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)