# BAYLOR COLLEGE OF MEDICINE GENETIC COUNSELING TRAINING PROGRAM

# **GRADUATE STUDENT MANUAL 2024-2025**

Manual Materials: Course overviews, thesis guidelines and clinical information.

As a student enrolled in the Baylor College of Medicine School of Health Professions Genetic Counseling Program (GCP), you should be knowledgeable of the College's policies, rules, regulations, and administrative procedures that affect you. This Student Manual provides guidelines and policies for the GCP. Students are responsible for all the information presented in this manual.

While every effort has been made to verify the accuracy of information, Baylor College of Medicine reserves the freedom to change, without notice, degree requirements, curriculum, courses, teaching personnel, rules, regulations, tuition, fees, and any other information published herein. This publication is not to be regarded as a contract.

Further information can be obtained from personnel in the following offices:

Genetic Counseling Program Offices Baylor College of Medicine One Baylor Plaza, Mail Stop BCM115 Taub Annex, Room 114 Houston, Texas 77030 (713) 798-5400

School of Health Professions Baylor College of Medicine One Baylor Plaza, Mail Stop BCM115 DeBakey Bldg., Suite M108 Houston, Texas 77030 (713) 798-4613

Office of Student Services Baylor College of Medicine One Baylor Plaza Cullen Bldg. Room 415A Houston, Texas 77030 (713) 798-6950

Baylor College of Medicine admits students of any race, sex, religion, marital status, sexual orientation, color, national or ethnic origin, disability, or age to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate based on race, sex, religion, marital status, sexual orientation, color, national or ethnic origin, disability, or age, in administration of its educational policies, admissions policies, scholarship and loan programs, athletic and other school-administered programs.

# CONTENTS

BAYLOR COLLEGE OF MEDICINE GENETIC COUNSELING PROGRAM	5
WHO ARE GENETIC COUNSELORS?	5
PROGRAM MISSION & VISION STATEMENTS:	6
PROGRAM & INSTITUTIONAL LEADERSHIP:	7
GENETIC COUNSELING FACULTY/STAFF	8
COURSE REQUIREMENTS	10
COMPREHENSIVE EXAMINATION	11
MAXIMUM TIME ALLOWED	12
SUPPLEMENTARY ACTIVITIES	12
TEACHING/PUBLIC PRESENTATIONS: variable	12
CURRICULUM	13
FALL YEAR 1	22
SPRING YEAR 1	23
FALL YEAR 2	23
SPRING YEAR 2	23
EXAMINATIONS	24
DIDACTIC GRADES	25
LATE SUBMISSIONS	25
FIELDWORK PLACEMENT GRADING	27
PRACTICUM/ROTATION OBJECTIVES	28
LOGBOOKS	30
UNIVERSITY ACADEMIC CALENDAR, HOLIDAYS, AND VACATION	30
ATTENDANCE	31
FINANCIAL AID	32
INTERNET	33
NETIQUIETTE	33
EMAIL COMMUNICATION	33
TECHNICAL DIFFICULTIES	33
LIBRARY	34
STUDENT OFFICE SPACE AT ROTATION SITES	34
CONFIDENTIALITY AGREEMENTS AND HIPAA TRAINING	34
PROFESSIONALISM AND DRESS CODE	34
TEXTBOOKS	35

ACADEMIC INTEGRITY	
COPYRIGHT	
STUDENT RECORD KEEPING	
ADVISING	
REMEDIATION & ACADEMIC INTERVENTIONS	
LEARNING ENVIRONMENT	
THE OMBUDSMAN	
STUDENT GREVANCES	
MISTREATMENT REPORTS	
DISABILITY SERVICES	
OTHER	
STUDENT ID'S	
CAMPUS RESOURCES	
HOUSING	
SOURCES OF ADDITIONAL INFORMATION	

#### **Baylor College of Medicine**

**History:** Baylor College of Medicine, a private medical school, was chartered by the State of Texas in 1900 and organized as the University of Dallas Medical Department, an independent, nonsectarian institution. In 1903, it became affiliated with Baylor University in Waco as Baylor University School of Medicine. The College moved to Houston in 1943 and became the nucleus of the Texas Medical Center. Baylor College of Medicine separated from Baylor University in 1969 and became an independent corporation.

**Mission:** Baylor College of Medicine is a health sciences university that creates and applies science and discoveries to further education, healthcare, and community service locally and globally.

#### **Department of Molecular and Human Genetics**

**History:** The Department of Molecular and Human Genetics (DMHG) was formally established in the early 1990s by Dr. Arthur L. Beaudet. Prior to its establishment, genetic activities began in the 1970s with the arrival of Dr. Tom Caskey and Dr. Arthur Beaudet from the NIH. Now under the leadership of Chairman, Dr. Brendan Lee, the DMHG is the largest and most integrated genetics department in the world with more NIH funded research than all other Genetics Departments nationally. The DMHG's tripartite mission integrates research, clinical affairs, and diagnostic lab medicine in all daily aspects.

Mission: Transforming Medicine with the Practice and Science of Genetics:

Our department integrates basic research in genetic and genomic mechanisms; translational research in disease models; clinical trials in rare and common genetic diseases; medical genetics care; and cutting edge genetic diagnostic services.

#### **School of Health Professions**

**History**: The Division of Allied Health Sciences began in 1976 as a component of Baylor College of Medicine's (BCM) Department of Community Medicine. In 1988, the Division was transferred to the Dean of Medical Education's Office. In 2004, the Academic Council approved the conversion of the Division to an independent School of Allied Health Sciences administratively positioned to answer directly to the Executive Vice President and Executive Dean of the College. Currently, the Dean answers directly to the Provost of the College. In April 2018, the BCM Board of Trustees voted to approve the change of the name from the School of Allied Health Sciences to the School of Health Professions (SHP).

**Mission:** To promote the well-being of the people of Texas and beyond by educating outstanding health professionals, providing quality health care services, and contributing to research to improve health professions education and health care delivery.

Accreditation: Baylor College of Medicine and the Genetic Counseling Training Program are accredited as follows:

Baylor College of Medicine is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award master's and doctorate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 3 033-4097, or call (404) 679- 4500 for questions about the accreditation of Baylor College of Medicine.

Baylor College of Medicine is legally authorized to grant degrees, and grant credits toward degrees, in the State of Texas by the Texas Higher Education Coordinating Board (P.O. Box 12788, Austin, TX, 78711, 512-427-6225).

The Genetic Counseling Program is accredited by the <u>Accreditation Council for Genetic Counseling</u> (ACGC). The program received full accreditation status in December of 2021for the maximum allowable term of 8 years. Visit the College's <u>accreditation</u> page for information about other accrediting agencies that review Baylor College of Medicine's educational programs.

#### BAYLOR COLLEGE OF MEDICINE GENETIC COUNSELING PROGRAM

# Welcome to the Genetic Counseling Program (GCP) in the School of Health Professions (SHP) at Baylor College of Medicine (BCM)! We are pleased that you have chosen to attend the BCM GCP.

This manual was created to provide you with general information about the Program, the DMHG, the SHP, and BCM. As you proceed through your Program and provide us with feedback on additional information to include that would be helpful for future classes. REFER TO THIS MANUAL AS NEEDED OVER THE NEXT TWO YEARS.

"GENETIC COUNSELING is the process of helping people understand and adapt to the medical, psychological and familial implications of genetic contributions to disease. This process integrates:

- Interpretation of family and medical histories to assess the chance of disease occurrence or recurrence.
- Education about inheritance, testing, management, prevention, resources, and research.
- Counseling to promote informed choices and adaptation to the risk or condition."

National Society of Genetic Counselors, 2005; A new definition of Genetic Counseling: National Society of Genetic Counselors' Task Force report. National Society of Genetic Counselors' Definition Task Force, Resta R, Biesecker BB, Bennett RL, Blum S, Hahn SE, Strecker MN, Williams JL, J Genet Couns. 2006 Apr;15(2):77-83.

# WHO ARE GENETIC COUNSELORS?

Genetic counselors are professionals who have specialized education in genetics and counseling and provide personalized education to individuals as they make decisions about their genetic health. Today, there are more than 7,000 certified genetic counselors.

Genetic counselors have advanced training in medical genetics *and* counseling to interpret genetic test results, and to guide and support patients seeking more information about such things as:

- How inherited diseases and conditions might affect them or their families.
- How family and medical histories may impact the chance of disease occurrence or recurrence.
- Which genetic tests may or may not be right for them, and interpretation of their test results
- How to make the most informed choices about their healthcare

Many genetic counselors work in clinic or hospital settings, and often work with obstetricians, clinical geneticists, oncologists, and other doctors. Like physicians, genetic counselors can work in a variety of settings and provide different services. They may provide general care, or specialize in one or more areas, including:

- Prenatal and Preconception
- Pediatric
- Cancer

- Cardiovascular
- Neurology
- Research
- Industry/Laboratory
- A variety of other specialty areas

#### http://www.nsgc.org/page/whoaregcs

The role of genetic counselors is quickly expanding. We look forward to seeing how you will contribute to our growing field.

# PROGRAM MISSION & VISION STATEMENTS:

**Mission**: The Baylor College of Medicine Genetic Counseling Program provides students a transformative education in genomic medicine and the practice of genetic counseling. The outstanding clinical, laboratory, and research faculty will empower graduates to be empathic professionals with effective critical thinking skills.

**Vision**: As leaders of genomic medicine integration, our graduates will serve as indispensable navigators of genetic service delivery.

#### **Objectives:**

#### Teaching

- Be equipped with the tools to meet the ever-changing demands of genomic medicine.
- Be familiar with the latest developments in genomic medicine and prepared to critically evaluate and implement these developments in their own practice.

#### Service

- Be empowered to engage with, and advocate for, the diverse communities they serve.
- Be committed to addressing disparities as they arise in the profession and among our various community partners.
- Contribute to the growth and development of the profession.

# Research

• Develop the skills necessary to further research in genetic counseling and genomic medicine.

# Community

• Be committed to creating a welcoming atmosphere to all learners, clients, advocates, and community partners.

#### PROGRAM & INSTITUTIONAL LEADERSHIP:

Program Director: Dan Riconda, MS, CGC daniel.riconda@bcm.edu Phone: 713-798-4569

#### Associate Program Director: Salma Nassef, MS, CGC

nassef@bcm.edu Phone: 713-798-8625 (program) Phone: 713-798-5054 (clinic)

#### **Research Coordinator: Rachel Franciskovich, MS, CGC**

rdwills@texaschildrens.org Phone: 936-267-7739

#### Dean. School of Health Professions: Todd Reinhart, PhD

todd.reinhart@bcm.edu Phone: 713-798-8473

#### Chair, Department of Molecular & Human Genetics: Brendan Lee, MD, PhD

blee@bcm.edu Phone: 713-798-5443

#### Chair, Division of Genetic Counseling: Pilar Magoulas, MS, CGC

plmagoul@texaschildrens.org Phone: 832-822-4288

# **GENETIC COUNSELING FACULTY/STAFF**

Prenatal		
Name	Email	Phone Number
Sandra Darilek, MS, CGC (co-manager)	sdarilek@bcm.edu	713-798-5054
Tammy Solomon, MS, CGC (co-manager)	txsolomo@texaschildrens.org	832-828-3961
Andrea Moon, MS, CGC	axharbis@texaschildrens.org	832-828-3997
Ashley Spector, MS, CGC	Ashley.spector@bcm.edu	713-798-5054
Grant Bonesteele, MS, CGC	gwbonest@texaschildrens.org	832-822-7811
Laura Ellis, MS, CGC	liellis@texaschildrens.org	832-828-3158
Lauren Westerfield, MS, CGC	lewester@texaschildrens.org	832-826-7483
Patti Robbins- Furman, MS, CGC	pjrobbin@texaschildrens.org	832-828-1696
Salma Nassef, MS, CGC	nassef@bcm.edu	713-798-5054
Veena Mathur, MS, CGC	vsmathur@texaschildrens.org	832-826-7624
Wanda Dosal, RN	wxdosal@texaschildrens.org	713-873-2290
Pediatric		
Name	Email	Phone Number
Pilar Magoulas, MS, CGC (manager)	plmagoul@texaschildrens.org	832-822-4288
Abby Yesso, MS, CGC	amyesso@texaschildrens.org	832-826-6511
Amanda Gerard, MS, CGC	aegerard@texaschildrens.org	832-822-4281
Liz (Elizabeth) Mizerik, MS, CGC	eamizeri@texaschildrens.org	832-822-4281
Emily Magness, MS, GCG	ecmagne1@texaschildrens.org	832-822-4276
Emily Soludczyk, MS, CGC	ensoludc@texaschildrens.org	832-826-5760
Farah Ladha, MS, CGC	faladha@texaschildrens.org	832-822-4317
Haley Streff, MS, CGC	hxstreff@texaschildrens.org	832-822-4295
Kari Johnston, MS, CGC	Kari.johnston@bcm.edu	936-267-5611
Katie Chan, MS, CGC	kmchan@texaschildrens.org	832-822-4273
Lisa Saba, MS, CGC	Lisa.saba@bcm.edu	713-798-3567
Nhi Ho, MS, CGC	Nhi.ho@bcm.edu	832-822-4326
Rachel Franciskovich, MS, CGC	rdwills@texaschildrens.org	936-267-7739
Shelly (Michelle) Zelnick, MS, CGC	michelle.zelnick@bcm.edu	832-824-3400
Taylor Beecroft Dawson, MS, CGC	txbeecro@texaschildrens.org	832-826-5952

Adult		
Name	Email	Phone Number
Tanya Eble, MS, CGC (manager)	teble@bcm.edu	713-798-8321
Dan Riconda, MS, CGC	riconda@bcm.edu	713-798-4569
Stacey Edwards, MS, CGC	stacey.edwards@bcm.edu	713-798-8854
Jessica Honkomp, MS, CGC	jessica.honkomp@bcm.edu	713-798-8854
Darwin Argueta, MS, CGC	Darwin.Argueta@bcm.edu_	713-798-3567
Pediatric Heme/Onc		
Name	Email	Phone Number
Sarah Scollon, MS, CGC (manager)	sxscollo@txch.org	832-824-4685
Lauren Desrosiers, MS, CGC	lrdesros@texaschildrens.org	832-824-1675
Hannah Helber, MS, CGC	hlhelber@texaschildrens.org	832-822-3054
Dan L. Duncan Cancer Center		
Name	Email	Phone Number
Cathy Sullivan, MS, CGC	Cathy.Sullivan@bcm.edu	713-798-9098
Georgiann Garza, MS, CGC	Georgiann.Garza@bcm.edu	713-798-6674
Research		
Name	Email	Phone Number
Jill Mokry, MS, CGC	Jill.Mokry@bcm.edu	713-798-5440
Jamie Fong, MS, CGC	Jamie.Fong@bcm.edu	713-798-2391
Children's Hospital of San Antonio		
Name	Email	Phone Number
Bailey Mitchell, MS, CGC	bailey.mitchell@bcm.edu	210-704-2421
Dina El Achi, MS, CGC	dina.elachi@bcm.edu	210-704-2375
Josie Minick, MS, CGC	Josephine.Minick@bcm.edu	210-704-3200
Melissa Stuebben, MS, CGC	melissa.stuebben@bcm.edu	210-704-3690
Mikaela Francisco, MS, CGC	Mikaela.Francisco@bcm.edu	210-703-8200
Morgan Nutter, MS, CGC	morgan.nutter@bcm.edu	210-704-2387
Rebecca Littlejohn, MS, CGC	rebecca.okashah@bcm.edu	210-704-3524
Sarah Seth, MS, CGC	sarah.seth2@christushealth.org	832-541-5151
Shontiara Johnson, MS, CGC	Shontiara.Johnson@bcm.edu	210-704-3200

Laboratory		
Name	Email	Phone Number
Allie N Merrihew, MS	amerrihew@baylorgenetics.com	281-849-7571
Carli Andrews, MS, CGC (CSL)	candrews@baylorgenetics.com	
Rob Rigobello, MS, CGC	rrigobello@baylorgenetics.com	281-849-6821
Romy L. Fawaz, MS, CGC	rfawaz@baylorgenetics.com	281-849-7039
Sydney Lau, MS, CGC	slau@baylorgenetics.com	281-849-7570
Joanna Lee	Jlee@baylorgenetics.com	281-849-8883
Arpita Neogi	aneogi@baylorgenetics.com	713-798-2035
Thomas Felton	tfelton@baylorgenetics.com	
Grace Hollingsworth	ehollingsworth@baylorgenetics.com	
Lexi Isaacs	aisaacs@baylorgenetics.com	
Jason Chibuk	jchibuk@baylorgenetics.com	281-849-8883
Laura Andolina	landolina@baylorgenetics.com	

# **OVERVIEW**

During their graduate education in the GCP, students will learn the principles of genetic counseling and medical genetics and their application to clinical genetics healthcare. The knowledge and clinical skills acquired will prepare you to function as a competent and empathic genetic counselor in a wide range of settings and roles. The curriculum of the Program has been designed to provide students with in-depth knowledge regarding principles of human and medical genetics, the psychosocial impact of genetic disorders, and the research process in genetic counseling. Students will obtain basic content through course work and learn to apply the information through clinical and laboratory rotations and the thesis project. In addition, students will gain experience through attendance and presentations in conferences, seminars, and journal clubs. All these activities will enable the student to meet the clinical competencies as outlined by the Accreditation Council for Genetic Counseling (ACGC).

# **REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE**

The SHP offers a Master of Science degree in Genetic Counseling that requires 55 credit hours: 46 didactic and 9 clinical.

# **COURSE REQUIREMENTS**

You MUST achieve a grade of B or above in all classes throughout the Program. A grade of C or less constitutes failing. Each course in the Program has specific requirements and evaluation processes. If any course grade is below a B, the student will be required to demonstrate his or her mastery of the material (for example, retaking the course and earning at least a B) as decided by the Program Director (PD) and the course director in order to successfully complete the Program. Please refer to the SHP handbook for details on remediation and/or academic intervention (Article 5.13.5:

https://www.bcm.edu/education/school-of-health-professions/students-resources/student-handbook).

Additionally, each student must demonstrate appropriate development of clinical skills, professionalism, and competencies during rotations. Successful completion of all clinical rotations is required. The APD will closely monitor student progress. If there is a concern regarding academic performance, the Program leadership will work with the student to remedy such difficulties on a case-by-case basis through the process of academic intervention. Tutoring is available.

#### **COMPREHENSIVE EXAMINATION**

A comprehensive assessment of skills is completed during the spring semester of the second year for all students. The assessments are comprised of three parts: a multiple choice exam at the end of the semester and a readiness for graduation assessment (typically in February) that is comprised of a role play and an oral examination (Objective Clinical Skills Examination or OSCE). A student must pass all three assessments to meet Program graduation requirements.

- **Multiple Choice Exam:** The multiple-choice examination covers the didactic courses and clinical genetic counseling material covered during the GCP to be taken by all second-year students who have performed satisfactorily in all aspects of the Program. Portions of the exam are patterned after the certification examination given by the American Board of Genetic Counseling, but there is no intent to "teach to the board exam".
- **Role Play:** Students will engage in a role play, which will allow them to demonstrate their psychosocial skills and genetics knowledge.
- **OSCE**: This portion of the comprehensive assessment allows students to further demonstrate their knowledge base of human and medical genetics and genetic counseling. The oral exam committee is composed of the Program Leadership and additional faculty. Students are given genetic counseling scenarios to discuss, asked general knowledge questions in any area of the curriculum and may be requested to clarify answers given in the written examination.

Students must attain a score of 76% or above to pass the written examination. A comprehensive assessment committee, composed of the Program Leadership and additional faculty selected by the PD and APD, will reach consensus on the student's performance on the role play and oral sections to determine if the student has passed these sections of the comprehensive assessment.

If a student fails one of these assessments, the Program Leadership will provide opportunities for the student to rectify the deficiency (academic intervention), such as having the student take another multiplechoice examination or undergo another OSCE focusing on gaps or deficiencies noted on the initial OSCE or another role play assessment. Committee members may also decide that additional course or clinical work is necessary to meet the requirements of the Program. Students will have an exit interview with the PD and APD prior to graduation to solicit their feedback.

#### Thesis

The master's Thesis Project is designed to develop the student's abilities to critically analyze and thoughtfully produce research in the field of genetic counseling. The project will contribute to evidence-based practice and best practices in genetic counseling and/or related field. Additionally, the project will prepare the graduate to participate in research while in clinical practice. The goal of the master's

candidate's thesis project is to produce a manuscript of publication quality for submission within a peerreviewed journal although submission and publication is not a requirement for graduation.

Thesis project ideas are identified in the fall of the first year of the Program and must be approved by program leadership as well as the Thesis course directors in the spring of year one. The students will identify an area of interest, communicate with project mentors, design protocols, perform a literature search, conduct their research, collect, and analyze data, produce a written manuscript, defend their thesis, and present a poster to colleagues at Baylor College of Medicine. All students will receive training in the Institutional Review Board (IRB) submission process as a part of the thesis process.

Students will defend their completed thesis and participate in a poster colloquium in the second year. Please reference the Thesis Project Manual for additional information regarding the thesis process, timelines, and expectations.

#### MAXIMUM TIME ALLOWED

All the requirements for the master's degree must be completed within two consecutive years unless there is an excused leave of absence. Due to the nature of the clinical rotations, students are required to complete the didactic and clinical course work within the 21 months of the Program. However, if additional time is necessary to finish thesis work, the length of the student's course of study may need to be extended. A master's candidate who is enrolled in Thesis III may, with a written request ("Request for Extension" form located in the Thesis Project Manual) and approval of the thesis committee and the PD, receive an incomplete in the course and continue work on the thesis for up to four weeks after the graduation date without incurring additional tuition. A student who does not complete and successfully defend the thesis with the approved four-week extension will be required to pay tuition for an additional semester in order to continue work on the project. All requirements for graduation must met within the additional semester for the degree to be conferred.

#### SUPPLEMENTARY ACTIVITIES

Students will have access to supplementary activities during their time at Baylor College of Medicine. A supplemental activities list is available to students via blackboard within Foundations of Genetic Counseling I and II. These activities range from journal clubs to community engagement opportunities. In the first year, each student is required to complete at least one supplemental activity. Students will provide a written summary about each of the required supplemental activities.

#### **TEACHING/PUBLIC PRESENTATIONS: variable**

Students will be expected to formally present topics of interest at various clinical genetics meetings throughout their training. Students may also have the opportunity to gain experience in presenting information regarding genetic counseling, the career of genetic counseling or some aspect of clinical genetics, to lay, student and/or professional audiences outside of the Program. Students will be asked to present as requests are received by the DMHG or the GCP.

Under the guidance of the PD, APD, and other genetic counseling faculty, the student will have an opportunity to prepare and give such talks. In some situations, materials for presentations may be provided to students to facilitate their presentations. Students are expected to work with faculty to design and collect evaluations of their presentations from participants, event organizers, and supervising genetic counselors, as suitable.

#### **CURRICULUM**

Some or all components of the course may be delivered through distance education as necessary.

# Foundations of Genetic Counseling I Course Number: GCFGC 64001 DLECT (Credits: 4, Fall) Course Director: Daniel Riconda, MS, CGC Course Description:

This course is designed to provide students with the foundation on which to build the skills to be a successful genetic counselor. Students will explore contexts and situations in genetic counseling that practicing genetic counselors are likely to face. They will learn procedures for obtaining an accurate and relevant family history, constructing a pedigree, assessing modes of inheritance, making a diagnosis, determining risks, receive an introduction to psychosocial counseling issues and explore diverse counseling theories. The course will include an overview of the history of the profession to provide a framework for understanding the current state of the profession. Students will be introduced to practice areas within the profession through a four-week block covering prenatal, pediatric, adult, and cancer genetic counseling and will obtain foundational knowledge specific to these practice areas. The ACGC Practice Based Competencies will be introduced, and students will explore the role of genetic counselors in working with clients through a combination of role-plays and standardized patient encounters.

#### Medical Genetics I Course Number: GCMEG 63001 DLEOL

(Credits: 3, Fall)

#### Course Co-Directors: Lindsay Burrage, MD, PhD and Pilar Magoulas, MS, CGC

#### **Course Description:**

This course is designed for genetic counseling students in their first year of training. This course provides an overview of fundamental principles of cytogenetics, molecular genetics, cancer genetics, population genetics, biochemical genetics and skeletal genetics. This course will be taken in sequence with Medical Genetics II with both live and pre-recorded lectures. This course will combine didactic lectures with case studies, problem sets, quizzes, and short presentations by the students to reinforce topics presented in the lectures. For example, there are three hours per week: One hour will be live, one hour will be video and one hour will be a combination of topic reviews, assignments, quizzes, and short presentations.

#### Embryology

Course number: GCEMB 62003 DLECT (Credits: 1, Fall) Course Director: Salma Nassef, MS, CGC

#### **Course Description:**

This course is designed for genetic counseling students in their first year of training. Students will understand the basics of normal human development and will apply this knowledge to a comprehensive understanding of the anatomy of the newborn and adult. Additionally, this course provides a basis for explaining the etiology and process of developmental anomalies. It also provides an introduction to the treatment of patients with congenital anomalies and counseling options for families of affected individuals. This course will combine didactic lectures with case studies, quizzes, and clinical correlates to reinforce key concepts.

# Health Behavioral Counseling Course Number: HPHBC 61201 DLECT (Credits: 1, Fall) Course Number:61201 Course Director: Beth Garland, PhD Course Description:

This course is designed for genetic counseling students in their first year of training. This course provides an overview of fundamental principles of cytogenetics, molecular genetics, cancer genetics, population genetics, biochemical genetics and skeletal genetics. This course will be taken in sequence with Medical Genetics II with both live and pre-recorded lectures. This course will combine didactic lectures with case studies, problem sets, quizzes, and short presentations by the students to reinforce topics presented in the lectures. For example, there are three hours per week: One hour will be live, one hour will be video and one hour will be a combination of topic reviews, assignments, quizzes, and short presentations.

#### Preparing for Genetic Counseling in Practice

Course Number: GCGCP 62001 DLECT (Credits 2, Fall) Course Director: Salma Nassef, MS, CGC Course Description:

This course is designed to provide students with a practical foundation in preparing for clinical participation in various practice areas. This hands-on course will build on didactic content learned from Foundations of Genetic Counseling I and serve as an applied course. Students will have the opportunity to practice chart review, interpretation of screening and testing reports, pedigree risk assessments, online risk models, simulated coordination of testing, application of practice guidelines in a clinical context, completion of requisition forms, and identification of genetic testing options based on insurance considerations. This practice- based exploration of clinical genetic counseling will equip students to participate in patient care on clinical rotations.

Research Methods in Genetic Counseling Course Number: GCRGC 61001 (Credits 1, Fall) Course Director: Sarah Scollon, MS, CGC Course Description:

This course will introduce students to the tools necessary to conduct clinical research studies in genetics and the foundations necessary for their thesis project. Students will discuss current topics significant to the field of genetic counseling and the roles of genetic counselors in the field of research. The course will explore how research designs including quantitative, qualitative, and outcomes research are utilized in the field of genetic counseling. Students will be introduced to the use of interview and survey techniques in genetic counseling research as well as the basics in obtaining research funding. Courses will be a combination of lecture, student discussion and presentation.

# Journal Club I Course Number: GCJOC 61001 DLECT (Credit 1, Fall) Course Co-Directors: Tanya Eble, MS, CGC and Lauren Desrosiers-Battu, MS, CGC

#### **Course Description:**

This course covers a review of current literature relating to advancements in genetic counseling, including the risk, diagnosis, and management of genetic diseases. Through this course, students will be able to: 1) review published literature and summarize significant findings, 2) analyze and critically evaluate data from the literature, and 3) present relevant data to provide an overview of key findings published in the literature.

#### **Clinical Practicum I\***

Course Number: GCCLP 71001 CPRAC

(Credits 1, Fall)

# Course Director: Salma Nassef, MS, CGC

# **Course Description:**

Each Clinical Practicum I through V introduces students to a new clinical training experience with the opportunity to observe cases in a variety of clinical settings. At each site, students observe cases on a rotating schedule under the supervision of genetic counselors or other medical staff. This is an opportunity for students to familiarize themselves with different components of the genetic counseling session, observe different counseling styles, and compare and contrast how different clinical sites operate. At the conclusion of the fall semester, students should be able to prepare for a case and to obtain a three-generation family pedigree. Additional skill acquisition may occur at the discretion of the clinical supervisors.

\*Clinical Practicum I, II, IV, and V will each be completed at a different site, cumulatively to expose each student to the following four core specialty clinical services. Summer Practicum III is not intended as a core clinical specialty, as described in that course description.

# **Clinical Practicum Sites**

Prenatal: Harris Health/Ben Taub Hospital; Texas Children's Pavilion for Women; Texas Children's community clinics (Sugarland, Katy, Woodlands, Northwest, Clearlake, Baytown); Methodist Hospital; Fetal Center; Consultagene Clinic

Pediatric: Texas Children's Hospital; Texas Children's Woodlands; Texas Children's West Campus Adult/Cancer: Harris Health/Smith Clinic; VA; McNair, Consultagene Clinic; Lester and Sue Smith Breast Center at Baylor College of Medicine

# Foundations of Genetic Counseling II Course Number: GCFGC 63002 DLECT (Credits: 3, Spring) Course Director: Daniel Riconda, MS, CGC Course Description:

This course is designed to prepare students for their clinical rotations. Emphasis will be on learning to effectively communicate a broad spectrum of genetic concepts to patients. This includes communicating both orally and in writing information about genetic disorders, procedures, laboratory tests, and risks.

Students will practice oral presentation skills and develop patient education aids, which they will use in directed role-plays. They will build upon the skills obtained in Foundations of Genetic Counseling I and will learn how to facilitate decision making, conduct psychosocial assessments, practice critical thinking, and employ ethical practice in genetic counseling. They will also build upon their initial introduction to prenatal, pediatric, adult, cancer, and laboratory practice areas.

#### **Medical Genetics II**

#### **Course Number: GCMEG 63002 DLEOL**

#### (Credits 3, Spring)

#### Course Co-Directors: Lindsay Burrage, MD, PhD & Pilar Magoulas, MS, CGC

#### **Course Description:**

This course is designed for genetic counseling students in their first year of training. This course provides an overview of genetic disorders encountered in prenatal genetics, pediatric genetics, and adult genetics, as well as advanced topics in biochemical genetics. An emphasis will be placed on etiology, diagnosis, prognosis, differential diagnosis, and management of these disorders. This course will be taken in sequence with Medical Genetics I with both live and pre-recorded lectures. This course will combine didactic lectures with case studies, problem sets, quizzes, short presentations by the students, and direct patient and parent interaction to reinforce topics presented in the lectures. For example, there are three hours per week: One hour will be live, one hour will be video and one hour will include a combination of topic reviews, assignments, quizzes, and short presentations.

# Ethical and Legal Issues in Human Genetics: Ethics

#### Course Number: GCELI 62000 DLECT

(Credit 2, Spring)

# Course Co-Director: Elizabeth Mizerik, MS, CGC and Abby Yesso, MS, CGC

#### **Course Description:**

This course focuses on the legal and ethical issues in the practice of genetic counseling and clinical genetics. The NSGC Code of Ethics will also be explored and applied to clinical and research case scenarios. Through the exploration of topics such as eugenics, incidental findings through genetic testing including non-paternity and consanguinity, genetic privacy and GINA, and prenatal testing/PGT, students will begin to appreciate ethical considerations and ethical decision making within the scope of clinical practice.

Fundamentals in Epidemiology Course Number: GCFEP 61000 DLECT (Credits 1, Spring) Course Director: Austin Brown, PhD Course Description:

This course introduces the basic principles and methods of epidemiology, with an emphasis on critical thinking, analytic skills, and application to clinical practice and research. Topics include outcome measures, methods of adjustment, surveillance, quantitative study designs, and sources of data. The course is designed for professionals intending to engage in, collaborate in, or interpret the results of epidemiological research as a substantial component of their career.

# Genetic Epidemiology and Population Genetics Course Number: GCEPG 61000 DLECT (Credits 1, Spring) Course Director: Melissa Richards, PhD

#### **Course Description:**

This introductory level course in genetic epidemiology will build upon the topics covered in foundations in epidemiology with a focus on the design of studies to identify disease-gene associations. The lectures concentrate on common study designs for genetic association studies, including case-control studies, cohort studies, and parent-offspring trios. There is a focus on epidemiologic approaches for genetic studies of non-Mendelian diseases, disease-gene associations, and maternal genetic effects. Students will learn about study design and data analysis through class lectures, independent readings, and related projects.

The objectives of this course are to provide the student with an understanding of complex genetic diseases; population genetics; common designs for studies of disease-gene association; and approaches for assessing maternal genetic effects. At the conclusion of the course, students will be able to design case-control and family- based studies to detect disease-gene associations and should have an understanding of the various statistical approaches that can be used to analyze the resulting data.

#### Thesis I

# **Course Number: GCTHE 81001 DLECT**

(Credits 1, Spring)

#### Course Co-Director: Sarah Scollon, MS, CGC and Rachel Franciskovich, MS, CGC

#### **Course Description:**

This course will continue the work begun in Genetic Counseling Research Methods. The course is designed to prepare students for submission of their thesis projects. This course will provide the framework for development of strong thesis projects from evaluation of ideas through execution of the project to publication of the data. Students will learn about choosing research mentors, writing human research protocols, obtaining informed consent, developing research projects, study design, and presentation of research in the form of abstracts and posters. Through this course, students will present ideas and outlines of their thesis project for evaluation by their instructors and peers and will submit a protocol to the IRB for their thesis project. Thesis Advisory Committee members will be identified and thesis proposal will be presented to class and advisors for candidacy.

#### Psychosocial Practicum I Course Number: GCPSP 62001 DLECT (Credits: 2, Spring) Course Co-Directors: Salma Nassef, MS, CGC; Patti Robbins-Furman, MPH, CGC; & Tammy Solomon, MS, CGC Course Description:

This course is designed to introduce and expand on various concepts pertaining to psychosocial aspects of a genetic counseling session. This will be a combined class incorporating both first and second-year genetic counseling students. Students will learn through didactic lectures, group discussion, role plays, interactive sessions, and reflective exercises. Through the exploration of topics such as ethics, cultural competency, difficult patients, and autonomy, students will be able to develop skills specific to clinical practice.

# Journal Club II Course Number: GCJOC 61002 DLECT (Credit 1, Spring) Course Co-Directors: Tanya Eble, MS, CGC & Lauren Desrosiers-Battu, MS, CGC

# **Course Description:**

This course covers a review of current literature relating to advancements in genetic counseling, including the risk, diagnosis, and management of genetic diseases. Through this course, students will be able to: 1) review published literature and summarize significant findings, 2) analyze and critically evaluate data from the literature, and 3) present relevant data to provide an overview of key findings published in the literature.

# Clinical Practicum II (for site listings, see Clinical Practicum I, First-Year, Fall) Course Number: GCCLP 72002 CPRAC

#### (Credits 2, Spring)

# Course Director: Salma Nassef, MS, CGC

#### **Course Description:**

Students will rotate through three blocks. During this semester students begin to take on additional case responsibilities. These responsibilities may include case preparation, including review of the medical records and literature, obtaining family, medical and pregnancy histories, providing inheritance counseling, presenting cases to the medical staff, participating in case conferences, and composing counseling letters.

# Laboratory Course Course Number: GCLAB 71000 DLELA (Credits: 1, Spring I) Course Co-Directors: Ning Liu, PhD, Nicole Owen, PhD, & Rob Rigobello, MS, LCGC Course Description:

This course is designed for genetic counseling students at the end of their first year of training. Through this course students will become familiar with current molecular, biochemical, and cytogenetic techniques. Additionally, through this course students will understand the basics of the role of a laboratory genetic counselor, processes to enhance communication with the laboratory, and the distinctive role of the diagnostic laboratory in patient care.

#### Clinical Practicum III (for site listings, see Clinical Practicum I, First-Year, Fall) Course Number: GCCLP 72003 CPRAC

# (Credits 2), Fall (June-July)

Course Co-Director: Daniel Riconda, MS, CGC & Salma Nassef, MS, CGC

# **Course Description:**

This rotation provides students with extensive clinical training and increasing case responsibilities. The students participate in a (minimum) 5-week full-time practicum. The internship can be in or outside of the state of Texas for students in good standing pending student interest and clinic site availability. Summer Practicum III provides students with the opportunity to train in varied geographic settings, to work with novel patient populations, and to pursue individual clinical interests.

# Advanced Genetic Counseling I Course Number: GCAGC 62001 DLECT (Credits: 2, Fall) Course Co-Director: Daniel Riconda, MS, CGC, Josephine Minick, MS, CGC

#### **Course Description:**

This course continues the work begun in Foundations of Genetic Counseling I and II. This course includes a discussion of the current state of the genetic counseling profession with a focus on current professional issues, including issues such as professional development, standards of practice, expanded roles of genetic counselors and cultural competency. The course will facilitate the continued development of presentation skills as well as preparation for job searching and interviewing. Working within interdisciplinary clinics and coordinating care with other health professionals will also be included in the instructional design of this course.

#### Thesis II

# Course Number: GCTHE 83002 DRESR (Credits: 3, Fall) Course Director: Rachel Franciskovich, MS, CGC Course Description:

The MSGC Program in Genetic Counseling requires completion of a research thesis. This course will continue the work begun in Research Methods in Genetic Counseling & Thesis I. Students will gather data related to their IRB approved graduate level research project developed in Thesis I under the supervision of a thesis advisory committee. Students will begin data analysis of their IRB approved graduate thesis project developed. The experience will be structured such that students are expected to meet with their primary thesis advisor at least once a week and the full advisory committee at least once a month for the purposes of ongoing project oversight, implementation, data analysis and interpretation of results, and summarizing results.

# Health Behavioral Counseling II

Course Number: GCHBC 61202 DLECT (Credits: 0.5, Fall) Course Number:61202 Course Co-Directors: Beth Garland, PhD & Daniel Riconda, MS, CGC

# **Course Description:**

This course is a follow-up to HPHBC 61201. The course includes genetic counseling case-based application of motivational interviewing counseling skills. Students will also use case reflections to self-assess opportunities for use of MI skills including equipoise, emphasizing autonomy, and a review of skills from the HPHBC 61201 course. In addition, the concepts of shared decision making, transference and countertransference will be explored.

Journal Club III Course Number: GCJOC 61003 DLECT (Credit 1, Fall) Course Co-Directors: Tanya Eble, MS, CGC & Lauren Desrosiers-Battu, MS, CGC Course Description: This course covers a review of current literature relating to advancements in genetic counseling, including the risk, diagnosis, and management of genetic diseases. Through this course, students will be able to: 1) review published literature and summarize significant findings, 2) analyze and critically evaluate data from the literature, and 3) present relevant data to provide an overview of key findings published in the literature.

# Variant Interpretation and Counseling Course Number: GCVIC 62000 DLECT (Credits 2, Fall) Course Co-Director: Linyan Meng, PhD & Rob Rigobello, MS, LCGC Course Description:

Gene and variant curation assists the healthcare provider to assess and classify the role of a sequence variant or copy number variant found in a gene and the potential role of the variant in a disease. In this course, students will learn the process of variant classification in laboratory result interpretation. This course is designed to provide students with the foundation of variant interpretation including ACMG guidelines, skills to assess various types of evidence, and to utilize databases and other resources to aide in the variant classification. Genetic counseling students will be assigned projects utilizing these resources and will learn to critically review laboratory data from exome sequencing, gene panel sequencing, and other genetic testing methodologies and curate these data for report interpretation. Students will also be introduced to bioinformatics resources and how they can be used to inform genetic testing methodologies and reporting.

# Clinical Practicum IVa & IVb (for site listings, see Clinical Practicum I, First-Year, Fall) Course Number: GCCLP 71004 & GCCLP 71005

(One Credit Each, 2 total, Fall (August-December)

# Course Director: Salma Nassef, MS, CGC

# **Course Description:**

Students will rotate through one block each for this course. During this course students will take on full cases including case preparation, counseling the full session, test coordination, and follow-up as needed. Through this rotation and with continuation into clinical practicum V, the students will rotate through the three main specialties (prenatal, pediatric, and adult).

# Introduction to Quantitative Data Analysis Course Number: GCQDA 61000 DLECT Course Co-Directors: Jeremy Schraw, PhD & Austin Brown, PhD (Credits: 0.5, Fall) Course Description:

This course will provide students with practical experience in quantitative data analysis in the R and STATA software environments. The course will introduce common data structures; basic data manipulation procedures; methods for summarizing and comparing the distributions of categorical and continuous variables; one-way analysis of variance (ANOVA); linear regression; logistic regression; and data visualization. The course is designed for professionals intending to engage in, collaborate in, or interpret the results of epidemiological research as a substantial component of their career and designed to be suitable for those without substantial prior exposure to data analysis or statistical programming. Emphasis will be placed on the analysis of data from observational studies in human subjects.

# Advanced Practice in Genetic Counseling

**Course Number: APGC 61000 DLECT** 

(Credit 1, Fall)

Course Co-Director: Abigail Yesso, MS, CGC & Taylor Dawson, MS, CGC

# **Course Description:**

This course explores advanced concepts in cancer genetics, neurogenetic conditions, and hereditary cardiac conditions that are not covered in depth elsewhere in the curriculum. Content will be delivered both synchronously and asynchronously. Instructors will utilize case-based discussions and students will learn additional skills that will expand their ability to generate a differential diagnosis. Throughout the course, instruction will focus on the practical application of this content in the context of providing genetic counseling to patients.

# Advanced Genetic Counseling II Course Number: GCAGC 62002 DLECT (Credits: 2, Spring) Course Co-Director: Daniel Riconda, MS, CGC, Josephine Minick, MS, CGC Course Description:

This course focuses on advanced topics within the profession of genetic counseling. It will provide the framework for discussion and understanding of such topics as licensure, insurance, billing and reimbursement for services, supervision, compassion fatigue and burnout, transitioning from student to practitioner, board exam preparation, expand on interprofessional engagement, developing leadership skills genetic counseling outcomes, advanced degrees, and specialty practice related issues within the practice of genetic counseling.

# **Psychosocial Practicum II**

# Course Number: GCPSP 62002 DLECT

# (Credits: 2, Spring)

# Course Co-Directors: Salma Nassef, MS, CGC; Patti Robbins-Furman, MPH, CGC; & Tammy Solomon, MS, CGC

# **Course Description:**

This course is designed to introduce students to concepts pertaining to psychosocial aspects of a genetic counseling session. This will be a combined class incorporating both first and second-year genetic counseling students. Students will learn through didactic lectures, group discussion, role plays, interactive sessions, and reflective exercises. Through the exploration of topics such as ethics, cultural competency, difficult patients, and autonomy, students will develop skills specific to clinical practice.

# Thesis III

# Course Number: GCTHE 83003 DRESR (Credits: 3, Spring) Course Director: Rachel Franciskovich, MS, CGC Course Description:

The experience will be structured such that students are expected to meet with their primary thesis advisor at least once a week and the full advisory committee at least once a month for the purposes of ongoing project oversight, implementation, data analysis and interpretation of results, and summarizing results. Students will prepare manuscript and/or abstract for submission to a reputable national journal or national conference. In addition, they will orally present their dissertation in an open colloquium and then participate in a closed oral defense after their presentation with their thesis advisory committee.

# Journal Club IV Course Number: GCJOC 61004 DLECT (Credit: 1, Spring) Course Co-Directors: Tanya Eble, MS, CGC & Lauren Desrosiers-Battu, MS, CGC Course Description:

This course covers a review of current literature relating to advancements in genetic counseling, including the risk, diagnosis, and management of genetic diseases. It also includes attendance at genetics case conferences at least twice a month. Through this course, students will be able to: 1) review published literature and summarize significant findings, 2) analyze and critically evaluate data from the literature, and 3) present relevant data to provide an overview of key findings published in the literature.

# Clinical Practicum V (for site listings, see Clinical Practicum I, First-Year, Fall) Course Number: GCCLP 72005 CPRAC

# (Credits 2, Spring)

#### Course Director: Salma Nassef, MS, CGC

#### **Course Description:**

This rotation is a continuation of the Clinical Practicum IV course. Students will rotate through two blocks this semester. One block will be in one of the core specialties (prenatal, pediatric, and adult). During this semester students will take on full cases including case preparation, counseling the full session, test coordination, and follow-up as needed. The other block will be reserved for their desired specialty, remediation if needed, and/or a specialty rotation.

FALL YEAR 1
-------------

Course* Identifiers	Course ** Number	Course Name	Credits
НРНВС	61201	Health Behavioral Counseling I	1
GCFGC	64001	Foundations of Genetic Counseling I	4
GCMEG	63001	Medical Genetics I	3
GCGCP	62001	Preparing for Genetic Counseling in Practice	2
GCEMB	61003	Embryology	1
GCRGC	61001	Research Methods in GC	1
GCJOC	61001	Journal Club I	1
GCCLP	71001	Clinical Practicum I	1

Total credits = 14

# SPRING YEAR 1

Course* Identifiers	Course ** Number	Course Name	Credits
GCFGC	63002	Foundations of Genetic Counseling II	3
GCMEG	63002	Medical Genetics II	3
GCELI	62000	Ethical and Legal Issues in Human Genetics: Ethics	2
GCFEP	61000	Fundamentals in Epidemiology	1
GCEPG	61000	Genetic Epidemiology and Population Genetics	1
GCTHE	81001	Thesis I	1
GCPSP	62001	Psychosocial Practicum I	2
GCJOC	61002	Journal Club II	1
GCCLP	72002	Clinical Practicum II	
GCLAB	71000	Laboratory Course	1

Total credits = 17

# FALL YEAR 2

Course* Identifiers	Course ** Number	Course Name	Credits
GCCLP	72003	Clinical Practicum III (Summer)	2
GCAGC	62001	Advanced Genetic Counseling I	2
GCTHE	84002	Thesis II	3
GCJOC	61003	Journal Club III	1
GCVIC	62000	Variant Interpretation and Counseling	2
GCCLP	71004	Clinical Practicum IVa	1
GCCLP	71005	Clinical Practicum IVb	1
GCHBC	61202	Health Behavioral Counseling II	0.5
APGC	61000	Advanced Practice in Genetic Counseling	1
GCQDA		Introduction to Quantitative Data Analysis	.0.5

Total credits = 14 (including summer rotation)

# **SPRING YEAR 2**

Course* Identifiers	Course** Number	Course Name	Credits
GCAGC	62002	Advanced Genetic Counseling II	2
GCPSP	62002	Psychosocial Practicum II	2
GCTHE	83003	Thesis III	3
GCJOC	61004	Journal Club IV	1
GCCLP	72005	Clinical Practicum V	2

Total credits = 10

# **Total credit hours = 55**

\*SHP assigns each course a 5-character alphabetic code reflecting the school (HP) or Program with which it is affiliated (GC) and its content.

\*\* Each course is assigned a 5-digit numeric designation. The first digit reflects the course level. 6xxxx = basic science courses; 7xxx = clinical science courses; 8xxx = specialized or other higher-level courses. The second digit reflects the number of semester hours awarded for successful completion. Third through fifth digits are unique numbering for each Program to use in clustering its courses.

# **EXAMINATIONS**

The GCP examinations are administered through ExamSoft, a cloud-based exam management tool. All students are required to have a laptop computer that can be used for electronic examinations.

Certain types of exams may also be administered on paper, using standardized patient simulations, or as oral exams, as appropriate.

The following policies must be observed for all exams:

- All personal belongings (backpacks, purses, tablets, cell phones, smart watches, calculators, scratch paper, pens/pencils, etc.) must be placed at the front of the room.
- Remote exams will be given via ExamSoft with Exam Monitor, a secure monitoring software (virtual test proctor).
- The examination <u>MUST</u> be completed within the allotted time. Incomplete exams will be evaluated and scored as is.
- For onsite exams, students may leave the room to use the restroom with proctor permission; however, no additional time will be allowed to finish the exam. If the exam is being given via ExamSoft, a student may need a resume code from the proctor to restart the exam. Only one student may leave the room at a time.
- For remote exams, students should remain in the room throughout the entirety of the exam. Excessive movement may be flagged by the Exam Monitor software.
- Students should answer each question to the best of their abilities, being sure to follow all instructions.
- For onsite exams, scratch paper and pencils will be provided. For remote exams, students must display their blank scratch paper to camera at the start of the exam and again before submitting the exam. Students may write notes on the scratch paper, however, only answers uploaded into ExamSoft (or paper exam) will be counted toward the student's grade. The scratch paper and pencils must be returned to the proctor at the end of the exam.
- Students may use the calculator available through ExamSoft. Students may not use any other calculator or similar device.
- After finishing an exam in ExamSoft, click the "exit/save" button on the tool bar and then close the exam. When prompted, select "exit and upload." A green screen indicates that the student has successfully uploaded the exam. Students <u>MUST</u> show the green screen to the proctor in order to be dismissed from the classroom.
- Any suspected unethical behavior during the exam will result in immediate uploading of the exam and a grade of zero.
- The College recognizes honesty and integrity as essential to the academic functions of the College. The following rules are promulgated in the interest of protecting the validity of the College's grades

and degrees, and to assist students in developing standards and attitudes appropriate to academic life and the practice of health care. Violation of academic rules can result in dismissal from the College.

- No student shall receive assistance not authorized by an instructor in the preparation of any assignment, laboratory exercise, report, or examination submitted as a requirement for an academic course or rotation.
- No student shall knowingly give unauthorized assistance to another student in such preparation.
- No person shall sell, give, lend, or otherwise furnish to any unauthorized person material that can be shown to contain the questions or answers to any examination to be given at any subsequent date, in any course of study offered by the College, excluding questions and answers supplied by the department for the purpose of review.
- Any persons taking, or attempting to take, steal, or otherwise procure in any unauthorized manner any material pertaining to the conduct of a class, including examinations, laboratory equipment, etc., shall be in violation of this regulation.
- Students can be disqualified from taking or continuing to sit for an exam and/or be dismissed from Baylor College of Medicine if the College, at its sole discretion, determines through any reasonable method such as observation or testimony by eyewitnesses, including but not limited to, any of the following forms of academic dishonesty including:
  - o Cheating,
  - Plagiarism without proper citation,
  - o Unauthorized disclosure of test questions to other students, or
  - Unauthorized disclosure of test answers to other students

#### **DIDACTIC GRADES**

Students are required to score 76% or higher on each individual course module within the School of Health Professions. See page 38 for details regarding remediation.

Grade	Score Range	<b>Quality Points</b>	Interpretation
А	90 - 100	4.0	Exceptional performance
В	76 – 89	3.0	Performance meeting expectations
С	70 - 75	2.0	Unsatisfactory performance (failure)
D	65 – 69	1.0	Unsatisfactory performance (failure)
F	0-64	0.0	Unsatisfactory performance (failure)

The grading scale will be as follows:

# LATE SUBMISSIONS

All assignments are due by the stated due date and time or when specified by the course director. Assignments received after this time are considered late. In special circumstances, course directors may grant extensions for assignments. A student who wishes to apply for an extension should contact the course director immediately to discuss his or her circumstances. Assignments submitted after the due date and without an agreed upon extension will be penalized as follows: a 10% penalty for the first day after the missed deadline and a subsequent 5% penalty per day for the next six calendar days after the due date (including Saturdays and Sundays). No assignments will be accepted more than seven calendar days past the due date except in exceptional circumstances and in consultation with the course director.

#### FIELDWORK PLACEMENTS

#### Description

Students will be oriented at each institution where they have a clinical rotation by the supervising genetic counselors at the time of their rotations. Institutional services, expectations, roles, and responsibilities will be addressed in detail at that time.

Students must satisfactorily complete all rotations of clinical practicum.

Clinical Practicum I is comprised of observational clinical rotations in the first semester that introduce students to a variety of clinical settings. At each site, students observe cases one half day per week on a rotating schedule under the supervision of genetic counselors or other medical staff. This is an opportunity for students to familiarize themselves with different components of the genetic counseling session, observe different counseling styles, and compare and contrast how different clinical sites operate. By the end of Clinical Practicum I, students are expected to have taken one full pedigree in clinic.

Clinical Practicum II in the spring semester, students will rotate through various clinical areas (ex: prenatal, pediatric, and adult). During this semester students begin to take on additional case responsibilities as they attend clinic each week. The first week on a given rotation, students may observe cases. By the third week, students should be taking pedigrees and intakes and beginning to explain basic genetic concepts, with the goal of actively participating in sessions by the end of the rotation.

Summer Practicum III provides students the opportunity to train in varied geographic settings, to work with novel patient populations, and to pursue individual clinical interests. This rotation provides students with extensive clinical training and increasing case responsibilities. Over the summer, students participate in a five-week full time practicum. The placement can be in or outside of the state of Texas for students in good standing pending student interest and clinic site availability and approval (vis a vie an executed affiliation agreement). The goal of the summer rotation is to allow students to get a sense of practicing as a full-time genetic counselor.

In Clinical Practicums IVa, IVb, and V students will rotate through various clinical areas each semester. During this semester students will take on full cases including case preparation, counseling the full session, test coordination, and follow up as needed as they attend clinic 2-3 days per week. In Clinical Practicum V students will rotate through one seven-week block and a four-week elective rotation (for students in good standing).

The specific rotation schedule for each student will be assigned by the APD in advance of your first day at the clinical site.

Each clinical rotation will provide students with opportunities to have first-hand experience with individuals and families affected by a broad range of genetic disorders. The intent of each rotation will be to expose students to the natural history and management of common genetic conditions and birth defects and to the relevant psychosocial issues involved in each case. During these clinical experiences students will be required to observe and practice a range of genetic counseling functions, including preparing for cases; obtaining medical and family histories; assessing and explaining risks; performing psychosocial assessments; communicating information about disease characteristics, inheritance, and natural history; providing anticipatory guidance and supportive counseling; identifying and using medical and community

resources; communicating information to other health care professionals; and case management and follow-up.

The rotation sites include:

- <u>Prenatal</u>: Harris Health/Ben Taub General Hospital; Texas Children's Pavilion for Women; TCH community clinics (Sugarland, Katy, Woodlands, Northwest); Methodist Hospital; Fetal Center; Consultagene Clinic
- <u>Pediatric</u>: Texas Children's Hospital (TCH) Main campus; TCH Woodlands; TCH West Campus
- <u>Adult (including Cancer)</u>: Harris Health/Smith Clinic; VA; McNair
- <u>Cancer</u>: Dan L Duncan Comprehensive Cancer Center; Consultagene Clinic
- <u>Electives (during the spring semester of the second year)</u>: Industry & specialty rotation options available
- <u>Outreach</u> (samples: distant, out-of-state, or global practicum placements may be considered for advanced practicum students only on an individual basis, pending verification of state authorization and vetting by Program leadership):

# FIELDWORK PLACEMENT GRADING

Grading is on an A, B, and F basis except for Clinical Practicum I which is pass/fail. Successful completion of EACH fieldwork placement is required to graduate from the program. Students will receive a mid-point and end-point evaluation for each rotation starting in the spring of the first year. Evaluations will be discussed face to face with the student and available for review by the student and Program Leadership through the Typhon system. Evaluations are mapped to practice-based competencies to ensure that students are advancing throughout their rotations. Specific requirements for fieldwork placements include, but are not limited to, preparing for cases weekly (chart review, literature search on appropriate topics pertaining to each case, obtaining additional information such as lab data and hospital records), and meeting with the clinical supervisor prior to each case at a time agreed upon by the student and the counselor to discuss counseling issues and strategies. In addition, the student may be asked to prepare a pre-case counseling outline and write-up. The pre-case write-up will be the basis for case review and discussion with the supervising clinician. These may be required prior to seeing the patient for the student to see the case.

Following each case, clinic notes, letters, post-case write-ups, and other additional information requested must be submitted in a timely manner.

Failure to meet expected deadlines for case write-ups, letters, etc. more than 3 times may result in mandatory remediation and/or a failing grade for the rotation at the discretion of the Program Leadership. A student who does not perform satisfactorily and meet the requirements of the practice-based competencies will not receive a passing grade for the clinical placement. Consistent with the remediation and academic intervention processes outlined in the student manual, the Course Director for the clinical practicum will evaluate the student for areas of focused skill deficits, and if a single area of weakness is identified, the Course Director will develop a targeted academic intervention. If there are multiple deficiencies, the Course Director to begin a process of comprehensive remediation. Both targeted academic intervention and comprehensive remediation of clinical skills deficiencies will result in a written plan including required outcomes and a timeline. Academic interventions may include, but are not limited to,

additional clinical work or use of simulation with faculty and/or standardized patients with a focus on an identified deficiency or deficiencies. In addition, the final fieldwork placement for a given student can be assigned by program leadership to address areas of weakness that have been identified through previous fieldwork placements.

# PRACTICUM/ROTATION OBJECTIVES

The clinical practicum supports the development of practice-based competencies as outlined by the Accreditation Council for Genetic Counseling and represents practice areas that define activities of a genetic counselor. These competencies fall into the following domains: communication skills; critical-thinking skills; interpersonal, counseling, and psychosocial assessment skills; and professional ethics and values. During each rotation, students will be assessed on skills necessary for achievement of each competency as outlined in specific objectives.

By the end of each rotation, the student will demonstrate progress in the following competencies:

# Case Preparation (PBC 1a, 4a, 5a)

- Appropriate visual aids utilized
- Reviews charts/medical records and research indication for referral
- Can critically assess scientific literature for use in a genetic counseling session

# Contracting/Rapport Building (PBC 3a, 3b, 3c 4a)

- Establishes mutually agreed upon contracting / agenda
- Establishes rapport with patient

# Family & Medical History (PBC 1a, 2a)

- Obtains comprehensive and appropriate medical history
- Constructs relevant, targeted, and comprehensive pedigree

# Genetic Expertise (PBC 1a, 1b, 1c, 2a, 2b, 5a)

- Can demonstrate/utilize depth and breadth of understanding and knowledge of genetics and genomics core concepts and principles
- Effectively educate patients about a wide range of genetic and genomic information based on their need, their characteristics, and circumstances

# Genetic Testing / Results (PBC 1c, 2b, 2c, 2d, 4c)

- Identify, assess, facilitate, and integrate genetic testing options into genetic counseling practice
- Accurately report results and explanation to patient (i.e., risk assessment versus diagnostic)

#### Risk Assessment and Inheritance/Risk Counseling (PBC 1c, 2a, 2b, 2c, 4c)

- 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
- Provide the aforementioned information to the patient in an appropriate and customized manner.

# Follow-Up/Case Management Skills (PBC 2d, 4a, 4b, 6b, 6c, 6d)

• Demonstrate skills necessary to successfully manage a genetic counseling case.

- Presents case information clearly and concisely to medical providers involved
- Provides appropriate support group/written info for patient
- Coordinates referral to other specialists
- Arranges for follow-up testing
- Calls results to patient/referring physician

# Psychosocial Assessment and Counseling (PBC 3a, 3b, 3c, 3d)

- Aware psychological and social issues of patient
- Employ active listening and interviewing skills to identify, assess, and empathetically respond to stated and emerging concerns.
- Use a range of genetic counseling skills and models to facilitate informed decision-making
- Applies skills in culturally responsive and respectful manner to all clients
- Recognizes the need for intervention and referral

#### Advanced Counseling Skills (PBC 3a, 3b, 3c, 3d)

- Promote client-centered, informed, non-coercive and value-based decision-making
- Range of genetic counseling skills to adapt to genetic risks or conditions
- Integrate knowledge of psychosocial aspects of conditions with genetic components to promote client well-being
- Assesses patient understanding and modifies counseling session as needed
- Demonstrates advanced critical thinking skills

#### Written Case Reports (PBC 4a, 4b)

• Write concise and understandable clinical and scientific information for audiences of varying educational backgrounds

#### Interpersonal Skills/Professional Development (PBC 1b, 6d, 7b, 7c, 7d)

- Acts in accordance with ethical, legal, and philosophical principles and values of the genetic counseling profession and policies of one's institution/organization
- Delivers information to patients/providers in a professional/confident manner
- Advocates for individuals, families, communities, and genetic counseling profession
- Adapt skills for varied service delivery models
- Accepts feedback in a productive and non-defensive manner
- Demonstrates desire to learn material beyond the clinical experience
- Able to identify professional strengths and weaknesses and a desire to improve and grow as a genetic counselor
- Demonstrates self-reflective, evidence-based, and current approach including accepting successes and failures
- Establish and maintain professional interdisciplinary relationships in both team and one-on-one setting, and recognized one's role in the larger healthcare system
- Self-care: Addresses personal issues that may affect professional life and demonstrates desire for wellness and balance

# LOGBOOKS

Each student will maintain a logbook of **ALL** patients he/she sees **including all observations**. This log should include all information needed to satisfy documentation of the student's role in each case as well as detailed notes on the cases and counseling strategies. The logbook should reflect the depth and breadth of the student's clinical experience. The Typhon system will be the electronic logbook tracking system. Logbooks will be reviewed by the APD and lead rotation supervisor at the end of each clinical rotation, as well as by the supervisor involved with the case.

Additionally, all student cases will be reviewed and must be completed to the satisfaction of the supervising genetic counselor, PD, and APD prior to the student leaving the Program.

Patient identifiers (such as patient hospital number) must never be used on the logbook. The Typhon system will auto assign a unique identifier for each case entered.

Specific expectations during each rotation for each clinical site will be given to the student prior to starting the rotation (see fieldwork placement manual). Students will receive a mid-point and end-point evaluation for each rotation. Evaluations will be discussed face to face with the student and available for review by the student and Program Leadership through the Typhon system. Evaluations are mapped to practice-based competencies to ensure that students are advancing throughout their rotations.

Each student, over the course of their training, will be expected to obtain a minimum of 50 participatory fieldwork case and other materials documenting their clinical training. These materials become a permanent part of the student's portfolio, maintained in the Typhon management system, and will be collected by the PD prior to the student graduating the Program. In each clinical setting in which cases will be eligible to be included in their logbook, the student will have direct supervision by a certified genetic counselor. The student must complete a total of 9 credit hours of Clinical Practicum (1 credit in the fall of year one, 2 credits in the spring of year one, 2 credit hours in the summer; 2 credit hours in the fall of year two and 2 credit hours for the final spring semester). Students will review their logbooks and other materials before leaving BCM.

Finally, prior to starting each rotation, each student will identify specific goals that the student wishes to accomplish during that rotation. Students will continue to add and build upon the list of goals at the beginning of each new rotation and will review them with the supervising counselor(s) at the beginning and end of a rotation. It is anticipated that by the end of the Program, the students will have achieved the goals that they and Program faculty have set.

# UNIVERSITY ACADEMIC CALENDAR, HOLIDAYS, AND VACATION

Graduate students in the SHP are officially registered for the entire year and as such are expected to dedicate full time to course work, clinical training, and study. Graduate students in the professional schools are subject to the SHP Calendar, which specifies the holidays they may observe each year. Thus, graduate students in the Genetic Counseling Training Program are expected to be present throughout the entire semester, regardless of whether classes, etc., are in session. Official holidays include Labor Day, two days at Thanksgiving, two weeks for Christmas/New Year's break, Martin Luther King Day, three days for spring break and July 4th.

Requests for excused absences based on religious observance, sick leave or medical or family emergencies

will be considered on a case-by-case basis. Even if an excused absence is granted, the student will be responsible for completing all missed assignments, required classwork and examinations.

Vacation times will be planned and discussed with the appropriate clinical faculty or supervising genetic counselors, etc. At least one months' advanced notice is required. Final approval must be given by the PD & APD.

#### ATTENDANCE

Students are expected to attend all required conferences, classes, clinical assignments, and rotations, even when a rotation is off campus.

Unanticipated Absences: If the student is ill or must miss a conference, class or clinical assignment, the student must contact the appropriate supervising genetic counselor, professor, or PD to notify them that they are ill. Absences due to unexpected, urgent or emergent situations do not require prior approval, but they do constitute an absence and will count as "absence bank" days. Examples include medical illness experienced by the student and personal crisis (e.g., death or illness of an immediate family member).

Anticipated Absences: Students may only miss a maximum of one day per clinical rotation block. Such absences are charged to your "absence bank" (6 absences over the course of your 2 years of training). If a student misses more than 6 days during their two years of training, the student will be expected to make-up missed dates during a rotation as needed to avoid receiving a failing grade. All requests for anticipated absence(s) must first be made of the clinical coordinator and/or course directors impacted by the absence prior to submission through the <u>GCP Student Absences Request Form</u>. Once approved by the course director and/or clinical rotation coordinators impacted by the absence, the Program leadership will review the request to determine if it will be approved Students will be notified via email of approval status as will the impacted faculty. If the student misses a significant portion of required attendance at clinical conferences or classes, the student may be asked to extend their course of study to make up deficiencies.

All medical absences that exceed two days, will require a letter from a healthcare provider. All requests are subject to the honour code as outlined in the student manual.

No requests for anticipated absences for the following:

- Days immediately preceding or following a BCM holiday, including the Monday after a Friday holiday and the Friday preceding a Monday holiday.
- <u>BCM holidays</u>:
  - New Year's Day
  - Martin Luther King Day
  - Memorial Day
  - Independence Day
  - o Labor Day
  - Thanksgiving Day
  - o Christmas Day
- This includes:
  - Wednesday before Thanksgiving

- The Friday before or Monday after spring break: March 10-14<sup>th</sup> 2025
- First day or the last day of a clinical rotation or the semester
- No absences will be authorized for the HBC II course as the class only meets three times a year

No more than one day of anticipated absence for the following:

- Each speciality advanced rotation (prenatal, pediatrics, cancer, elective)
- Classes only one day a week per semester only one day per semester for each class. Please be aware that some classes are not able to be recorded and by being absent you miss important material.

#### FINANCIAL AID

Each student is responsible for obtaining his or her own financial aid. The Office of Student Financial Aid supports the mission, vision, and values of Baylor College of Medicine, additional information can be found here: <a href="https://www.bcm.edu/education/school-of-health-professions/tuition-and-fees">https://www.bcm.edu/education/school-of-health-professions/tuition-and-fees</a>. The telephone number is 713-798-4603 and the email address is <a href="finaid@bcm.edu">finaid@bcm.edu</a>. Financial arrangements should be made by the time the student registers for each semester. Fall and spring semester tuition bills are sent directly to the student. BCM reviews tuition charges annually and reserves the right to change the amount of tuition and fees and/or to amend the method of charging tuition and fees without notice. Any changes in school tuition or fees will apply to all students enrolled in the school, regardless of the date of matriculation.

Other expenses include the Program-related fees and health insurance fees if the student does not have health insurance outside of the Program. Students who have alternate medical insurance may waive the Aetna Student Health Program fee each semester by completing a waiver form. Students are given the opportunity to waive out of the Aetna Student Health Program if their alternate coverage meets the BCM waiver criteria. A student may submit a waiver of coverage:

- 1. During the Annual Student Insurance Change Period
- 2. As an incoming student
- 3. As a result of a qualifying life event (birth, marriage, commencement of employment, etc.)

Billing for the Student Health Program is charged to the student's tuition bill and administered through the Student Account Services Office. For questions regarding health charges or due credits please contact their office directly.

Students may work part time if it does not interfere with Program requirements including didactic coursework and class times, clinical rotation responsibilities and thesis work. Students may contact the Office of Student Employment which assists students seeking part-time employment on and off campus during the academic year.

During the second year of training, students will be given up to a stipend to be applied to expenses incurred to attend the Annual Conference of the NSGC and/or TSGC. Documentation of expenses will be required.

#### INTERNET

Each student at BCM receives free access to email services. Students will receive an ID number and directions for accessing the internet at home and this will be reviewed again during orientation. Moreover, the campus is wireless, so students should be able to access the internet from anywhere on campus if their laptops have wireless capability. Network security requirements for personal computers will need to meet guidelines established by the BCM IT security team (Acceptable Use policy): https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display Policy&Policy Number=12.2.01

#### NETIQUIETTE

All communications in discussions boards, chat forums, and via other online tools should be composed with tact, fairness, and common courtesy. Students should keep in mind that communication cues, such as body language, tone, and expression, are absent in an online forum and, as a result, misunderstandings can occur. Students are encouraged to be cautious about the wording and tenor of all communication and to observe basic netiquette guidelines. All communications should represent graduate level grammar, spelling, and syntax.

All students have the right to appropriately express opinions in discussions and other online forums. Attempts to dominate a discussion by posting threads excessively, intentionally changing the discussion topic, exhibiting an inappropriate or argumentative attitude or other disruptive behavior will not be permitted.

For more information about online netiquette and the BCM social media policy, visit the following sites: <u>https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=11.2.15</u>

#### EMAIL COMMUNICATION

Students must use their BCM email accounts for all Program communication. When submitting questions or coursework via email, students should observe the instructor's guidelines regarding subject lines, attachment types, and file naming conventions. Instructors may request that students put the course name or course ID in the subject field, use a particular naming convention for attachments, or request assignments in a particular format or file type. Following these guidelines will help ensure efficient communication between instructors and students. Failure to comply with these guidelines may result in a delayed reply or misplaced coursework.

Prompt response to all communications (phone calls, emails, etc.) from supervisors, faculty, course directors, and program leadership is required. If you receive an email or phone call from any of the aforementioned individuals, you are expected to respond within 24 hours unless it is a Friday (a response within 48-72 hours would be expected).

#### **TECHNICAL DIFFICULTIES**

All students are encouraged to have a back-up plan for internet/computer access should they experience technical difficulties with their primary computer or internet service provider. If a student experiences technical difficulties (e.g., internet outage, power outage, weather-related issues) that prevent him or her from submitting an assignment, the student should contact the instructor immediately via phone or other communication method. The instructor will advise the student how to proceed with submitting the

coursework. The GCP does have a laptop, which may be used for and exam with Exam Soft if advanced notice is given to the course director that your laptop is unavailable to provide adequate time for the download of the exam onto the laptop.

# LIBRARY

Students have access to the TMC library. Most journals and texts useful to genetic counseling students can be found in either the TMC Library or online through the library. A complete set of the required textbooks for the Program are available to be signed out in the Program offices. Students may use the TMC library at any time. Books, journals, and reprints may NOT be removed, but copies may be made at the library. Other facilities will let the students know what reference materials they have access to during rotations.

#### STUDENT OFFICE SPACE AT ROTATION SITES

When possible, office space (cubicle area or other arrangement) has been made available to students when they are involved in clinical rotations at the various institutions. Each genetics center will provide students with access to patient records and materials including computer access to on-line databases as appropriate. **NO PATIENT RECORDS ARE TO BE REMOVED FROM ANY GENETICS CENTER – NOR MAY ANY PATIENT DATA BE COPIED AND TAKENOUT OF THE FACILITY.** Office space at the various institutions is very limited. Please do NOT use hallways or secretaries' office areas as gathering or meeting places. Students should **NEVER** telephone patients or discuss patient related matters in any public area (including elevators, lunchroom, etc.) other than those that have been designated by your supervisors. NO personal calls or texting should be made or received at your rotation site unless there is an emergency.

# CONFIDENTIALITY AGREEMENTS AND HIPAA TRAINING

Students must sign Confidentiality Agreements with the various institutions prior to participating in any clinical activities including observations and clinic conferences. This is to preserve patient confidentiality. Under HIPAA guidelines, students may **NOT** copy or remove any patient records including the pedigree from any clinical site. All pre-case and post-case write-ups must have patient names, etc., blacked out.

# PROFESSIONALISM AND DRESS CODE

Business casual attire and demeanor is expected when seeing patients in person **or remotely** or when otherwise engaging in professional activities at all clinical rotation sites. Students should always wear their student badges when involved in any patient situation. Check with the clinic regarding dress codes.

Dress in the department is casual and you may wear jeans and other casual clothing. If your clothes are felt to be inappropriate, you may be asked to leave and/or change.

Please address faculty formally as warranted by their academic or professional title (Dr., Professor, etc.) unless they instruct otherwise. In the clinical setting when seeing patients, **ALWAYS** address the faculty member formally. Also, be sure to ask the counselors how they would like to be addressed in a professional setting – many counselors do not use a nickname when seeing patients. Professionalism also includes how you interact with others in the classroom, the clinic or at any time you are on campus or representing the Program off the campus. As you will hear us say many times, "you are always on stage".

While engaging in any classes that are delivered virtually (via Zoom or other means), you must have your video/camera on throughout the class unless otherwise instructed. Use of the chat function or muting/unmuting to ask the instructor(s) questions will be at the discretion of the course director. Your full attention and professionalism are expected during the allotted class time

Students should dedicate a space for classroom engagement. Lounging in bed, on a hammock, or lying on the floor are unacceptable. Distractions, such as loud background noise, pets, and cellphone usage, should be minimized during class times.

# TEXTBOOKS

We have tried to keep required texts to a minimum. However, we highly suggest that students purchase or have available the following texts (approximately ~\$850). Electronic versions of most texts have been collated by previous classes and this may reduce the need for you to purchase some or most of the books that are required. All these texts are used in the Program-related courses. The most economical is to purchase them online – where prices may be reduced. All the required texts will be available at no cost in the Program office and/or the TMC library for individual check out. Copies are limited.

Required Books:

- Foundations of GC I & II Uhlmann WR, Schuette JL, Yashar BM, A Guide to Genetic Counseling, 2nd. Ed., Wiley-Blackwell, 2009, ISBN 978-0470179659.
- Bennett, RL, The Practical Guide to the Genetic Family History, 2nd Ed., March 2010, Wiley-Blackwell, ISBN: 978-0-470-04072-0, 386 pages.
- Veach, P, LeRoy, B, and Bartels, D, (2021). Facilitating the Genetic Counseling Process: A practice manual. 2nd Ed., Springer., ISBN 978-3-319-74798-9
- Advanced GC I & II LeRoy, B, McCarthy-Veach, P, and Callanan, N, Genetic Counseling Practice: Advanced concepts and skills. 2<sup>nd</sup> Ed., Wiley-Blackwell, New York, 2021. ISBN- 13: 978-1119529859
- Research Methods in GC MacFarlane, IM, Veach, P, LeRoy, B, Genetic Counseling Research: A Practical Guide, 2014, Oxford Univ Press, ISBN 978-0199359097
- Laboratory and Variant Interpretation and Counseling Goodenberger, ML, Thomas, BC, & Kruisselbrink, T, (2017). Practical Genetic Counseling for the Laboratory (1st Ed.). S.l.: Oxford University Press. ISBN 978-0190604929
- Health Behavioral Counseling Rollnick, S, Miller, W, & Butler, C, (2022) Motivational Interviewing in Health Care: Helping Patients Change Behavior (Applications of Motivational Interviewing), 2nd Ed. Guilford Press, ISBN: 978-1462550371

Not required but strongly recommended and referenced:

- Fundamentals in Epidemiology & Genetic Epidemiology and Population Genetics Oleckno W, Essential Epidemiology: Principles and Applications, 1st Ed., 2002. Waveland Press. ISBN: 1577662164
- Rothman, KJ. Epidemiology: An introduction. 2012. 2<sup>nd</sup> Ed. Oxford University Press. ISBN:

0199754551

- Embryology Langman Medical Embryology Us Ed Pb, Sadler, Lippincott Williams&Wilkins ISBN 978-1-4511-1342-6
- Medical Genetics I & II Nussbaum, McInnes, Willard (2015) Thompson and Thompson Genetics in Medicine, 8th Ed.; Saunders, ISBN10 1437706967
- Saul, RA, (2013) Medical Genetics in Pediatric Practice; American Academy of Pediatrics, ISBN 978-1-58110-496-7

Other recommended texts:

- Kenneth Jones, editor. Smith's Recognizable Patterns of Human Malformations. 7th Ed. W.B. Saunders Company, Philadelphia, 2013. ISBN-10: 1437706967 \$80
- Robertson, D and Williams, GH, Clinical and Translational Science: Principles of Human Research, 2nd Ed., Elsevier (Academic Press), 2016; ISBN-13: 978- 0128021019
- Clarke, Angus, Harper's Practical Genetic Counselling, Eighth Edition (new Ed in October 2019)
- William Reardon. The Bedside Dysmorphologist. Oxford University Press, New York, 2007. \$54 ISBN 978-0195300451
- Medical dictionary any good medical dictionary is fine. \$30-\$40
- Schneider KA, Counseling About Cancer: Strategies for Genetic Counseling, 3rd Ed., Wiley-Liss, Inc. 2012, ISBN 978-0-470-08150-1.
- Young, ID, Introduction to Risk Calculation in Genetic Counseling. 3rd Ed., Oxford University Press, 2006. ISBN 978-0195305272
- Gardiner and Sutherland, Chromosomal Abnormalities and Genetic Counseling, Oxford Univ Press, 4th Ed. ISBN 978-0195375336

Optional texts

- Psychosocial Genetic Counseling. By Jon Weil. Oxford University Press, New York 10016, 2000, 297 pp. ISBN: 9780195120660
- Practical Genetic Counselling 8th Edition, Peter Harper (2020). ISBN: 9781444183740

Visual aids flip chart book is very helpful for role plays in these courses as well and will be provided at no cost. Books needed for courses not listed above will be assigned by the instructors for those courses (Health Behavioral Counseling, Medical Ethics and Fundamentals of Epidemiology).

# ACADEMIC INTEGRITY

The importance of academic integrity cannot be over-emphasized. Throughout the course of their professional careers, genetic counselors are expected to maintain academic integrity. The SHP has prepared a detailed document about BCM's academic integrity policy (Regulations Concerning Conduct). It is the responsibility of each incoming student to read the SHP Student Handbook section on Regulations Concerning Conduct. The URL for this section of Handbook the is https://www.bcm.edu/education/school-of-health-professions/students-resources/student-handbook

College policy states, "Honesty and integrity are essential to the academic functions of the SHP."

Anything a student writes, whether it is for a course, clinical rotation, or thesis document, must be entirely in their/your own words. Plagiarism is prohibited. Plagiarism includes "an act or instance of using or closely imitating the language and thoughts of another author without authorization and the representation of the author's words as one's own, as by not crediting the original author." (dictionary.com) Whether intentionally or unintentionally, making extensive use of sources without acknowledging them (including the internet) is interpreted as acts of plagiarism. Quotations, paraphrases and borrowed information must be properly referenced.

# ARTIFICIAL INTELLIGENCE (AI) & LARGE LEARNING MODULES (LLMS)

Submitting work completed by an AI tool without proper citation as part of a course, or for any written work submitted for a grade (including all thesis related work); or when AI tools are expressly prohibited by the relevant course syllabus or student manual, will be grounds for an Honor Council investigation.

Professors and course directors are strongly encouraged to give assignments where AI tools cannot be easily leveraged to cheat (i.e., in-person written assignments, secure browsers, etc.) and to explicitly address their policy on AI tools in the relevant course syllabus or student manual.

Unauthorized and unintended uses

Caution: Generative AI tools are trained on data available on the Internet and may not be accurate or reliable. It is always a good idea to verify information received from a generative AI tool or any other AI-assistance tool with evidence-based sources including peer reviewed literature, standards of care, and guidance from professional bodies. Below are use cases in which use of generative AI, LLMs and other AI-assistance is not permitted.

- Any written work submitted for a grade without proper citation
- Written exams and any other writing assignments when the use of AI tools is expressly prohibited in the relevant course syllabus or student manual
- Peer review publications, unless otherwise stated by the journal or publisher
- To assess students' critical thinking and core competencies
- To use or disclose protected health information

Compliance with BCM policies:

BCM students will be expected to ensure their use of generative AI tools complies with BCM policies and guidelines, including the Honor Code and Student Code of Conduct.

While all homework, writing assignments, tests or other class material (including all works related to a student's thesis) is expected to be the original work of the student, with express consent of the Course Director, limited use of Artificial Intelligence (AI - ChatGPT, Bard, Co-Pilot, etc.) in the course maybe allowed at the discretion of the Course Director. The Course Director will provide guidance and the required documentation for use of AI in each specific homework, writing assignment, test or any other class material. Failure to follow this guidance and provide the specified documentation of use of AI is considered plagiarism and/or misconduct and are examples of prohibited conduct (article 8.4 in the SHP Student Handbook).

# COPYRIGHT

All course materials, including online content, are property of Baylor College of Medicine and may not be shared, distributed, or published outside the College. Students are authorized to view, copy, and print documents as needed for successful completion of coursework. Contents may not be copied for personal, commercial, or non-commercial use.

Course participants retain copyright of all course assignments and posts; however, these materials may be used for educational purposes within the given course, or future courses. In group projects, only the portion of the work completed by that individual is copyrighted by that individual.

Students must observe all applicable restrictions when obtaining copyrighted material from libraries and other sources. Title 17, United States Code, governs the making of photocopies or other reproductions of copyrighted material. Under certain Fair Use circumstances specified in the law, libraries and educational institutions are allowed to furnish copies to students. The copies may not be used for any purpose other than private study, scholarship, or research. Electronic copies should not be shared with unauthorized users. If a user fails to comply with Fair Use restrictions, he/she may be liable for copyright infringement.

#### STUDENT RECORD KEEPING

It is imperative that students maintain complete and accurate records of not only their clinical learning experiences, but also their time commitment for other learning activities. Students in the clinical phase of the Program may be asked to enter both case logs and time logs in Typhon Group's AHST Student Tracking System daily. Maintaining case and time logs is a professional responsibility of each individual student.

#### ADVISING

The student's major advisor for the Program will be the PD. The PD and APD are available to assist students with all aspects of the Program as well as personal issues if the student so desires. Additionally, each student will be assigned a GC faculty mentor at the start of the Program.

During clinical rotations, the supervising genetic counselor of that rotation should be the student's first choice for a resource person. However, a student may also wish to discuss counseling styles, strategies, etc., with other counselors to get a broader perspective. If a counselor feels that information brought to their attention by the student should be shared with the PD, the counselor is expected to inform the student of such.

# **REMEDIATION & ACADEMIC INTERVENTIONS**

Ideally, students who are struggling will be identified as early as possible in didactic and clinical coursework. This will be achieved through frequent assessment and monitoring of the student's attainment of the practice-based competencies.

- 1. Students must achieve a final passing grade of B or better in all courses that require grades or must pass any courses that are pass/fail.
- 2. Course directors may require an academic intervention designed to address less-than-satisfactory

performance on a learning or assessment activity within a given course, regardless of whether that learning or assessment activity results in a passing or failing final course grade. When an academic intervention for a learning or assessment activity is required, the highest score possible is the minimum passing score for the learning or assessment activity.

- 3. Only final course grades can result in formal academic action by the PD or Health Professions Student Promotions Committee (HPSPC, e.g., academic probation, dismissal).
- 4. When a student achieves a final grade of C, D, or F, the Course Director will evaluate for areas of focused knowledge deficits
  - a. If a single area of focused knowledge deficit is identified, the Course Director may direct a targeted remediation in the area of weakness.
    - i. Targeted remediation should occur prior to the HPSPC meeting; if this is not possible, the Course Director reports a grade of incomplete (I) to the PD and confers with the Program on a date the remediation will be completed.
    - ii. Successful targeted remediation results in the lowest passing grade in that course (B) being reported as a final grade to the PD.
    - iii. Unsuccessful targeted remediation results in the original failing grade (C, D, or F) being reported as a final grade to the PD.
  - b. If more than one area of knowledge deficit is identified, the student is not eligible for targeted remediation and the original failing grade (C, D, or F) is reported as a final grade to the PD.
- 5. If a student has a single failing final course grade, the PD places the student on academic probation, and arranges comprehensive remediation of the course. The PD can authorize comprehensive remediation for up to two failing final course grades, provided they do not occur concurrently.
  - a. Comprehensive remediation includes a course examination and/or clinical remediation activities representing all course content areas.
    - i. Successful comprehensive remediation will result in the lowest passing grade (B) in the course being reported as a final grade to the PD. The PD will report this grade to the Office of the Registrar.
    - ii. Failure of comprehensive remediation results in the original failing grade (C, D, or F) being reported as a final grade to the PD. The PD will report this grade to the Office of the Registrar and refer the matter to the HPSPC. The HPSPC may require the student to repeat the course in its entirety, or other actions deemed appropriate.
- 6. If a student has two or more concurrent failing final course grades (C, D, or F), the PD places the student on academic probation, does not authorize remediation, and refers the matter to the HPSPC. The HPSPC will consider options deemed appropriate, including dismissal.
- 7. If, after successfully remediating two failing final course grades, a student has a third failing final course grade, the PD places the student on academic probation, does not authorize remediation, and refers the matter to the HPSPC. The HPSPC will consider options deemed appropriate, including dismissal.

Article 9.7 Academic Performance – Periodic promotion and ultimately recommendation to the President of the College to grant the Master of Science degree require the satisfactory completion of all required courses, examinations, and credits as well as demonstration by the student that he or she is capable of conduct appropriate within the discipline for which he or she is receiving education and training.

In the case of a student whose academic performance has been unsatisfactory in one or more courses or clinical rotations, the Health Professions Student Promotions Committee may require the student to:

- 1. take a special make-up examination.
- 2. be placed on Academic Probation.
- 3. enroll in a remedial course of study.
- 4. repeat specific courses or rotations even if previously passed.
- 5. repeat an academic year of study.
- 6. withdraw from the College.
- 7. be dismissed from the College and not be allowed to pursue further studies at the institution; and/or
- 8. comply with other actions as appropriate.

Reference Article 5.13.5 Final Grades of the SHP Student Handbook for additional information can be found the Handbook adverse actions in and the policy statement: (https://intranet.bcm.edu/policies/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=28.1. 05). Students who are required to repeat a didactic or clinical course are responsible for the same academic work and examinations as required of other students taking the course. It is contrary to policy to offer an examination or re-examination to a student who has been suspended, withdrawn, dismissed, or is on a leave of absence.

(https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=23.1.12).

BCM publishes a course repeat policy to explicate the Baylor College of Medicine (BCM) criteria for calculating repeats in coursework. The full policy is available in the BCM Policy and Procedure Manual. http://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=23.1.09

# LEARNING ENVIRONMENT

When situations arise that could impede success in learning, students should access support and report concerns. This may include but is not limited to bullying or other behaviors that are not conducive to a safe learning environment. Students may address concerns directly with faculty, staff, Program Directors, and deans, and should review the following policies regarding grievances, mistreatment, and qualifying disabilities.

Reports through the avenues described below are addressed confidentially to the extent possible to resolve the issue. BCM enforces an anti-retaliation policy to encourage everyone at BCM to take proper steps to point out problems and to recommend solutions.

# THE OMBUDSMAN

The Ombudsman's office provides confidential guidance to any member of the BCM community for handling problems, conflicts, and concerns. https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=32.1.01

#### STUDENT GREVANCES

BCM is committed to treating all students respectfully and fairly and providing a quality educational environment and experience. Student Services Policy 23.8.01 describes how to appeal a grade, adverse academic action, other academic issue, or conduct, and to report nonacademic, professionalism, and mistreatment issues

https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=23.1.08Report grievances using the **Integrity Hotline** (https://secure.ethicspoint.com, 855-764-7292) or via the Intranet www.bcm.ethicspoint.com. Appeals of grades and adverse academic actions must occur within 10 days of the grade being posted to the Student Portal or within 10 business days following personal notice of an adverse action.

#### MISTREATMENT REPORTS

BCM is committed to providing a safe and supportive environment for all members of the BCM community. All individuals have the right to be free from all forms of sex and gender-based discrimination, which includes sexual harassment, acts of sexual violence, domestic violence, dating violence and stalking. BCM enforces policies related to Harassment, Discrimination, and Retaliation https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&policy\_number=02.2.25

and sexual misconduct and other prohibited conduct <u>https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=02.2.26</u>These policies define prohibited conduct, describe mechanisms for reporting alleged violations, explain BCM's centralized investigation and adjudication procedures, and identify potential disciplinary actions and remedies. Report prohibited conduct you experience or witness via the **Integrity Hotline** <u>https://secure.ethicspoint.com</u> or the Intranet <u>www.bcm.ethicspoint.com</u>. Anonymous reports are investigated to the extent allowed by the information provided, and a system exists to provide confidential follow-up about steps taken.

# **DISABILITY SERVICES**

BCM is committed to providing equal educational access for qualified students with disabilities in accordance with state and federal laws including the Americans with Disabilities Act of 1990, as amended in 2008, and Section 504 of the Rehabilitation Act of 1973. The goal is to provide students with disabilities access to needed resources so that they are afforded every opportunity to do their best work. Further information about these services is available at: https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\_Policy&Policy\_Number=23.1.07 Students with documented disabilities can seek accommodations by contacting Student Disability Services (713-798-8137) or by the Title IX Coordinator, Ms. Toni Gray (toni.gray@bcm.edu). If an accommodation is granted, the student is responsible for informing the course director of the approved accommodation prior to the first examination.

#### OTHER

#### **Background Check/TB Testing/Immunizations**

Students are required to have a criminal background check as they enter the Program. Results are sent directly to the student as well as to the PD. A positive response on the background check will not

automatically preclude admission, however, such findings will be reviewed by the Program Admissions committee who will make a recommendation regarding acceptance into the GCP.

Please note that results of any of the criminal background checks may be shared with any of the affiliated hospitals at their request. Students may undergo additional background checks according to policies of affiliated hospitals as well.

TB testing/Immunization Records: Students are required to have an annual TB (Tuberculin) test as well as to submit documentation of current immunization records.

# STUDENT ID'S

Students will be issued IDs at the start of orientation. These student ID badges will be used throughout the Program. Replacement of lost or damaged badges will incur an additional cost to the student. All ID badges must be returned to the Program administrative assistant at the time of graduation. Due to COVID-19 additional badges and/or credentials may be required to access BCM campus and affiliates.

# **CAMPUS RESOURCES**

The BCM campus has several resources available to graduate students. Student wellness is a priority and links to relevant resources are found here: <u>https://www.bcm.edu/education/academic-faculty-affairs/student-services/student-wellness.</u>

Graduate students have access to these resources:

- Student wellness is essential to academic progress at Baylor College of Medicine. To support this philosophy, Baylor maintains the BCM Health Care Program for Students (the Program). Baylor requires that all individuals enrolled in any Baylor academic program elect coverage through the Program or are enrolled in alternative coverage that meets all the waiver requirements established by the College. For the 20/21 academic year coverage for the BCM Health Care Program is provided by Blue Cross and Blue Shield of Texas (BCBSTX). Additionally, Academic Health Plans (AHP) is a student health insurance administrator that will assist with enrolling or waiving coverage. Benefit coverage and cost information along with waive requirements can be found here. Students will be provided information during orientation on how to enroll or waive coverage.
- Counseling services are available to students who experience a variety of difficult personal and interpersonal challenges. Graduate school can be very demanding and adjusting to these challenges is not always easy. There are two options available to students. The Student and House Staff Mental Health Services (Phone: (713) 798-4881) and counseling services provided by an independent third party called Well Connect (Phone: (866) 640- 4777). We recommend that students feel free to utilize these services at any time. Please refer to the Student Wellness Mental Health website for additional information: <a href="https://www.bcm.edu/education/academic-faculty-affairs/student-services/student-wellness/emotional-mental-health-wellness">https://www.bcm.edu/education/academic-faculty-affairs/student-services/student-wellness/emotional-mental-health-wellness</a>

# HOUSING

Even though Houston is a big city with a thriving economy, the cost-of-living is low and housing options are relatively inexpensive, especially compared to other big cities and other parts of the country. Most

graduate students live off campus in one of the pleasant residential neighborhoods within walking or biking distance of the College. There is a variety of very reasonably priced housing available in the Houston area. Information about housing can be obtained from <u>https://www.bcm.edu/about-us/life-in-houston/living-in-houston/housing</u>.

# SOURCES OF ADDITIONAL INFORMATION

**SHP Student Handbook**: contains a description of the General Academic Rules and Policies governing SHP Students as set forth by the BCM and the SHP. <u>https://www.bcm.edu/education/school-of-health-professions/students-resources/student-handbook</u>. Click on the <u>Code of Conduct</u> to read the BCM policy.

In advance of matriculation, all students must complete online training on HIPAA (confidentiality & privacy), Infection control (universal precautions), Blood Borne Pathogens, Sexual Harassment & Sexual Misconduct Reporting Guide, Handwashing Tips, CME – Coronavirus Preparation for Providers and Trainees, Personal Protection Equipment (PPE) Training, Outpatient Telehealth Online Module, & FY20 Annual Compliance Training - Code of Conduct. Student conduct, professionalism, privacy, and IT security will also be covered during your orientation.

**Student Services Guide**: contains additional information about Student Affairs, Student Activities, Academic Services, Other Campus Services, College Policies and Regulations, and a general guide to Houston Cultural Activities: <u>https://www.bcm.edu/education/academic-faculty-affairs/student-services</u>.