HUMAN GENETICS & GENETIC COUNSELING (MS)

Contacts

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Program Description

The Human Genetics and Genetic Counseling MS program will provide students integrative education and training to become compassionate and knowledgeable genetic counselors.

The program in Human Genetics & Genetic Counseling is a participant in the Genetic Counseling Admissions Match through National Matching Services (NMS).

Learning Goals/Outcomes: Genetics Expertise & Analysis

- Demonstrate & utilize a understanding and knowledge of genetics and genomics core concepts and principles
- Integrate knowledge of psychosocial aspects of conditions with a genetic component to promote client well- being
- Construct relevant, targeted and comprehensive personal and family histories and pedigrees
- Identify, assess, facilitate, and integrate genetic testing options in genetic counseling practice
- Assess individuals' and their relatives' probability of conditions with a genetic component or carrier status based on their pedigree, test result(s), and other pertinent information
- Demonstrate skills necessary to manage genetic counseling case
- Critically assess genetic/genomic, medical and social science literature and information

Learning Goals/Outcome: Psychosocial and Counseling Skills

- Establish a mutually agreed upon genetic counseling agenda with the client
- Employ active listening and interviewing skills to identify, assess, and empathically respond to stated and emerging concerns
- Use range of genetic counseling skills & models to facilitate informed decision-making & adaptation to genetic risks or conditions
- Promote client-centered, informed, non-coercive and value-based decision-making
- Understand how to adapt genetic counseling skills for varied service delivery model
- Apply genetic counseling skills in a culturally responsive and respectful manner to all clients

Learning Goals/Outcome: Education

- Educate clients about a wide range of genetics and genomics information based on their needs, their characteristics and the circumstances of the encounter
- Write concise and understandable clinical and scientific information for audiences of varying educational backgrounds
- Give a presentation on genetics, genomics and genetic counseling issue

Learning Goals/Outcome: Prof Development & Practice

- Use Ethical, legal, philosophical principles & values
- Demonstrate understanding of the research process
- Advocate for individuals, families, communities profession
- Demonstrate a self-reflective, evidenced-based and current approach to genetic counseling practice
- Understand the methods, roles and responsibilities of the process of clinical supervision of trainee
- Establish and maintain professional interdisciplinary relationships in both team and one-on-one settings, and recognize one's role in the larger healthcare system

Curriculum: 2 years, 64 credits

Course	Title	Credits
First Year		
HG 501	Intro to Genetic Counseling	2
GE 636	Tumor Cell Signaling&CellCycle	3
CB 615	Devel. Biol I-Embryology	3
HG 670	ClinCardiovascular Genetics	1
HG 601	Medical Genetics	2
HG 550	ClinApp for Genetic Counsel I	2
HG 701	Clinical Lab/Rotation	1
GE 651	Pathobiology of Cancer	2
HG 680	Clinical Cancer Genetics	2
HG 602	Medical Genetics II	2
HG 502	Psychosocial Iss in Gen Couns	3
HG 551	Clinical Applications II	1
HG 702	Clinical/Lab Rotation (1 day/week - Prenatal)	1
CB 635	GeneEnv Intractns BirthDef&Dis	2
HG 611	Metabolic Genetics I	2
STAT 220	Stats for the Behavioral Sci	3
HG 570	Res Des & Method for Gen Couns	2
HG 552	Clinical Applications III	1
HG 703	Clinical/Lab Rotation (2 days/wk - Cancer)	2
HG 511	Gen Counseling Theory & Prac	2
HG 580	Prac Issues in Gen Counseling	1
HG 801	Thesis I	2
HG 704	Clinical/Lab Rotation (3 days/wk – Peds)	3
	Credits	**45**
Second Year		
HG 802	Thesis II	2
HG 531	Gen Couns Workshop & Sem I	1
HG 512	Gen Couns Theory & Practice II	2
HG 532	Gen Couns Workshop & Sem II	2

Course	Title	Credits
HG 690	Gen Basis of Neur & Psych Dis	1
HG 704	Clinical/Lab Rotation (3 days/wk)	3
HG 803	Thesis III	2
HG 532	Gen Couns Workshop & Sem II	2
HG 705	Clinical/Lab Rotation (3 days/wk)	3
Supplemental		
Thesis		
HG 706	Clinical/Lab Rotation	3
Curriculum Review Modules		
	Credits	**21**
	Total Credits	**66**