

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) <i>(two-term course)</i> | Total to Date |
| | GS-GS-6400 | Foundations B: Biostatistics | 2 (Didactic) <i>(two-term course)</i> | |
| | GS-GS-5111 | Strategies for Success in Graduate School | 1 | |
| | GS-GS-5101 | Responsible Conduct of Research 1 | 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) <i>(two-term course)</i> | Total to Date |
| | GS-GS-6400 | Foundations B: Biostatistics | 2 (Didactic) <i>(two-term course)</i> | |
| | GS-CC-5101 | Reading & Evaluating Scientific Literature | 1 | |
| | GS-CC-5100 | Student Research Seminar | 1 | |
| | GS-CC-5030 | Research Rotation ± Electives | 5 | |
| Total: | | | 12 (5) | 24 (10) |
| Term 3: | GS-GS-6202 | Gene Regulation | 2 (Didactic) | Total to Date |
| | 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) | Total to Date |
| | 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 to Date: |
| | Total: | | | 12 |

Year Two Requirements:

| | | | | |
|---------|------------|--|----|---------------|
| Term 1: | GS-CC-5301 | NRSA Grant Writing & Project Development 1 | 3 | Total to Date |
| | 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.

| | | | | |
|---------|------------|--|--------|---------------------------|
| Term 2: | GS-CC-5302 | NRSA Grant Writing & Project Development 2 | 3 | Total to Date 84 (17) |
| | GS-GS-5112 | Powerful Presentations | 1 | |
| | GS-CC-5100 | Student Research Seminar | 1 | |
| | GS-GS-5102 | Responsible Conduct of Research 2 | 1 | |
| | GS-CC | Research Hours ± Electives | 6 | |
| | | | Total: | |
| Term 3: | GS-CC-5100 | Student Research Seminar | 1 | Total to Date 96 (17) |
| | GS-CC | Research Hours ± Electives | 11 | |
| | | | Total: | |
| Term 4: | GS-CC-5100 | Student Research Seminar | 1 | Total to Date 108 (17) |
| | GS-CC | Research Hours ± Electives | 11 | |
| | | | Total: | |
| Term 5: | GS-CC | Research Hours ± Electives | 12 | Total to Date |
| | | | 12 | 120 (17) |

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

**Students may select electives from open course options in all graduate programs. Courses may be viewed in the [AY21 Graduate School Bulletin](#)*