

# **Doctor of Medical Physics Program Handbook**

## Welcome

The Doctor of Medical Physics is a four-year professional degree program in therapeutic medical physics that provides a direct path to certification and gainful employment in clinical medical physics. The first two years of the program curriculum is very similar to UNLV's accredited Master of Science in medical physics program during which students take didactic coursework emphasizing the fundamentals of therapeutic medical physics. During the last two years, students are placed in clinical rotations in local and regional radiation oncology centers and/or hospitals where they are exposed to the practical aspects of therapeutic medical physics. The DMP program is accredited by the Commission on Accreditation of Medical Physics Education Programs (CAMPEP).

## Mission Statement

The mission of the Doctor of Medical Physics (DMP) Program is to provide a high-quality graduate education experience for students in therapeutic medical physics. The educational experience comprises rigorous classroom instruction aided by computer and multi-media instruction, practical laboratory experiences, and clinical instruction. Program graduates will be capable of critical thinking and problem solving, devoted to a lifetime of learning, committed to the ethical standards of their profession, and highly sought after by employers.

# Program Outcomes

The educational objectives for the doctorate in medical physics program are to provide students with:

- A comprehensive understanding of the fundamental principles associated with the clinical use of both ionizing and non-ionizing radiations.
- An understanding of basic sectional anatomy and common pathologies in medical imaging modalities including CT, MRI, ultrasound, and PET.
- An in-depth knowledge of the operation of radiation producing and detecting devices commonly used in therapeutic applications.
- An understanding of the basic computational principles associated with therapeutic and diagnostic applications.
- The clinical experience required for a complete understanding of the wide-ranging clinical duties of a therapeutic medical physicist.
- Research experiences in medical physics-related projects.
- The ability to critically evaluate research and scholarship in medical physics.
- A sound understanding of medical physics ethics and the ability to provide appropriate clinical care to patients in a professional manner.
- The capability of effectively communicating technical information in both oral and written form.
- ☐ The educational experience that will lead them to pursue a lifetime of self-directed learning and professional development.

# Purpose

The purpose of this handbook is to provide program specific information that is not found in the <u>UNLV Graduate Catalog</u>. Students are responsible for understanding and following the policies and procedures delineated in this document and the <u>UNLV Graduate Catalog</u>, as well as the NSHE Code,

UNLV Bylaws, and the UNLV Student Conduct Code. Questions about policies should be directed to the Graduate College: valarie.burke@unlv.edu or gradassociatedean@unlv.edu

# **Department Graduate Faculty**

A current listing of the graduate faculty can be found in the <u>UNLV Graduate Catalog</u>. Faculty must hold either associate or full graduate faculty status to be involved in graduate education at UNLV. For up to date information regarding graduate faculty status in your department, visit the <u>Graduate Faculty status</u> web page.

# **Program Information**

<u>Graduate Catalog: Doctor of Medical Physics (DMP)</u> Sub-Plans: Post-Bachelor's Track, Post-Master's Track

Contact Information
Doctor of Medical Physics

Program Director Yu Kuang, PhD, yu.kuang@unlv.edu

Department Chair Steen Madsen, PhD, steen.madsen@unlv.edu

Graduate Coordinator
Steen Madsen, PhD, steen.madsen@unlv.edu

Department Main Office Bigelow Heath Sciences – 345 Phone: 702-895-4320 Fax: 702-895-4819

**Program Requirements** 

Program requirements regarding admission, coursework and culminating experience are found in the graduate catalog.

Degree Program Benchmarks

In order to graduate from the program students must:

- 1. Maintain a cumulative GPA of 3.0/4.0 or above each semester enrolled.
- 2. Receive a grade of B (3.0) or above (or satisfactory, where applicable) in all courses. If less than a B (or unsatisfactory) is earned, the course may be repeated. The student must be in good standing to repeat a course, and any course may be repeated only once.
- 3. Complete a minimum of six semester hours in each calendar year.
- 4. Complete a minimum of 80 credit hours (60 credit hours for students admitted with a masters degree.

Students entering the program with a B.S. degree have the option of leaving the program with a master's degree after successful completion of all non-clinical coursework. These students are required to take additional credits of professional paper (HPS 796) or thesis (HPS 797) in order to satisfy the research component of the master's degree.

Students are required to complete a culminating experience (HPS 777) consisting of a clinical research project performed during their last two semesters in the program. Prior to the start of the project, students are required to present a project proposal to their project committee. At the conclusion of

the project, students will present the results to the committee via oral presentation and a written report. The project committee will consist of the program director, associate director, graduate college representative, and a minimum of two clinical physicists including the clinical project mentor.

Oral exams are used to evaluate students in clinical courses. The final grade (satisfactory/fail/incomplete) for each clinical class is based on the student's performance on the oral exam which covers material from all clinical rotations constituting the class. The oral exam is graded on a 5-point scale (5 = excellent; 4 = good; 3 = satisfactory; 2 = poor and 1 = fail). A minimum score of 3 (satisfactory) in each clinical rotation is required to pass the class. Failure to achieve a satisfactory will result in remedial action as determined by the examination committee. In cases where the deficiencies are relatively minor, the student will be given an opportunity to correct the deficiencies without having to repeat the entire class. Based on the nature of the deficiencies, the program director, in consultation with members of the examination committee, will develop a remediation plan and an "incomplete" will be given for the course. Once the student has successfully completed the remediation plan, the "incomplete" will be removed and a grade of "satisfactory" will be assigned for the class. In cases, where there are significant shortcomings (e.g. failing grades in multiple rotations within the class), the student will be required to repeat the entire class and placed on probation via the Graduate College process. Failure to pass a clinical class on the second attempt will result in separation from the Program.

# Sample Program Timeline Post-Bachelor's Track (80 credits)

Fall Semester #1	Spring Semester #1	Summer Semester #1	
HPS 701 – 3 cr.	HPS 703 – 3 cr.	HPS 790 – 6 cr.	
HPS 730 – 3 cr.	HPS 602 – 3 cr.		
HPS 611 – 1 cr	HPS 603 – 3 cr.		
HPS 676 – 3 cr			
Fall Semester #2	Spring Semester #2	Summer Semester #2	
HPS 720 – 3 cr.	HPS 740 – 3 cr.	HPS 770 – 6 cr.	
HPS 742 – 3 cr.	HPS 742L – 3 cr.		
HPS 611 – 1 cr.	HPS 792 – 1 cr.		
	HPS 611 – 1 cr.		
Fall Semester #3	Spring Semester #3	Summer Semester #3	
HPS 771 – 6 cr.	HPS 772 – 3 cr.	HPS 774 – 6 cr.	
	HPS 773 – 3 cr.		
Fall Semester #4	Spring Semester #4		
HPS 775 – 6 cr.	HPS 776 – 6 cr.		
HPS 777 – 2 cr.	HPS 777 – 2 cr.		
Post-Master's Track (60 credits)			
Fall Semester #1	Spring Semester #1	Summer Semester #1	
Approved electives – 10 cr.	Approved electives – 10 cr.	HPS 770 – 6 cr.	
Fall Semester #2	Spring Semester #2	Summer Semester #2	
HPS 771 – 6 cr.	HPS 772 – 3 cr.	HPS 774 – 6 cr.	
	HPS 773 – 3 cr.		
Fall Semester #3	Spring Semester #3		
HPS 775 – 6 cr.	HPS 776 – 6 cr.		
HPS 777 – 2 cr.	HPS 777 – 2 cr.		

# **Professional Code of Ethics/Discipline Guidelines**

UNLV Graduate College policy regarding academic integrity can be found in <a href="the graduate catalog">the graduate catalog</a>. Non-academic dismissal may be warranted for any just cause including, but not limited to, serious or repeated infractions of established policies or procedures, failure to adhere to appropriate patient care, failure to demonstrate ethical or professional standards, failure to perform required work duties

properly, or any action threatening the health, welfare or safety of any patient, visitor, colleague or employee. In such instances, the program director will request a special meeting with the program's steering committee which will make the final decision. In most instances, the student will be placed on probation via the Graduate College process when initial concerns are raised. The student will receive a letter from the program director outlining the grounds for dismissal via the Graduate College.

# **Annual Mandatory Individual Development Plan (IDP)**

Each winter break and early spring term, graduate students are required to complete the Graduate Student Individual Development Plan (IDP) form [Formerly known as the Student Annual Review]. The review covers the prior calendar year and assesses student progress, and it establishes reasonable goals for the year ahead.

Faculty Advisors/Graduate Coordinators have the option to provide feedback to each students' submitted IDP and provide acknowledgement that they have reviewed the IDP.

Reported student data is shared with students' graduate coordinators and advisors to foster opportunities for discussion about students' strengths and weaknesses, accomplishments and next requirements, and mentoring plans so that students know what they need to do in order to progress successfully through their programs in a timely manner.

Students who are graduating are also required to complete the form in order to record their achievements since the data is also used to track UNLV metrics related to the annual productivity of all students.

## **Probation**

If a student fails to successfully progress in their degree program, their department/school will recommend that the student be placed on probation by the Graduate College. Students on probation may be dismissed/separated from their program for failing to successfully meet the conditions of their probation by the deadline provided. Please see the Probation and Separation section of the Graduate Catalog for more information.

# **University Resources**

## The Graduate Academy: Innovative Leadership, Professional, and Career Development

The goal of the Graduate Academy is to serve as a virtual resource providing support and many professional opportunities to UNLV graduate students. The Academy offers information about events and services such as graduate certificate programs, workshops, training sessions and career services. You can follow Academy activities via social media or look for regular updates on the website.

# Alumni Engagement

With an alumni base 150,000+ strong, the UNLV Alumni Engagement offers a variety of services and opportunities in support of alumni and their families. UNLV alumni are encouraged to support the values of higher learning through advocacy, involvement, and giving.

#### Commencement Office

Located in the UNLV Office of the Registrar, the <u>commencement office</u> is the last step in the graduation process. Please check with the commencement office for information on the commencement ceremony and your diploma; for all other information about graduate student degree completion and graduation, including thesis/dissertation requirements and doctoral hooding, please contact the Graduate College. It is the students' responsibility to ensure they apply for <u>graduation on time</u> and submit all required forms to the Graduate College. Questions regarding thesis/dissertation should be directed to the Graduate College <u>Student Services Team</u> and questions regarding required forms should be directed to the Graduate College <u>RPC Team</u>.

The vision of the Office of Diversity Initiatives is to advocate, promote, and support the advancement of equity, inclusiveness, and empowerment of a continuously changing collegiate and global community. The mission of the Office of Diversity Initiatives is to provide leadership and support for UNLV's diversity mission: to nurture equity, diversity, and inclusiveness that promotes respect, support, and empowerment. This Office also handles UNLV Title IX questions, inquiries, and reporting.

#### Disability Resource Center (DRC)

The <u>DRC</u> is committed to supporting students with disabilities at UNLV through the appropriate use of advocacy, accommodations, and supportive services to ensure access to campus courses, services, and activities. The DRC is the university-designated office that determines and facilitates reasonable accommodations in compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. Graduate students with disabilities must disclose to the DRC in order to receive appropriate accommodations.

#### Office of International Student and Scholars Services

International Students and Scholars (ISSS) ensures compliance with both SEVIS (Student and Exchange Visitor Information System) and federal law, so that the university can continue to be authorized by the U.S. federal government to enroll international students; host and hire international scholars; assist and advise employment eligibility and authorization relating to international students and scholars, and visa, travel, and immigration issues; provide critical and specialized services to the international students and scholars of the UNLV community; and facilitate their transition to the campus and the U.S.

#### The Care Center

The <u>Care Center</u> is committed to creating a supportive and inclusive environment for all genders through programming, services, and advocacy for the UNLV community. The Women's Center has informational resources, brochures, and flyers for a variety of on and off campus organizations to help empower and protect yourself, and learn about your options. They also provide free tampons, pads, and condoms.

#### The Intersection

<u>The Intersection</u> is a one-stop resource for UNLV's highly diverse student body — a comprehensive multicultural center grounded in the academic life of our students. As an intersecting campus resource, the Intersection helps ensure students, particularly first-generation and students of color, successfully navigate their academic careers. Here, all members of campus can discuss their differences, discover their similarities, and build a shared sense of belonging.

#### **UNLV** Libraries

<u>UNLV Libraries</u> has always been more than books; they are about encouraging students and creating quality programs that elevate growth and learning. Please visit their website for important information about the services they offer to graduate students.

# Graduate & Professional Student Association (GPSA)

The <u>Graduate & Professional Student Association</u> serves all currently enrolled University of Nevada, Las Vegas graduate and professional students. The GPSA maintains the Graduate Student Commons located in the Lied Library room 2141 and Gateway Building PDAC Room. The facility a working office equipped with a copier, fax, flatbed scanners, color laser printer, office supplies, and computers with printers and a small kitchen area. The GPSA is the graduate student governance body at UNLV; the GPSA Council consists of one graduate student representative from each graduate department, and they meet monthly. The GPSA also provides volunteer opportunities, sponsors social events, and supports graduate student research through the graduate research and travel grants program.

## Office of Student Rights and Responsibilities

The Office of Student Rights & Responsibilities is a student-centered, service-oriented office located within the Division of Student Affairs. The Office of Student Rights & Responsibilities collaborates with the UNLV community to provide an inclusive system through enforcement of the UNLV Student Code of Conduct by:

- Promoting awareness of student rights and responsibilities;
- Establishing accountability for student choices;
- Creating opportunities for involvement in the process; and
- Striving to uphold the values and ethics that advance the common good.

## Military and Veteran Services Center

The <u>Military and Veteran Service Center</u> is staffed with veterans and veteran education benefits-experienced staff to assist more than 1,800 veterans, dependents, active duty service members, National Guard members, and reservists attending

UNLV. Their mission is to develop a welcoming, veteran-friendly campus environment that fosters academic and personal success.

# The Financial Aid & Scholarships Office

The <u>Financial Aid & Scholarships Office</u> supports higher-education access and persistence by providing financial aid to eligible students. The office partners with student organizations, the UNLV Foundation, the Graduate College, and other external constituents to provide financial aid learning opportunities and scholarship support for graduate students.

#### Writing Center

This is a free service to UNLV students to help you with any writing project, from papers to creative writing, to resumes, and we can work with you at any stage of the writing process. The center can help you brainstorm, make an outline, work on your drafts, or just be a soundboard for your ideas. The center staff can assist you in person, or via the <a href="Online Writing Lab (OWL)">Online Writing Lab (OWL)</a> page.

# **University Policies and Procedures**

Graduate students are responsible for knowing and acting in accordance with UNLV Policies and Procedures. To view the most commonly referenced campus policies and procedures, you can refer to the following websites:

- Academic Integrity
- Activation for Military Service
- Change of Address
- FERPA/Privacy Rights
- Health Insurance Mandatory
- Jean Clery Campus Safety and Security Report
- Proof of Immunization
- Policies and Procedures on the Protection of Research Subjects
- Rebelmail Policy
- Student Conduct Code
- Student Computer Use Policy
- Title IX

UNLV does not discriminate in its employment practices or in its educational programs or activities, including admissions, on the basis of sex/gender pursuant to Title IX, or on the basis of any other legally protected category as is set forth in NSHE Handbook Title 4, Chapter 8, Section 13. Reports of discriminatory misconduct, questions regarding Title IX, and/or concerns about noncompliance with Title IX or any other anti-discrimination laws or policies should be directed to UNLV's Title IX Coordinator Michelle Sposito.

The Title IX Coordinator can be reached through the <u>online reporting form</u>, by email at <u>titleixcoordinator@unlv.edu</u>, by phone at (702) 895-4055, by mail at 4505 S. Maryland Parkway, Box 451062, Las Vegas, NV, 89154-1062, or in person at Frank and Estella Beam Hall (BEH), Room 555.

To ensure compliance with Graduate College policies and procedures, please review the relevant sections of the <u>Graduate Catalog:</u>

- Academic Calendar
- Academic Policies
- Admission and Registration Information
- Degree Progression Policies & Procedures

In addition, the Graduate College website contains additional information regarding policies and procedures.

Nothing in this handbook supersedes any NSHE, UNLV, or Graduate College policy.

# **Handbook Information**

Last revised	Revised by	Department Vote Tally: Yes/No/Abs. (date of vote)	Changes summary
03/06/2023	Steen Madsen	5 yes 0 no 0 abstain	Updated University Resources section based on the 2019 template.

Last revised	Revised by	Department Vote Tally: Yes/No/Abs. (date of vote)	Changes summary
		03/09/2023	Added one program outcome as mandated by program accreditation review
12/12/2024	Steen Madsen	Minor edits	Correction of minor typos