GENETIC COUNSELING (GEN)

GEN 601 Principles of Genetic Counseling 3
Introduction to techniques used in genetic evaluation and counseling. Issues in preconception and prenatal genetic counseling. Skill development including basic interviewing techniques, psychosocial assessment, pedigree construction, searching on-line resources.
Prerequisites: Enrollment in MS genetic counseling program.

GEN 602 Principles of Genetic Counseling II 3
Issues in genetic counseling for pediatric and adult-onset genetic disorders including cancer genetics. Skill development, including working with special populations, decision-making, elements of informed consent.
Prerequisites: Matriculation to second semester of MS genetic counseling program.

GEN 605 Research Design in Genetic Counseling 3
Knowledge and skills basic to critical analysis, interpretation of research findings. Use of the scientific method and research process to address issues in the practice of genetic counseling.
Prerequisites: Matriculation to second semester of MS genetic counseling program.

GEN 610 Genetic Counseling and the Community 2
Impact of genetic disorders on patients and families, structure and function of support groups, and role of allied health professionals in evaluation, treatment and referral of patients with genetic disorders.
Prerequisites: Enrollment in MS genetic counseling program.

GEN 614 Prenatal Development: Embryology and Teratology 3
Human embryological development with emphasis on normal and abnormal development. Issues in teratology and birth defects, clinical problems associated with birth defects and their means of prevention.
Prerequisites: Enrollment in MS genetic counseling program.

GEN 616 Human Molecular Genetics 3
Review and extension of basic principles of molecular genetics and their application for the characterization, understanding, and treatment of genetically based disorders and susceptibilities.
Prerequisites: Enrollment in MS genetic counseling program or permission of instructor.
Notes: Same as BIO 614.

GEN 618 Psychosocial Seminar 1
Application of psychosocial aspects of genetic and genomic medicine with an emphasis on genetic counseling and the general public. Implementation of peer-supervision for discussion of components of particularly challenging cases.

GEN 630 Medical/Clinical Genetics I 3
Introduction to clinical/medical genetics for genetic counseling students. Topics include clinical cytogenetics and molecular genetics, Mendelian and non-traditional inheritance, dysmorphology, genetics of common cancers.
Prerequisites: Enrollment in MS genetic counseling program, BIO 614, BIO 616.

GEN 648 Capstone Preparation Seminar 1
Introduction to research methods for genetic counselors. Knowledge and skills basic to critical analysis, interpretation of research findings, and proposal preparation.
Prerequisites: Enrollment in MS genetic counseling program or permission of instructor.

GEN 658 Molecular Diagnostics 2
Survey of human molecular genetics and current clinical methods used for the diagnosis of human genetic disorders. Special emphasis given to the molecular principles, interpretations, and limitations of these tests.

GEN 669 Clinical Skills Seminar 1
Skill development, eliciting histories, pedigree construction, case preparation and presentation, written documentation of clinical contacts. Introduction to components of clinical and dysmorphology examination and physical measurements.
Prerequisites: Matriculation to Summer Session I of MS genetic counseling program.

GEN 688 Genetics Journal Club 1
Students will select or be assigned articles from the genetics literature for presentation/class discussion. Topics will reflect current trends in research, clinical practice, public policy and social issues.
Prerequisites: Enrollment in MS genetic counseling program or permission of instructor.
Notes: May be repeated for a maximum of two semester hours credit.

GEN 698 Summer Clinical Rotations 2
Introduction to clinical genetic counseling. Supervised observational and participatory activities, skill development.
Prerequisites: Matriculation to Summer Session II of MS genetic counseling program.
Notes: Grade: Satisfactory/Unsatisfactory (S/U).

GEN 701 Principles of Genetic Counseling III 3
Issues in professional development, public policy and health care systems. Introduction to legal issues in genetic counseling. Skill development including advanced genetic counseling skills, case management and preparing educational programs.
Prerequisites: Matriculation to third semester of MS genetic counseling program.

GEN 711 Experimental Course 6
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

GEN 718 Clinical Rotations I 4
Supervised clinical experiences in genetic counseling: case preparation, risk assessment and intervention, psychosocial assessment and support, identification of testing and support resources for patients, skill development.
Prerequisites: Matriculation to second year of MS genetic counseling program.
Notes: Grade: Satisfactory/Unsatisfactory (S/U).

GEN 719 Clinical Rotations II 4
Supervised clinical experiences in genetic counseling: case preparation, risk assessment and intervention, psychosocial assessment and support, identification of testing and support resources for patients, skill development.
Prerequisites: Matriculation to second year of MS genetic counseling program.
Notes: Grade: Satisfactory/Unsatisfactory (S/U).

GEN 730 Medical/Clinical Genetics III 3

GEN 748 Research Project 3
Research project in genetic counseling.
Prerequisites: Matriculation to third semester (GEN 748) and fourth semester (GEN 749) of MS genetic counseling program and successful completion of PSY 624.
Notes: Grade: Satisfactory/Unsatisfactory (S/U).
GEN 749 Research Project 3
Research project in genetic counseling.
**Prerequisites:** Matriculation to third semester (GEN 748) and fourth semester (GEN 749) of MS genetic counseling program and successful completion of PSY 624.

**Notes:** Grade: Satisfactory/Unsatisfactory (S/U).

GEN 803 Research Extension 1-3