

All competencies are based on information taught during university courses and clinical education. Students must successfully complete 25 mandatory clinical competencies and 5 elective activities during the course of their clinical education experience. There is no specification regarding the order of competency mastery, just the specific number of mandatory competencies, as outlined in the course syllabi, must be completed to be eligible to receive credit for clinical courses.

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 competency on each of the identified mandatory procedures. The student is responsible for notifying staff that they are ready to perform a competency. This is normally done by asking a qualified evaluator in advance of the procedure. Students should not expect to be evaluated on a procedure until they have demonstrated their ability to perform the procedure to an acceptable level. Competencies can be performed on new scans, previous scans or on scans in the GVSU database, although it is preferred the students perform their competency on a new scan that will be used for treatment. The competency will be done independently and in a reasonable amount of time. The observation and evaluation of the student's procedural skills is required to be evaluated by a certified medical dosimetrists or certified medical physicist. It is not required that the preceptor sign all competency forms. Multiple competencies cannot be completed at the same time (only one competency per patient attempt). For competencies, students are not allowed to use autocontouring, autoplanning or EZFluence (or similar programs), and automated processes should be limited as much as possible. The student needs to show competence in the manual treatment planning process, since all clinics have different levels of automation and artificial intelligence.

The evaluator will complete the *Mandatory Competency Evaluation Form* after the student has informed the evaluator the competency attempt is completed. The evaluator will evaluate each Task item, and mark each task as P (pass), F (fail), or NA (not applicable). For mastery, the student must Pass in each Task listed unless a specific task is determined N/A by the evaluator. The student should be performing as many tasks as possible. The competency is considered a Fail and should be repeated by the student for mastery attainment if the plan is not treatable, or unacceptable for treatment, or has an error that makes a significant difference in the distribution.

If a competency is a fail, the student must continue to practice the competency, and then request another competency attempt once ready. A new patient must be used for a new competency attempt.

During the first semester (RMD 661), tasks #16 and #17 on the *Mandatory Competency Evaluation Form* can be N/A (16. Independent calculation performed (Hand calc., Computer MU Calc., etc.; 17. Record and Verify System information), but during the second (RMD 662) and third semester (RMD 663) of clinical education these tasks must be completed with each competency attempt. Multiple patients can be used to achieve the required tasks for a single competency attempt if needed.

Once competencies are graded, they are considered confidential and need to be kept secure until given to the student (example: in a locked drawer). Competencies may be rejected by university faculty if deemed necessary due to failure of evaluators to note errors. There is no penalty for failing a competency. All failed competencies are required to be uploaded to Blackboard.

Elective Activities

Evaluators are not required to complete a Mandatory Competency Evaluation Form for elective activities but must sign and date that the elective activities was performed on the Student Competency Checklist for Graduation.

## Mandatory Competencies List **(must complete all 25):**

*all should be curative intent unless stated as palliative, and photon unless otherwise stated*
To the extent possible, students should complete some practice cases and competencies on actual patients.

- Primary Brain IMRT/VMAT
- Primary Bilat Head and Neck (with nodes) IMRT/VMAT
- Primary Lung (3D Conformal or IMRT/VMAT)
- Primary Esophagus (IMRT/VMAT)
- Intact Breast Tangents (3D Conformal)
- Chest Wall Tangents w/ Supraclavicular and Axilla Fields (3D Conformal or IMRT/VMAT)
- Chest Wall (or Intact) Tangents w/ Supraclavicular, Axilla and IM Fields (3D Conformal or IMRT/VMAT)
- Abdomen (e.g. Pancreas, GE Junction) (3D Conformal or IMRT/VMAT)
- Pelvis and Nodes SIB (IMRT/VMAT)
- 3 Field Pelvis with Wedges (curative intent)
- 4 Field Pelvis (curative intent)
- Prostate IMRT/VMAT
- Limb Melanoma/Sarcoma (3D Conformal or IMRT/VMAT)
- Interstitial Implant
- Intracavitary HDR
- Craniospinal Irradiation IMRT/VMAT
- Palliative Whole Brain
- Palliative Spine
- Lymphoma/ Mantle (can be involved field, IMRT/VMAT preferred, mediastinal location)
- Electron Beam Planning (skin cancer)
- Fusion (MRI, PET, etc.)
- Re-Irradiation (can be palliative)
- Composite Planning (new treatment in close proximity to a previous treatment, can be palliative)
- Simultaneous Integrated Boost (SIB) IMRT/VMAT
- Lung Stereotactic Body Radiation Therapy (SBRT)
- Brain Stereotactic Radiosurgery (SRS)

## Elective Activities **(must complete a minimum of 5):**

- Observe High Dose Rate (Plan and Tx)
- Observe Respiratory Motion Mgmt (Plan and Tx)
- Prone Breast
- PA Axillary Boost Plan or Calculations
- Anus or Vulva Treatment Planning
- Proton Treatment Planning
- Surface or Cavity Dose Measurements
- Clinical Dosimetrist Assignment

- Clinical Dosimetrist Assignment
- Clinical Dosimetrist Assignment
- Observe Brachytherapy OR Insertion
- Observe Brachytherapy Source Preparation
- Brachytherapy HDR Procedure
- Participate in Total Body Irradiation Planning
- Participate in Total Skin Electron Irradiation (TSEI)
- Observe Patient Specific QA
- Observe Monthly or Annual QA of equipment: Simulator
- Observe Monthly or Annual QA of equipment: Other (HDR, etc.)
- Observe Monthly or Annual QA of equipment: LINAC

## Additional Clinical Opportunities

In addition to the mandatory competencies and elective activities, students are encouraged to participate in as many clinical activities as possible. Other activities include, but not limited to, tumor boards, chart rounds, quality assurance (QA) procedures, physics duties, simulations, and treatment. Students are also encouraged to perform proficiencies if time allows.

## Clinical Education Grading

Additional clinical activities are included in the clinical grade, as per the course syllabus. These activities include, but are not limited to: case studies, tumor board, chart rounds, proficiencies, webinars, assignments, clinical quizzes and evaluations. The student is required to complete a specified minimum number of mandatory clinical competencies in clinical courses as designated by program faculty each semester. The clinical grade scale is the same as didactic courses. Students who fail a clinical course (grade of B- or less), do not accumulate clinical competencies or clinical hours from that course toward graduation clinical requirements.

## Clinical Education Evaluations

Medical dosimetrists must also have the ability to care for patients and interact with healthcare team members in a professional and ethical manner. To assist you in developing these skills the Grand Valley State University Diagnostic and Treatment Sciences Programs conduct a Clinical Advising Program in conjunction with clinical education. This program is designed to assess each student's personal progress toward achieving objectives consistent with professional clinical practice. This includes behavioral affective characteristics.

This system is designed to verify student affective competence and serve as a method to achieve positive changes in professional behaviors. Student engagement will be evaluated through a clinical advising system based on evaluations from clinical staff who have provided direct clinical instruction for the student (midsemester and end of semester) and self-evaluation by the student. Students will set individual goals by comparing behavioral patterns identified by these evaluations during a private clinical advising session with the university Clinical Coordinator and /or program director and/or clinical preceptor. Satisfactory progress in meeting these goals forms a critical element in the student's engagement in clinical learning while failure to make such progress is grounds for course failure, regardless of the grade achieved through competency or proficiency evaluation. Student engagement refers to the level of involvement in activities during

clinical education as well as professional behaviors exhibited as part of the student's experience as a member of the Medical Dosimetry program. It represents more than the ability to achieve cognitive and psychomotor objectives and is based on affective goals. Any student who receives an Occasionally True, Usually Not True, or Almost Never True will be required to set a goal to work on these behaviors. Any student who receives a Usually Not True or Almost Never True on the *Clinical Evaluation of Student Form* will require remediation counseling and corrective action as determined by program faculty. Clinical grades are affected by advising results only when it is determined that the student has failed to make continued and regular progress toward achieving personal goals. Students may be subject to corrective actions due to failure to comply with advising suggestions. This includes failure to achieve objectives for a clinical education course, which can cause a failing grade to be issued. Continued unsatisfactory scores in any evaluation section by a student will result in a Fail for the clinical course and dismissal from the program. Please see the Clinical Evaluation of Student Form in the forms section of the Appendix of the Student Handbook.

## Radiation Protection

Students are expected to follow rules of ALARA for their personal protection and the protection of patients and coworkers. They are also expected to be aware that Occupational exposure limit=50mSv or 5 rem per year. Non-occupational (public) exposure limit = 5mSv or .5 rem per year.

### Program Policy

Radiation Protection Policy and Procedures in the Clinical Internship

Patient Safety:

- During treatment planning, the fields should be designed to minimize the amount of radiation exposure to the patient and normal tissues while effectively treating the treatment volume.
- Calculations and plans done by the student will be checked by qualified credentialed staff before implementation.
- Students involved in simulation and treatment setups are to be supervised at all times by qualified credentialed staff. Direct supervision is required to prevent unnecessary exposures.
- Any errors in planning or charting must be reported to the Radiation Therapist, Medical Dosimetrist, Physicist, and Radiation Oncologist in charge of the patient's care immediately.

Student Radiation, MRI and Mold Room Safety:

- Students new to clinical internship must receive orientation to radiation safety practices and requirements by the Radiation Safety Officer or appropriate administrator.
- Students must complete the GVSU MRI safety training, mold room safety training and radiation safety training before starting clinical education. Students must follow all safety training rules and may not enter an MRI area without screening and approval from the appropriate staff. If a student declares that he or she has a condition which would be considered a potential contraindication to

entering Zone III and Zone IV, the program will have the completed screening form reviewed by a Level II MR technologist, MRSO, or MRMD to determine subsequent action. The student will then be rescreened by the Level II MR technologist at the clinical setting prior to entering Zone III. Students also must notify the Program Director is their status changes.

- The GVSU issued radiation monitoring badge must be worn by the student at all times while in the department.
- Students assisting in the simulator and treatment units must never be in the room during exposures or treatments.
- Students working in brachytherapy must remember and put to use techniques of time, distance, and shielding.
- Radiation exposure levels will be monitored by the university Radiation Safety Supervisor (RSS). If a student's radiation exposure reading exceeds 50 mrem on a single report, the program director must be informed immediately. The RSO and program director will investigate the reason for the reading and determine an action plan within 10 days to ensure that the student follows ALARA principles.
- If the student exceeds the trigger dose limit (150 mrem) on any personal monitoring report, the student must be removed from the clinical setting and counseled immediately by the university RSO, Program Director and Clinical Coordinator on how to avoid further exposure.

## State of Michigan Radiation Protection Rules

Students are expected to conform to the Michigan Department of Environmental Quality Ionizing Radiation Rules, the Radiation Monitoring and Reporting rules of the Michigan Radiation Environmental Monitoring Program, the Michigan Radioactive Material and Standards Unit, and all other state standards, regulations, recommendations, and guidelines.
Students in locations outside of the state of Michigan must conform to the rules and regulations of the state in which the clinical experience is located. The program will work with students in other states to assure that regulations and policies are followed as specified.

## Personnel Monitoring

All students in the program will wear a personnel monitoring device provided by the university at the collar at all times when using ionizing radiation during clinical education and energized laboratory procedures. Students not having a badge may be dismissed or assigned to non-radiographic areas or duties for the day at the discretion of the faculty member or clinical instructor responsible for the instruction or clinical experience.

Radiation exposure limits are to follow ALARA (As Low As Reasonably Achievable) guidelines as established by the National Council on Radiation Protection and Measurements (NCRP), the regulations of the Nuclear Regulatory Commission (NRC), United States Standards for Protection Against Radiation 10 CFR Part 20, and the regulations of the State of Michigan. In addition, the following limits are set by the Grand Valley State University, College of Health Professions, Diagnostic and Treatment Sciences programs:

- 50 mrem whole body radiation in one month.

- Any recorded exposures beyond this limit shall be investigated through interviews of the persons involved and the person receiving the exposure shall be advised as to procedures available to avoid future exposure.

Instadose Monitor

- During fluoroscopy personal monitoring devices will be worn outside the lead apron.
- PERSONNEL MONITORING DEVICES ARE NOT TO BE LEFT IN HOT OR WET PLACES (i.e., dashboard of a car, pocket of a lab coat being washed, etc.)
- Personnel monitoring devices are to be worn only during clinical education or during college labs. Students may not wear university personnel monitoring devices during outside employment for any reason.
- Personnel monitoring devices are to be linked to the "Instadose" application via a download from the App store or Google play to a compatible device (i.e. phone or tablet).
- New personnel monitoring devices will be distributed from the office of the Program Director or Clinical Coordinator.
- Loss or accidental exposure of a personal monitoring device shall be reported to the Radiation Safety Supervisor immediately. A telephone or email message shall be left the day of the incident.
- Students will be responsible for the fees for all loss of personnel monitoring device charges.
- Personnel monitoring reports will be made available to employers upon receipt of written release from the student/alumnus.
- Students are expected to review their dose results, at a minimum, every quarter by using the Instadose application and downloading their data.

**Failure to comply with any of the above radiation protection policies will result in corrective action.**

## Pregnancy

The student will have several options:

1. Continue in the program as scheduled.
2. Take a leave of absence during the pregnancy.

IMPORTANT NOTE: The first 3 months (1st trimester) of a pregnancy is the most critical time as far as exposure to ionizing radiation in concerned.

Any student who believes they may be pregnant may declare a pregnancy (voluntary). Students also have the right to un-declare pregnancy at any time. All pregnancy declarations and un-declarations must be in writing to the radiation safety officer, must be dated and signed legibly, and shall be submitted to the program director's office.

The student's total accumulated exposure during pregnancy shall not exceed 0.5 rem/5 mSv (Not

to exceed 50 mrem/0.5 mSv for the gestational period). In the event that this exposure limit is exceeded, the student shall be advised to withdraw from all clinical education for the remainder of the pregnancy. It is the student's responsibility to continually check the personnel monitoring device reports. The pregnant student will be required to upload their dose on the first of each month. Within the first week of each month, the Radiation Safety Supervisor and/or the Program Director shall review the personnel monitoring device report to verify that they have uploaded their dose and that the accumulated exposure falls below the defined threshold.

If the student decides to continue clinical education they will be expected to participate in all clinical assignments and/or duties. A student will be allowed to make up any clinical time missed due to pregnancy or immediate post-partum care. See absence from clinical education policy for more details. Make up time will be structured to compensate for loss of clinical experiences during pregnancy.

In addition, a declared pregnant student who continues to work in and around the MR environment should not remain within the MR scanner room or Zone IV during actual data acquisition or scanning.

## APPENDIX

A. PROGRAM CURRICULUM

B. STUDENT ORIENTATION CHECKLIST

C. CLINICAL EDUCATION SCHEDULE WORKSHEET

D. CLINICAL EDUCATION ATTENDANCE RECORD

E. REMOTE CLINICAL EDUCATION POLICY

F. MANDATORY COMPETENCY EVALUATION FORM

G. COMPETENCY CHECKLIST FOR GRADUATION

H. CLINICAL EVALUATION OF STUDENT FORM

I. CLINICAL ADVISING PROGRAM STUDENT SELF-EVALUATION

J. STUDENT EVALUATION OF CLINICAL EDUCATION CENTER

K. INDEPENDENT STUDY COURSE AGREEMENT

L. INCIDENT/ INJURY REPORT FORM

M. RECOGNITION- ABOVE AND BEYOND

N. NEW POLICY NOTIFICATION FORM

O. JRCERT STANDARDS FOR AN ACCREDITED EDUCATIONAL PROGRAM IN MEDICAL DOSIMETRY

## PROGRAM CURRICULUM

The following courses comprise the medical dosimetry program (lock-step cohort):

FALL SEMESTER ONE (CREDITS: 12 – 14)

- STA 610 - Applied Statistics for Health Professions Credits: 3
- RMD 620 – Dosimetry Treatment Planning I Credits: 3
- RMD 621 – Dosimetry Treatment Planning I Lab Credits: 1
- RMD 661 - Medical Dosimetry Clinical Education I Credits: 4
- RMD 693 - Medical Dosimetry Research Project Credits: 1 to 3 OR RMD 695 – Medical Dosimetry Thesis Credits: 1 to 3

WINTER SEMESTER TWO (CREDITS: 12 – 14)

- RMD 630 - Medical Dosimetry I Credits: 3
- RMD 622 – Dosimetry Treatment Planning II Credits: 3
- RMD 623 – Dosimetry Treatment Planning II Lab Credits: 1
- RMD 662 - Medical Dosimetry Clinical Education II Credits: 4
- RMD 693 - Medical Dosimetry Research Project Credits: 1 to 3 OR RMD 695 - Medical Dosimetry Thesis Credits: 1 to 3

SPRING/SUMMER SEMESTER THREE (CREDITS: 11 – 13)

- RMD 632 - Medical Dosimetry II Credits: 3
- RMD 663 - Medical Dosimetry Clinical Education III Credits: 4
- RMD 670 - Professional Issues in Medical Dosimetry Credits: 3
- RMD 693 - Medical Dosimetry Research Project Credits: 1 to 3 OR RMD 695 - Medical Dosimetry Thesis Credits: 1 to 3

TOTAL CREDITS: 38

*RMD 693 Medical Dosimetry Research Project and RMD 695 Medical Dosimetry Thesis may be taken at variable credit per semester of one to three credits for a required total of six credits. RMD 696 Continuation of Master's Project or Thesis Research enrollment may be required if the student does not successfully complete RMD 695 Medical Dosimetry Thesis course.

RMD 696 - Continuation of Master's Project or Thesis Research Credits: 1 to 6

PART-TIME OPTION

Students may apply to the program as a part-time student. Part-time students are required to enroll in all the didactic courses with the cohort they are admitted with and complete within the one-year timeframe. Part-time students are also required to begin their clinical education at the same time as their didactic courses, but are allowed to spread their clinical education (RMD 661 Medical Dosimetry Clinical Education I, RMD 662 Medical Dosimetry Clinical Education II and RMD 663 Medical Dosimetry Clinical Education III) over a longer period of time (up to two years).

Full-time students complete 32 hours per week of clinical education during the semester, and part-time students must complete a minimum of 16 hours per week of clinical education. Part-time students are given credit for the clinical education course once the clinical hours (112 clinical education hours per one credit ratio) and course requirements are achieved. Part-time students can complete the program in four, five or six semesters.

Each new cohort begins in the Fall semester, and both didactic courses and clinical courses are started at the same time. Many part-time students continue to work as a radiation therapist while continuing their education.

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## STUDENT ORIENTATION CHECKLIST

Student Name _____ Clinical Site: _____
Semester _____

This form should be completed by the clinical preceptor, on each new student, the first day of clinical education at a new clinical education center.

| | |
|---|---|
| Parking Policy/ Facility Name Badge | |
| Locker or Coatroom Location | |
| Record of Attendance Policy | |
| Facility Tour | |
| Emergency Procedures | |
| Fire/Disaster Plan Evacuation Routes | |
| Department Emergency Cart/Equipment Locations | |
| Public Address Code Responses | |
| Department Patient Distress Responses | |
| Initiation of Emergency Codes (Cardiac Arrest, Etc.) | |
| Hazardous Material Management/ Infection Control Polices | |
| Mold Room Safety Training | |
| MRI Safety Training | |
| Incident Reporting Policy | |
| Patient Transport Procedures | |
| Review of Departmental Routines | |

The above items have been explained to me.
Clinical Instructor Signature: _____ Date: _____

Student Signature: _____ Date: _____

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## CLINICAL EDUCATION SCHEDULE WORKSHEET

Student Name: Clinical Site:

| Course | Semester & Year | Days of the Week (M,T,W,Th,F) *Note if remote* | Time (ex: 8am-4:30pm, 30 min lunch) | Clinical Hours Gained per Week |
|---|---|---|---|---|
| RMD 661 Medical Dosimetry Clinical Education I Total = 4 credits | | | | |
| | | | | |
| RMD 662 Medical Dosimetry Clinical Education II Total = 4 credits | | | | |
| | | | | |
| RMD 663 Medical Dosimetry Clinical III Total = 4 credits | | | | |
| | | | | |

**Anticipated Semester and Year of Graduation**:

It is my understanding that if I require any changes to this plan I am responsible for submitting a new worksheet and have the Program Director's approval before starting the new schedule.

| Date | Student Signature | Printed Name |
|---|---|---|

| Date | Clinical Preceptor Signature | Printed Name |
|---|---|---|

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## CLINICAL EDUCATION ATTENDANCE RECORD

Name of Student _____ Clinical Education Center _____

GVSU Policies and Procedures include:

- Time of arrival and time of departure must be recorded appropriately.
- Clinical instructors will require students to make up time that is not accurately recorded.
- Falsification of time records is considered cheating and is a breach of university and professional ethics and will merit appropriate disciplinary action.
- Lunch is not considered part of the clinical hours.
- Each line should contain a maximum of 1 day (not per week).

| | Scheduled Clinical Date (MM/DD/YY) | Arrival Time | Departure Time | Lunch Duration | Clinical Hours **Gained** (note if remote) | If not in clinic but gained hours, list the reason (personal time, funeral leave, conference etc) | Dosimetrist Initials | Student Initials |
|---|---|---|---|---|---|---|---|---|
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| 60. | | | | | | | | |

Total Number of Gained Clinical Education Hours:_____

-of the Total Gained Hours, how many are Personal Hours:_____

I have reviewed this record and verify that it is accurately recorded. I understand that falsification of time records is grounds for dismissal from the Medical Dosimetry program.

Student Signature Date

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## REMOTE CLINICAL EDUCATION POLICY

At any point, JRCERT or GVSU may update/create new policies which will require changes to the Remote Clinical Education Policy. The current JRCERT Policy states if there is a separation between the student and the instructor, this is considered remote clinical education.

The following is the GVSU remote clinical education policy for two types of remote clinical education:

1. Student is **not** physically in the clinic
    a. Only if **all** dosimetry staff (instructors) are working remotely, up to 50% of the student's clinical **week** may be done outside of the clinical setting. This will be calculated per week, so that the overall clinical hours will not exceed 50% remote.
        i. If there is staff in the office and able to train the students, then remote clinical education will not be allowed and the student will be required to attend clinic onsite.
    b. Exceptions: COVID related reasons (case by case as approved by the program)
    c. Remote learning is not to be used for normal illness, childcare, pregnancy, travel issues, moving, etc

2. Student **is** physically in the clinic, but the primary instructor (e.g. dosimetrist) is remote:
    a. As long as there is other staff readily available (e.g. physicist) that have the necessary treatment planning skills, this type of remote learning is allowed up to 100%.

For all remote clinical education, the following requirements have to be met, otherwise the student will not be able to do remote clinical education and must return to in-person clinical education. The student will be responsible for establishing an appropriate and safe environment for remote clinical education.

**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)
    - 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:
    - Expectation for planning/workload.
    - What should be accomplished by the end of the day.
    - When the instructor is available for questions.
- The student and clinical instructor agrees to be accessible by phone, e-mail, or other mode of communication (e.g., instant messaging) within a reasonable time period during the agreed upon clinical education schedule.

**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. Students are held to the same schedule restrictions as found in the handbook.
- 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).
- Students are required to have appropriate child care arrangements in place during their scheduled clinical education hours to ensure uninterrupted focus and productivity.

**Journals**

- In addition to attendance, students must journal a summary of their daily activity for each clinical day they remotely 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 be completed every remote day.
    - **Do not include patient information.** The journal will be checked by the GVSU faculty once a week.
- If students do not consistently maintain productivity and performance expectations, then remote clinical education can be revoked.

**Planning System**

- Students must have access to the hospital's planning system to gain clinical hours.
- 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.

**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.

- Competency attempts must be proctored by the clinical instructor. The student is required to use screen sharing and have their video on throughout the entire duration of the competency attempt.

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Student Name _____ Date: _____

Evaluator Name _____ Competency: _____

## MANDATORY COMPETENCY EVAULATION FORM

This form is to be completed by the evaluator.
Evaluator: Please mark each task as P (pass), F (fail), or NA (not applicable). For mastery, the student must Pass in each Task listed below unless a specific task is determined N/A by the evaluator. **Also, the competency is a Fail and should be repeated by the student for mastery attainment if the plan is not treatable or unacceptable for treatment or has an error that makes a significant difference in the distribution.**

| Task | Pass | Fail | N/A | Evaluator Comments |
|---|---|---|---|---|
| **1. Treatment Prescription followed** | | | | |
| **2. Isocenter/Calc Point Placement** | | | | |
| **3. Treatment structures identified (CTV, PTV, etc.)** | | | | |
| **4. Treatment structures covered adequately** | | | | |
| **5. Critical structures contoured (OAR, etc)** | | | | |
| **6. Critical structure doses appropriate** | | | | |
| **7. Hot spot placement** | | | | |
| **8. Beam angle selection** | | | | |
| **9. Treatment accessory devices appropriately utilized** | | | | |
| **10. Dose engine/algorithm appropriate** | | | | |
| **11. Heterogeneity appropriately selected** | | | | |
| **12. Dose grid selection** | | | | |
| **13. Image transfer/Fusion** | | | | |
| **14. Tx Couch contoured appropriately** | | | | |
| **15. Minor contours** | | | | |
| **16. Independent calculation performed (Hand calc., Computer MU Calc., etc.)** | | | | |
| **17. Record and Verify System information** | | | | |
| **18. Plan can be implemented clinically** | | | | |
| **19. Overall plan appropriateness** | | | | |
| **20. Overall plan quality** | | | | |
| **21. Student obtained plan approval from credentialed dosimetrist or physicist** | | | | |
| **22. Student obtained plan approval from physician** | | | | |
| **23. Planning time reasonable** | | | | |
| **24. Student demonstrated cognitive competency by answering relevant clinical case questions*** | | | | |

| Evaluator Comments: |
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| Student Comments: |
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☐ Pass ☐ Fail

If a passing score, evaluator please rate the overall plan quality (does not affect the student's grade):

| | 3 (No Changes) | 2 (Minor Changes) | 1 (Moderate Changes) |
|---|---|---|---|
| **Overall Plan Quality** | | | |

**Evaluator Signature & Credentials: _____ Date:_____**

**Student Signature: _____Date:_____**

***Examples of Relevant Clinical Case Questions:**

1. What would be other possible treatment options for this clinical case?
2. What possible complications might the patient experience as a result of this treatment dose?
3. What are difficulties that the radiation therapist may experience when implementing this treatment plan?
4. What are some benefits of this particular treatment delivery modality, energy, beam arrangement, etc.?

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Student Name: _____ Clinical Site: _____

## COMPETENCY CHECKLIST FOR GRADUATION

| **Mandatory (Must Complete All)**<br>*all should be curative intent unless stated as palliative, and photon unless otherwise stated* | **Evaluators Signature** | **Date Performed** | **Semester Turned In** |
|---|---|---|---|
| Primary Brain IMRT/VMAT | | | |
| Primary Bilat Head and Neck (with nodes) IMRT/VMAT | | | |
| Primary Lung (3D Conformal or IMRT/VMAT) | | | |
| Primary Esophagus (IMRT/VMAT) | | | |
| Intact Breast Tangents (3D Conformal) | | | |
| Chest Wall Tangents w/ Supraclavicular and Axilla Fields (3D Conformal or IMRT/VMAT) | | | |
| Chest Wall (or Intact) Tangents w/ Supraclavicular, Axilla and IM Fields (3D Conformal or IMRT/VMAT) | | | |
| Abdomen (e.g. Pancreas, GE Junction) (3D Conformal or IMRT/VMAT) | | | |
| Pelvis and Nodes SIB (IMRT/VMAT) | | | |
| 3 Field Pelvis with Wedges (curative intent) | | | |
| 4 Field Pelvis (curative intent) | | | |
| Prostate IMRT/VMAT | | | |
| Limb Melanoma/Sarcoma (3D Conformal or IMRT/VMAT) | | | |
| Interstitial Implant | | | |
| Intracavitary HDR | | | |

| | | | |
|---|---|---|---|
| Craniospinal Irradiation IMRT/VMAT | | | |
| Palliative Whole Brain | | | |
| Palliative Spine | | | |
| Lymphoma/ Mantle (can be involved field, IMRT/VMAT preferred, mediastinal location) | | | |
| Electron Beam Planning (skin cancer) | | | |
| Fusion (MRI, PET, etc.) | | | |
| Re-Irradiation (can be palliative) | | | |
| Composite Planning (new treatment in close proximity to previous treatment, can be palliative) | | | |
| Lung Stereotactic Body Radiation Therapy (SBRT) | | | |
| Brain Stereotactic Radiosurgery (SRS) | | | |

Note: Completed Mandatory Competency Evaluation Form is required for each mandatory competency. To the extent possible, students should complete some practice cases and competencies on actual patients.

| **Elective Activities (Must complete 5)** | **Evaluators Signature** | **Date Performed** |
|---|---|---|
| Observe High Dose Rate (Plan and Tx) | | |
| Observe Respiratory Motion Mgmt (Plan and Tx) | | |
| Prone Breast | | |
| PA Axillary Boost Plan or Calculations | | |
| Anus or Vulva Treatment Planning | | |
| Proton Treatment Planning | | |
| Surface or Cavity Dose Measurements | | |
| Clinical Dosimetrist Assignment | | |
| Clinical Dosimetrist Assignment | | |
| Clinical Dosimetrist Assignment | | |
| Observe Brachytherapy OR Insertion | | |
| Observe Brachytherapy Source Preparation | | |
| Brachytherapy HDR Procedure | | |
| Participate in Total Body Irradiation Planning | | |
| Participate in Total Skin Electron Irradiation (TSEI) | | |
| Observe Patient Specific QA | | |
| Observe Monthly or Annual QA of equipment: | | |
| Observe Monthly or Annual QA of equipment: Other | | |
| Observe Monthly or Annual QA of equipment: LINAC | | |

Note: Only the Evaluators signature is required for elective activities.

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## CLINICAL EVALUATION OF STUDENT FORM

Student Name _____ Date _____

Clinical Education Center _____ Course # _____ Semester & Year _____

INSTRUCTIONS: Please rate the student in the following categories by checking inside the appropriate box. We appreciate honest and candid responses as they are essential to the students' professional growth. Please review this evaluation with the student and both sign below.

| EVALUATION FACTORS | | Almost Always True | Usually True | Occas-ionally True | Usually Not True | Almost Never True | N/A |
|---|---|---|---|---|---|---|---|
| **Attendance** | Punctuality: on time each day and prepared to begin the clinical assignment | | | | | | |
| | Notifies staff of absenteeism at correct time | | | | | | |
| | Actively engaged in clinical activities | | | | | | |
| | Motivated to learn | | | | | | |
| | Works on clinical assignments (not homework) | | | | | | |
| **Professional Conduct** | Professionally dressed & clean (personal appearance) | | | | | | |
| | Work area is neat and orderly | | | | | | |
| | Respectful to staff | | | | | | |
| | Respectful to patients / family members | | | | | | |
| | Able to focus on tasks | | | | | | |
| | Follows instructions well | | | | | | |
| | Willing to learn from all staff members | | | | | | |
| | Volunteers to assist others in need | | | | | | |
| | Works well under pressure | | | | | | |
| | Follows AAMD Scope of Practice | | | | | | |
| | Follows MDCB Ethical Standards | | | | | | |
| **Skills** | Planning skills are progressing according to expectations | | | | | | |
| | Charting skills are progressing according to expectations | | | | | | |
| | Simulation skills are progressing according to expectations | | | | | | |

| | | Almost Always True | Usually True | Occas-ionally True | Usually Not True | Almost Never True | N/A |
|---|---|---|---|---|---|---|---|
| | Department workflow skills are progressing according to expectations | | | | | | |
| | Successfully presenting plans to physicians are progressing according to expectations | | | | | | |
| | Proficient in sites already comped on | | | | | | |
| **Application of Knowledge** | Grasping concepts at an appropriate rate | | | | | | |
| | Eager to demonstrate acquired knowledge | | | | | | |
| | Asks appropriate questions (content) | | | | | | |
| | Asks an appropriate frequency of questions | | | | | | |
| | Planning approach is logical and efficient | | | | | | |
| | Completing plans in a timely manner | | | | | | |
| | Demonstrating mastering of details | | | | | | |
| | Displays proficiency in past learned skills | | | | | | |
| | Can apply past learned concepts to new treatment sites | | | | | | |
| | Can anticipate what is required for each patient and performs tasks without prodding | | | | | | |
| | Applies didactic classroom knowledge to clinic (where appropriate) | | | | | | |
| **Initiative / Perseverance** | Actively seeks learning experiences | | | | | | |
| | Keeps busy | | | | | | |
| | Takes direction well | | | | | | |
| | Able to adapt to changes | | | | | | |
| | Able to prioritize duties | | | | | | |
| | After making a mistake, asks questions and makes another attempt without prodding | | | | | | |
| | Learns from their mistakes | | | | | | |
| | Takes criticism well, and does not blame others or argue (deny errors) | | | | | | |
| **Commun-ication** | Works well in the team environment | | | | | | |
| | Communicates effectively with **physicians** | | | | | | |
| | Communicates effectively with **physicists** | | | | | | |
| | Communicates effectively with **dosimetrists** | | | | | | |
| | Communicates effectively with **radiation therapist** | | | | | | |
| | Communicates effectively with **patients** | | | | | | |
| **Self-Confidence** | Exhibits confidence when approaching a new task | | | | | | |
| | Exhibits confidence when approaching a task already mastered | | | | | | |
| | Overall confident in personal ability | | | | | | |

| | | Almost Always True | Usually True | Occas-ionally True | Usually Not True | Almost Never True | N/A |
|---|---|---|---|---|---|---|---|
| **Organization Skills** | Notes are organized | | | | | | |
| | Effectively prioritizes duties | | | | | | |
| | Follows through with all aspects of treatment planning | | | | | | |
| **Patient Care Skills** | Ensures patient safety | | | | | | |
| | Ensures patient comfort | | | | | | |
| | Is aware of the patient's emotions and acts accordingly | | | | | | |
| | Provides information to the patient | | | | | | |
| | Shows awareness of the patient's condition / limitations | | | | | | |
| | Ensures proper radiation protection | | | | | | |

Evaluator Comments and Recommendations:

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Student Comments:

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This performance evaluation has been reviewed with me, and I understand that I may attach my comments, if desired.

**Evaluator Signature: _____Date:_____**

**Student Signature: _____Date:_____**

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## CLINICAL ADVISING PROGRAM STUDENT SELF-EVALUATION

| Student Name | | Date |
|---|---|---|
| Clinical Education Center | Course # | Semester & Year |

**INSTRUCTIONS:** As students, you are constantly evaluated by your instructors in order to monitor your progress during clinical education. However, it is important that your instructors also hear how you perceive your experience and ability. This evaluation asks you to candidly discuss your current progress. Please check the appropriate column or columns which best describes your feelings about your level of proficiency at this point in your education.

1. List the treatment plans you require the most help with

2. In the space below, list the procedure or situation you find most difficult:

3. Rate your abilities in each of the following areas according to the following.

Grading Rubric:
***Poor-Zero (0) points indicating does not meet acceptable standard***
***Fair-One (1) points indicating meets standard but needs significant improvement***
***Good-Two (2) points indicating meets acceptable standard***
***Excellent-Three (3) points indicating exceeds acceptable standard***

| | Excellent (3 points) | Good (2) | Fair (1) | Poor (0) |
|---|---|---|---|---|
| 1. PROFESSIONAL CONDUCT<br>mannerisms, cleanliness, neatness | | | | |
| 2. ATTITUDE<br>enthusiasm for profession, interest in assigned activities | | | | |
| 3. COMMUNICATION SKILLS<br>interpersonal skills c/ staff | | | | |
| 4. PATIENT CARE SKILLS<br>awareness of emotions, modesty, provide information to patient | | | | |
| 5. COOPERATION<br>willingness to assume duties | | | | |
| 6. DEPENDABILITY<br>punctuality & reliability | | | | |
| 7. SELF-CONFIDENCE<br>confidence in personal ability | | | | |
| 8. APPLICATION OF KNOWLEDGE<br>use of academic information | | | | |
| 9. ORGANIZATION OF DUTIES<br>logical & efficient performance | | | | |
| 10. ADAPTABILITY<br>ability to adapt to changing situations, prioritize duties and cases | | | | |

4. Place an X on the line to rate your overall professional ability at this point in your education:

Excellent Good Average Fair Poor

5. In the space below explain the progress you have made in achieving the goals you set at your last self-evaluation. Attach any required documentation.

6. GOALS: In the space below list at least one measurable goal that you wish to set for yourself for next term

| 7. List each of the goals for which you are being evaluated (N/A if initial term) | Goal Met Yes(X) | No(X) |
|---|---|---|
| Goal: | | |
| Goal: | | |
| Goal: | | |
| Goal: | | |
| Goal: | | |
| Goal: | | |
| ALL GOALS MET FROM PREVIOUS TERM (N/A if initial term) | | |

8. Please add any additional comments which you deem important (e.g., disagreements with this or other evaluations, clinical assignments, etc.):

| 9. Goals for the following semester: (will be completed by GVSU Faculty) |
|---|
| Goal: |
| Goal: |
| Goal: |
| Goal: |
| Goal: |
| Goal: |

Note: Additional goals may be indicated on attachments

_____ _____

GVSU Faculty Evaluator (Sign & Date) Student (Sign & Date)

I have reviewed this evaluation and have had opportunity for discussion.

**Medical Dosimetry Program**
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College of Health Professions
Center for Health Sciences
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## STUDENT EVALUATION OF CLINICAL EDUCATION CENTER

Date: _____ Clinical Ed Center: _____

INSTRUCTIONS: Before completing this form consider this question; "Did I make an honest effort to take advantage of the educational opportunities available during my assignment to this clinical education center?" Keep this consideration in mind while completing this evaluation.

Evaluations will be provided to the clinical site and preceptor annually

All results are typed into a cumulative total so that you cannot be personally identified. Honest and candid answers will be most helpful. Please make a written comment to explain all Strongly Agree and all Strongly Disagree marks. **DO NOT SIGN YOUR NAME TO THIS EVALUATION**.

| REGARDING THE MEDICAL PHYSICISTS<br>I believe they made every attempt to: | **Strongly Agree** | **Agree** | **Disagree** | **Strongly Disagree** | **N/A** |
|---|---|---|---|---|---|
| 1A. recognize that my role was primarily to learn with the resulting service being secondary | | | | | |
| 1B. encourage and answer my questions | | | | | |
| 1C. display professionalism | | | | | |
| | | | | | |
| REGARDING THE RADIATION ONCOLOGISTS<br>I believe they made every attempt to: | **Strongly Agree** | **Agree** | **Disagree** | **Strongly Disagree** | **N/A** |
| 2A. recognize that my role was primarily to learn with the resulting service being secondary in nature | | | | | |
| 2B. encourage and answer my questions | | | | | |
| 2C. display professionalism | | | | | |
| | | | | | |
| REGARDING THE RADIATION THERAPISTS<br>I believe they made every attempt to: | **Strongly Agree** | **Agree** | **Disagree** | **Strongly Disagree** | **N/A** |
| 3A. recognize that my role was primarily to learn with the resulting service being secondary in nature | | | | | |
| 3B. encourage and answer my questions | | | | | |
| 3C. display professionalism | | | | | |
| | | | | | |
| REGARDING THE MEDICAL DOSIMETRISTS<br>I believe they made every attempt to: | **Strongly Agree** | **Agree** | **Disagree** | **Strongly Disagree** | **N/A** |
| 4A. recognize that my role was primarily to learn with the resulting service being secondary in nature | | | | | |
| 4B. encourage and answer my questions | | | | | |
| 4C. point out alternative methods for me to accomplish a task when necessary | | | | | |
| 4D. permit me to correct my own mistakes | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 4E. allow me to do things on my own | | | | | |
| 4F. display professionalism | | | | | |
| 4G. demonstrate a positive attitude toward all students | | | | | |
| 4H. schedule and make available valuable clinical experiences for me | | | | | |
| | | | | | |
| REGARDING MY CLINICAL PRECEPTOR I believe s/he made every attempt to: | **Strongly Agree** | **Agree** | **Disagree** | **Strongly Disagree** | **N/A** |
| 5A. recognize that my role was primarily to learn with the resulting service being secondary in nature | | | | | |
| 5B. encourage and answer my questions | | | | | |
| 5C. point out alternative methods for me to accomplish a task when necessary | | | | | |
| 5D. permit me to correct my own mistakes | | | | | |
| 5E. allow me to do things on my own | | | | | |
| 5F. display professionalism | | | | | |
| 5G. demonstrate a positive attitude toward all students | | | | | |
| 5H. schedule and make available valuable clinical experiences for me | | | | | |
| | | | | | |
| REGARDING MY OVERALL EXPERIENCE | **Strongly Agree** | **Agree** | **Disagree** | **Strongly Disagree** | **N/A** |
| 5A. I experienced a good mix of patients, problems and clinical experiences. | | | | | |
| 5B. I had a reasonable pace of learning. | | | | | |
| 5C. I had reasonable access to resources and consistent clinical instruction. | | | | | |
| 5D. I experienced a fair evaluation of my performance in clinic. | | | | | |
| 5E. My time in clinic was valuable, with minimal down time. | | | | | |
| 5F. I was encouraged to be more independent over time. | | | | | |
| 5G. I was encouraged to be part of the team and interact with all Rad Onc members. | | | | | |
| | | | | | |
| REGARDING MY PERSONAL FEELINGS As a result of this clinical rotation, I now am: | **Strongly Agree** | **Agree** | **Disagree** | **Strongly Disagree** | **N/A** |
| 7A. more advanced in clinical knowledge | | | | | |
| 7B. more interested in Medical Dosimetry as a profession | | | | | |
| 7C. prepared to start my career as a Medical Dosimetrist | | | | | |

Constructive comments should be made below.

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## INDEPENDENT STUDY COURSE AGREEMENT

Independent study courses are available in 1, 2, and 3 credit options. You may propose any topic relevant to the study of medical imaging and radiation sciences but must have this form completed and signed by the faculty member responsible for your course grade. You should expect to propose approximately 42 hours of activity for 3 each academic credit. This is based on a 14 week semester expectation of a didactic course meeting 1 hour per week per credit plus 2 hours per week of preparation and study.

Student Name _____ Date _____

Course # _____ Semester & Year _____

I propose the following for _____ academic credits.

The title of my independent study is:

List each activity and approximate number of hours you plan to devote to achieve your objective/s.

| Hours | Activity |
|---|---|

I realize I must acquire the signature of a faculty member on this form and in addition, must register for the appropriate course before this proposal can be completed.

Student Signature & Date _____

Faculty Signature & Date _____

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# INCIDENT / INJURY REPORT FORM

**STUDENT**

| | | |
|---|---|---|
| Last Name | First Name | |
| Date of Birth | Social Security Number | |
| Street Address | | |
| City | Zip | Phone: |

**INCIDENT/INJURY**

| | | |
|---|---|---|
| Date of incident | Date reported | Course in which injury occurred |
| Place of incidence | | Type of injury (strain, cut, etc) |
| Describe how incident/injury happened | | |
| Name of witnesses | | |
| Name of doctor (if known) | | |
| Signature | | Date |

**INSTRUCTOR'S REPORT**

| | |
|---|---|
| What caused this accident? (Please be explicit) | |
| How was the injury treated? Or how was the incident addressed? | |
| How can a recurrence be prevented? | |
| Has preventative action been taken?<br>if 'no', please explain. | Has a report been completed at the institution where the incidence occurred? |
| Comments by student regarding injury or incident | |
| Signature | Date |

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## RECOGNITION ABOVE AND BEYOND FORM

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 signature | Date |

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## NEW POLICY NOTIFICATION FORM

New Policy:

I have received a copy of the new policy. It is my understanding that the new policy takes effect immediately and agree to follow the new policy.

| Date | Student Signature | Printed Name |
|---|---|---|

# JRCERT STANDARDS FOR AN ACCREDITED EDUCATIONAL PROGRAM IN MEDICAL DOSIMETRY

EFFECTIVE January 1, 2021

Adopted by: The Joint Review Committee on Education in Radiologic Technology
Joint Review Committee on Education in Radiologic Technology 20 N. Wacker Drive, Suite 2850 Chicago, IL 60606-3182 312.704.5300 ● (Fax) 312.704.5304 www.jrcert.org

The Joint Review Committee on Education in Radiologic Technology (JRCERT) is dedicated to excellence in education and to the quality and safety of patient care through the accreditation of educational programs in the radiologic sciences. The JRCERT is the only agency recognized by the United States Department of Education (USDE) and the Council on Higher Education Accreditation (CHEA) for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. The JRCERT awards accreditation to programs demonstrating substantial compliance with these STANDARDS. 

Standard One: Accountability, Fair Practices, and Public Information

The sponsoring institution and program promote accountability and fair practices in relation to students, faculty, and the public. Policies and procedures of the sponsoring institution and program must support the rights of students and faculty, be well-defined, written, and readily available.

Standard Two: Institutional Commitment and Resources

The sponsoring institution demonstrates a sound financial commitment to the program by assuring sufficient academic, fiscal, personnel, and physical resources to achieve the program's mission.

Standard Three: Faculty and Staff

The sponsoring institution provides the program adequate and qualified faculty that enable the program to meet its mission and promote student learning.

Standard Four: Curriculum and Academic Practices

The program's curriculum and academic practices prepare students for professional practice.

Standard Five: Health and Safety

The sponsoring institution and program have policies and procedures that promote the health, safety, and optimal use of radiation for students, patients, and the public.

Standard Six: Programmatic Effectiveness and Assessment: Using Data for Sustained Improvement

The extent of a program's effectiveness is linked to the ability to meet its mission, goals, and student learning outcomes. A systematic, ongoing assessment process provides credible evidence that enables analysis and critical discussions to foster ongoing program improvement.