

GENETIC COUNSELING (GENC)

GENC 6101 - Psychosocial Aspects of Genetic Counseling I (2 Credits)

This is the first course in a two-semester sequence addressing basic psychosocial and counseling theories, approaches, and resources necessary for the provision of genetic counseling to clients and their families in prenatal, pediatric and adult clinical settings. Coreq: GENC 6105, GENC 6110. Restrictions: Matriculated students in Genetic Counseling MS Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6102 - Psychosocial Aspects of Genetic Counseling II (2 Credits)

This is the second course in a two-semester sequence addressing basic psychosocial and counseling theories, approaches, and resources necessary for the provision of genetic counseling to clients and their families in prenatal pediatric and adult clinical settings. Prereq: GENC 6101. Co-Req: GENC 6105, GENC 6110. Restrictions: matriculated student in Genetic Counseling M.S. Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

GENC 6105 - Basic Interviewing Skills (1 Credit)

This course covers fundamental theories and principles of effective patient/client interviewing in genetic counseling practice. Lectures are combined with hands-on role plays and interviews so that students may gain applied experience and receive feedback to foster skills development throughout course. Coreq: GENC 6101, GENC 6110.
Restriction: Matriculated student in Genetic Counseling M.S. Program
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6110 - Topics in Medical Genetics I (3 Credits)

First course in a two-part course sequence regarding principles of clinical genetics and genetic counseling and development of clinical skills used in various medical genetics settings. Fall semester focuses on principles important in pediatric and general genetics settings. Restriction: Matriculated student in Genetic Counseling M.S. Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6111 - Topics in Medical Genetics II (2 Credits)

Second course in two-course sequence regarding principles of clinical genetics and genetic counseling used in various medical genetics settings, and development of critical skills. Spring semester focuses on prenatal and adult genetics clinic settings. Prereq: GENC 6110. Restrictions: Matriculated student in Genetic Counseling M.S. Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

GENC 6120 - Clinical Cytogenetics and Molecular Genetics (3 Credits)

This course provides integrated instruction regarding human cytogenetic and molecular genetic principles, techniques, and diagnostic testing approaches used in clinical evaluation and risk assessment for genetic disorders/predispositions in prenatal and postnatal patient populations. Coreq: GENC 6121. Restrictions: Matriculated student in Genetic Counseling M.S. Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6121 - Laboratory in Clinical Cytogenetics and Molecular Genetics (2 Credits)

Course provides introduction to specific methodologies and interpretation of studies used in diagnostic cytogenetics and molecular genetics laboratories. Principles discussed in the co-requisite clinical cytogenetics and molecular genetics course will be applied through demonstrations, hands-on experiments, discussion of illustrative cases. Coreq: GENC 6120. Restrictions: Matriculated student in Genetic Counseling M.S. Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6122 - Seminar in Clinical Cytogenetics and Molecular Genetics (1 Credit)

Course requires students to apply theories/principles of cytogenetics and molecular genetics to analysis of cases that present in daily operations of diagnostic laboratories and formal critique of current research literature. Additionally, students present formal seminar integrating cytogenetic/molecular genetic principles. Prereq: GENC 6120, GENC 6121. Restrictions: Matriculated student in Genetic Counseling M.S. Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

GENC 6130 - Cancer Genetics and Genetic Counseling (2 Credits)

Course in providing genetic counseling services to clients with or at risk for hereditary cancer predisposition. Topics include clinical oncology, epidemiology, molecular biology of cancer, risk assessment, genetic testing, ethical/legal issues, clinical research considerations, psychosocial impact/support, specific genetic counseling approaches. Prereq: GENC 6110, GENC 6120. Restrictions: Matriculated student in Genetic Counseling M.S. Program
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

GENC 6140 - Human Inborn Errors of Metabolism (2 Credits)

Course provides systematic review of major metabolic disorders, including their clinical phenotypes, diagnosis, and management. Physiological and laboratory testing principles important to understanding these disorders will be reviewed. Psychosocial impact of metabolic disorders and genetic counseling approaches will be discussed. Restrictions: Matriculated student in Genetic Counseling M.S. Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

GENC 6150 - Congenital Malformations and Disorders of the Newborn (1 Credit)

This survey course covers common major malformations and non-metabolic genetic disorders identified by newborn screening programs. Clinical phenotypes, diagnosis, management and etiology are addressed. Psychosocial impact of these conditions and genetic counseling approaches will be discussed. Prereq: GENC 6110. Co-Req: GENC 6111. Restrictions: Matriculated student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

GENC 6170 - Introduction to Clinical Research for Genetic Counseling Students (1 Credit)

An introduction to clinical research including an overview of ethical principles, study methods and designs, practical execution, data analysis and presentation of results. Possible roles of a genetic counselor in the conduct of clinical research will be a course focus. Restrictions: Matriculated student in MS Genetic Counseling Program. Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6201 - Advanced Psychosocial Genetic Counseling (2 Credits)

This course examines advanced genetic counseling techniques as they relate to psychosocial theories, specific client characteristics and the client/counselor dynamic. Critical discussion of core topics and readings and case analysis will be used for instruction. Prereq: GENC 6101 and GENC 6102. Restrictions: Matriculated second year student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6210 - Professional Issues in Genetic Counseling I (2 Credits)

First course in a two course sequence regarding professional practice issues of master's level genetic counselors. The Fall semester course focuses on professional standards, professional ethics, legal principles and health systems and policy issues relevant to genetic counselors. Prereq: GENC 6101, GENC 6105, GENC 6110. Restrictions: Second year student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6211 - Professional Issues in Genetic Counseling II (2 Credits)

Second course in a two course sequence regarding professional practice issues of master's level genetic counselors. The Spring semester course focuses on disability issues, cultural competency, public health genetics, research methods in genetic counseling, and professional roles. Prereq: GENC 6210. Restrictions: Second year student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

GENC 6250 - Risk Calculation in Genetic Counseling (1 Credit)

This course covers pedigree analysis and risk calculation principles used by genetic counselors in clinical practice. Prereq: GENC 6110, GENC 6120. Restrictions: Matriculated student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

GENC 6910 - Applied General Genetics Clinic (3 Credits)

This is a clinical rotation for Genetic Counseling M.S. students through a general genetics clinic serving a variety of referral indications. Students will learn and practice case management, history taking, risk assessment, counseling and client advocacy skills. Prereq: GENC 6101, GENC 6105, GENC 6110. Restrictions: Matriculated in Genetic Counseling M.S. Program. Grading Basis: Letter Grade with IP
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

GENC 6911 - Applied Prenatal Genetics Clinic (3 Credits)

This is a clinical rotation for genetic counseling students through a prenatal diagnosis and genetics clinic. Students will learn/practice history taking, risk assessment, patient education and genetic counseling, case management, as well as observe prenatal diagnosis procedures. Prerequisites: GENC 6101, GENC 6105, GENC 6110. Restriction: Matriculated student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade with IP
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

GENC 6912 - Applied Metabolic Genetics Clinic (3 Credits)

This is a clinical rotation for genetic counseling students through a genetics clinic for inborn errors of metabolism. Students will work with patients referred for diagnostic evaluation, medical/nutritional management of specific conditions, and follow-up of positive newborn metabolic screening results. Prereq: GENC 6101, GENC 6105, GENC 6110. Restrictions: Matriculated student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade with IP
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

GENC 6913 - Applied Regional & Specialties Genetics Clinics (1-2 Credits)

This is a clinical rotation for genetic counseling students through regional outreach (telehealth) genetics clinics and specialty/multidisciplinary clinics serving patients with various genetic conditions. Prereq: GENC 6101, GENC 6105, GENC 6110. Restrictions: Matriculated student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade with IP
Repeatable. Max Credits: 2.
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

GENC 6914 - Applied Hereditary Cancer Clinic (1 Credit)

This is a clinical rotation for genetic counseling students through adult and pediatric hereditary cancer clinics for individuals seeking genetic counseling and testing for genetic cancer predisposition syndromes. Section 01 - Adult I, Section 02 - Adult II, Section 05 - Pediatric. Program. Prereq: GENC 6105, GENC 6110, GENC 6120, GENC 6130
Grading Basis: Letter Grade with IP
Repeatable. Max Credits: 3.
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

GENC 6915 - Applied Adult Medical Genetics Clinic (1 Credit)

This is a clinical rotation for genetic counseling students through a medical genetics clinic and clinical research settings providing diagnosis, management, risk assessment and genetic counseling for adults. Prereq: GENC 6101, GENC 6105, GENC 6110. Restrictions: Matriculated student in Genetic Counseling M.S. Program. Grading Basis: Letter Grade with IP
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

GENC 6919 - Applied Medical Genetics Clinic - Clinical Elective (1-3 Credits)

This is an elective clinical rotation for genetic counseling students desiring to arrange training in outside of core required clinical rotations or an additional, advanced rotation. Prereq: GENC 6101, GENC 6105, GENC 6110. Restrictions: Matriculated student in Genetic Counseling M.S. Program.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

A-GRAD Restricted to graduate students only.

Typically Offered: Fall, Spring, Summer.

GENC 6920 - Applied Medical Genetics-Laboratory Genetic Counseling Elective (1 Credit)

An elective rotation for students desiring an advanced, applied training experience with genetic counselors based in a genetics diagnostic laboratory. Restrictions: Matriculated student in GENC program who has completed required prerequisite courses listed; Permission of instructor.

Prereq: GENC 6120; GENC 6121; GENC 6122

Grading Basis: Letter Grade

A-GRAD Restricted to graduate students only.

Typically Offered: Fall, Spring, Summer.

GENC 6940 - Capstone in Genetic Counseling (1 Credit)

Students will develop a proposal and complete an individualized scholarly project that contributes to the knowledge and/or practice of genetic counseling. GENC matriculated student with 2 semesters required coursework completed. Permission of instructor.

Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 3.

A-GRAD Restricted to graduate students only.

Typically Offered: Fall, Spring, Summer.