# Graduate Degree Plan

## PhD in Cancer & Cell Biology

Students Starting Academic Year: 2021-2022

### General Degree Requirements:
- Completion of at least 180 term hours
- At least 30 of those term hours must be in Didactic courses
- Completion of at least three terms of Research Rotation before appointing a major advisor
- Students must maintain satisfactory academic progress as detailed in the Student Handbook

### Year One Requirements:

#### Term 1:
- **GS-GS-6600** Foundations A: Molecules to Systems 3 (Didactic) (two-term course)
- **GS-GS-6400** Foundations B: Biostatistics 2 (Didactic) (two-term course)
- **GS-GS-5111** Strategies for Success in Graduate School 1
- **GS-GS-5101** Responsible Conduct of Research 1
- **GS-CC-5100** Student Research Seminar 1
- **GS-CC-5030** Research Rotation ± Electives 4

Total: 12 (5) 12 (5)

#### Term 2:
- **GS-GS-6600** Foundations A: Molecules to Systems 3 (Didactic) (two-term course)
- **GS-GS-6400** Foundations B: Biostatistics 2 (Didactic) (two-term course)
- **GS-CC-5101** Reading & Evaluating Scientific Literature 1
- **GS-CC-5100** Student Research Seminar 1
- **GS-CC-5030** Research Rotation ± Electives 5

Total to Date: 24 (10)

#### Term 3:
- **GS-GS-6202** Gene Regulation 2 (Didactic)
- **GS-CC-6208** Cellular Signaling 2 (Didactic)
- **GS-GS-5105** Scientific Writing 1
- **GS-CC-5100** Student Research Seminar 1
- **GS-CC-5030** Research Rotation ± Electives 6

Total: 12 (4) 36 (14)

#### Term 4:
- **GS-CC-6302** Molecular Carcinogenesis 3 (Didactic)
- **GS-CC-5100** Student Research Seminar 1
- **GS-CC** Research Hours ± Electives 8

Total: 12 (3) 48 (17)

#### Term 5:
- **GS-CC** Research Hours ± Electives 12

Total: 12 60 (17)

### Year Two Requirements:

#### Term 1:
- **GS-CC-5301** NRSA Grant Writing & Project Development 1
- **GS-GS-5113** Effective Project Design & Management 1
- **GS-CC-5100** Student Research Seminar 1
- **GS-CC** Research Hours ± Electives 7

Total: 12 72 (17)

*Student’s Thesis Advisory Committee must be appointed by the end of Term 1 in the student’s second year of enrollment*. 07.02.2021
<table>
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<th>Term 2</th>
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<th>Course Name</th>
<th>Credits</th>
<th>Total to Date</th>
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Thirteen additional didactic hours are required for a total of thirty (30)

**Qualifying Exam Requirement:**
- Must be taken by the end of the second year of enrollment.
- Student must complete all prerequisite activities defined by their program before taking the exam.

**Course Requirements beyond Year Two:**
- Year 3, Term 3: GS-GS-5103 Responsible Conduct of Research 3 1
- Year 4, Term 3: GS-GS-5104 Responsible Conduct of Research 4 1

**Recurring requirements until Graduation:**
- Terms 1-4: GS-CC-5100 Student Research Seminar As required
- Terms 1-5: GS-CC-5050 Dissertation As required*

*Students shall enroll in the number of credits of Dissertation needed to be enrolled full-time (12 credits) each term through Graduation.

**Research Course Work:**
- GS-CC-5010 Readings
- GS-CC-5030 Research Rotation
- GS-CC-5040 Special Projects
- GS-CC-5050 Dissertation

**Additional Cancer & Cell Biology courses***:
- GS-CC-6101 Cancer
- GS-CC-6103 Biology of Aging
- GS-CC-6201 Translational Cancer Biology
- GS-CC-6202 Explorative Data Analysis
- GS-CC-6203 Integrated Microscopy
- GS-CC-6204 Regulation of Energy Homeostasis
- GS-CC-6205 Translational Breast Cancer Research
- GS-CC-6206 Cell Death in Development & Disease
- GS-CC-6207 Ethics & Regulatory Prep for Research with Animal Models
- GS-CC-6210 Tumor, Technology, Therapy
- GS-CC-6303 Reproductive Biology
- GS-CC-6304 Biology & Mechanisms of Age-Related Disease
- GS-CC-6401 Technologies for Cancer Drug Discovery & Development (two-term course)

*Students may select electives from open course options in all graduate programs. Courses may be viewed in the 2021 Graduate School Bulletin.