Master of Science in Human Genetics and Genetic Counseling
Curriculum for 2014-15

First year, Autumn (Full Time >11 units)
DBIO 201 Development and Disease Mechanisms, 4 units (Kim, Kingsley, Porzig, Scott)
MED 255C Responsible Conduct of Research, 1 unit (SCBE Staff)
GENE 271 Human Molecular Genetics, 4 units (Hanson-Kahn)
GENE 272 Introduction to Medical Genetics, 2 units (Ormond and Hudgins)
GENE 273 Introduction to Clinical Genetics Testing, 1 unit (Hanson-Kahn and Ormond)
GENE 275 Role Play and Genetic Counseling Observations, 2 units (Hanson-Kahn/Ormond/Chen/Siskind/Taylor/)
GENE 284 Medical Genetics Seminar, 2 units (Hanson-Kahn)
GENE 285A Genetic Counseling Seminar, 2 units (Ormond)
Total units: 18

First year, Winter (Full Time >11 units)
GENE 274A A Case Based Approach to Clinical Genetics I, 2 units (Hudgins/Hanson-Kahn)
GENE 276, Clinical Rotations, 5 units (Hanson-Kahn/Ormond)
GENE 278 or 279 or 280 or 281 (select one; tutorial for rotation), 1-4 unit (online courses)
GENE 282 Research Seminar, 1 unit (Ormond)
GENE 284 Medical Genetics Seminar, 2 units (Hanson-Kahn)
GENE 285B Genetic Counseling Seminar, 2 units (Ormond)
(GENE 299 Directed readings, 1-4 units (staff); to bring total to 18 units)
Optional elective, 3-5 units (Faculty outside of the department)
Total units: 12 + online courses, directed readings, and research electives to total 18 units
(Note: if students register for >18 units, extra tuition fees may apply)

First year, Spring (Full Time >11 units)
HumBio 174 Foundations in Biomedical Ethics, 3 units (Magnus)
GENE 274B A Case Based Approach to Clinical Genetics II, 2 units (Hudgins/Ormond)
GENE 276, Clinical Rotations, 5 units (Hanson-Kahn/Ormond)
GENE 278 or 279 or 280 or 281 (select one; tutorial for rotation), 1-3 unit (online courses)
GENE 282 Research Seminar, 1 unit (Ormond)
GENE 284 Medical Genetics Seminar, 2 units (Hanson-Kahn)
GENE 285C Genetic Counseling Seminar, 2 units (Ormond)
Total units – 15 + online courses, directed readings and research electives to total 18 units
(Note: if students register for >18 units, extra tuition fees may apply)

First year, Summer
Students will complete clinical rotations on a full time (~40 hour/week) basis, and work on their research projects. Students will not sign up for any academic credits during this time.
Second year, Autumn (Full time 8-10 units)
GENE 278, 279 or 280 or 281 (any remaining not completed online courses), 1-2 units
GENE 283 (research), 1-5 units, staff OR Elective, 3-5 units
GENE 284 Medical Genetics Seminar, 2 units (Hanson-Kahn)
GENE 286A Advanced Genetic Counseling conference, 2 units (Ormond and Hanson-Kahn)
Use some combination of the GENE 283 and Elective to make up the remaining 5-6 units:
Note: students will also complete research projects and clinical rotations during this quarter, but will not register for them.
Total units 5 + 3-5 in electives (to total exactly 10 without extra fees)

Second year, Winter (Full time 8-10 units)
GENE 283 (research), 1-5 units, staff OR Elective, 3-5 units
GENE 284 Medical Genetics Seminar, 2 units (Hanson-Kahn)
GENE 286B Advanced Genetic Counseling Conference, 2 units (Ormond and Hanson-Kahn)
Use some combination of the GENE 283 and Elective to make up the remaining 6 units:
Note: students will also complete research projects and clinical rotations during this quarter, but will not register for them.
Total units 5 + 3-5 in electives (to total exactly 10 without extra fees)

Second year, Spring (Full time 8-10 units)
GENE 283 (research), 1-5 units, staff OR Elective, 3-5 units
GENE 284 Medical Genetics Seminar, 2 units (Hanson-Kahn)
GENE 286C Advanced Genetic Counseling Conference, 2 units (Ormond and Hanson-Kahn)
Use some combination of the GENE 283 and Elective to make up the remaining 6 units:
Note: students will also complete research projects and clinical rotations during this quarter, but will not register for them.
Total units 6 + 3-5 in electives (to total exactly 10 without extra fees)

Total Units: 84

Note: GENE 278, 279, 280, 281 and 287 are online courses in prenatal, pediatrics, metabolic, cancer, and cardio- genetics that will be taken concurrently with the relevant clinical rotations.

Given the rigorous curriculum listed, students should expect that classes and clinical rotations will fill their days during regular business hours (typically 8:30-5pm, with some exceptions of required classes going until 6pm). Infrequently, required events will be scheduled on weekends or into the evenings, generally with significant advance notice.

**Students should take one elective or more during their second year. As described elsewhere, at least one general elective and one research elective should be taken to complete the program.**