

**Doctor of Philosophy in Interdisciplinary Health Sciences  
Health Physics Sub Plan**

Students must complete 24 credits in the interdisciplinary health sciences core—12 of which are dissertation credits—and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.

In the interdisciplinary health sciences core, students will be required to take all of the following courses:

- HSC 710 Seminar (1 credit, to be taken three times)
  - Example topics: global healthcare, health policy, health systems, health innovations
- HSC 799 Dissertation (12 credits minimum required)
  - Two committee members will be from faculty who are in other sub-plans.

In the interdisciplinary health sciences research core, students will be required to take three of five of the following courses:

- HSC 701 Interdisciplinary team science (3 credits)
- HSC 702 Translational research design (3 credits)
- HSC 703 Interdisciplinary grant writing for health sciences (3 credits)
- HSC 704 Statistics for health sciences (3 credits)
- HSC 705 Clinical trial design and analysis (3 credits)

Students must complete 36 credits within the health physics sub plan.

Health Physics sub-plan core coursework (18 credits)

- HPS 602 – Detectors (3 credits)
- HPS 603 – Detector Lab (3 credits)
- HPS 701 – Nuclear Physics (3 credits)
- HPS 703 – Interactions (3 credits)
- HPS 720 – Dosimetry (3 credits)
- HPS 730 – Advanced Radiation Biology (3 credits)

Health Physics electives (18 credits)

- HPS 611 - Graduate Seminar (1-3 credits)
- HPS 616 - Advanced Health Physics (3 credits)
- HPS 670 - Environmental Health Physics (3 credits)

- HPS 718 - Radiochemistry Lab (3 credits)
- HPS 719 - Radiochemistry lecture (1 credit)
- HPS 740 - Imaging Physics (3 credits)
- HPS 742 - Physics of Radiation Therapy (3 credits)
- HPS 742L - Physics of Radiation Therapy Lab (3 credits)
- HPS 750 - Radiation Risk Assessment (3 credits)
- HPS 760 - Waste Management (3 credits)
- HPS 790 - Clinical Internship (1-3 credits)
- HPS 792 - Professionalism and Ethics (1 credit)
- HPS 794 - Directed Research (1 - 12 credits)
- HPS 795 - Independent Study (1-9 credits)