

HGEN 6300: PERINATAL GENETICS

Credit Hours: 3.0

Contact Information

Name	Position	Phone	Email
TBD			UUGPGC@utah.edu

Course Information

Brief Description of Course

This course will provide an overview of topics in perinatal genetics including management of normal and complicated pregnancy, genetic screening, prenatal diagnostic techniques and indications, teratogens, and infertility. The diagnosis and management of pregnancies complicated by maternal and fetal genetic disease, fetal anomalies, and pregnancy loss will be covered as well as reproductive options such as pregnancy termination. The psychosocial and ethical implications of perinatal genetic counseling will also be covered. Prerequisite: University of Utah Graduate Program in Genetic Counseling (UUGPGC) students.

Course Objectives

At the conclusion of this course students will be able to:

1. The student will become familiar with the ethical, legal and psychosocial issues specific to perinatal genetic counseling.
2. The student will understand the indications for, techniques, and appropriate follow-up of prenatal genetic screens, carrier screening, and diagnostic tests.
3. The student will be familiar with the causes, diagnosis, recurrence risk, and pregnancy management of the major classes of birth defects.
4. The student will be familiar with the major teratogens and management of exposed pregnancies.

The ACGC Practice-Based Competencies Addressed in this course:

Genetics and Genomics Expertise: 1; 1.a; 1.b; 1.c.

Risk Assessment: 2; 2.a; 2.b; 2.c; 2.d.

Counseling: 3; 3.a; 3.b; 3.c; 3.d.

Communication: 4; 4.a; 4.b; 4.c.

Research: 5; 5.a.

Healthcare Systems: 6.b; 6.c; 6.d.

Professional Identity: 7; 7.a; 7.b; 7.c; 7.d.

Course Format & Schedule

Timeline

One semester

Educational and Instructional Modalities

This is a hybrid course which has both online and in-person components. Core and guest lectures will be supplemented with interactive discussions and student presentations. It is expected that assigned readings and corresponding assessments are complete online prior to attending class.

Role of the Student in this Course

You will be expected to engage in a variety of learning activities including reading, viewing videos, sharing with peers, writing and creating educational presentations.

Required Materials/Readings

- Laptop or tablet with a webcam & microphone (or headphones)
- MDpocket® Basic Pregnancy Wheel (available on Amazon)
- Required Textbooks: Foundations of Perinatal Genetic Counseling by Amber Mathiesen and Kali Roy, Life's Work by Dr. Willie Parker, and Choosing Naia by Mitchell Zuckoff
- Assigned Readings, Optional Readings, Resources:
 - Readings will be found in Canvas under each individual class and may be printed or downloaded on your home computer. Make sure you read the headers and footers, as they contain textbook chapter information and websites that are required reading.

Assessment & Grading

Evaluation Methods

1. Exams: two examinations will be given (midterm and final examination) worth 25% and 35% of the final grade. All students must take both exams. Exams cover lecture and homework content as well as readings from the textbook and assigned articles. The final examination is comprehensive and covers all semester material. A student will be given an early or late exam only in the event of an extreme emergency.
2. Assignments and Class Activities: homework assignments and class activities will account for 20% of the final grade. On the due date, assignments should be submitted electronically on Canvas by the specified time. These assignments will cover lecture and reading materials. *Late assignments will not be accepted and will be assigned a grade of zero. Assignments will be returned by either the Midterm or Final exam. Students should complete the appropriate on-line class lectures prior to attendance of a class activity. Students should be prepared to interact with their instructors and peers during activities.
3. Ultrasound Anomaly Project: Each student will be assigned a fetal ultrasound anomaly. Each student will create a PowerPoint presentation on the unique anomaly to present to your instructors, classmates, and invited guests. Additionally, each student will create a patient focused handout and write a patient letter addressed to a hypothetical patient about the ultrasound anomaly. This assignment will count for 15% of the overall grade.
4. Participation: Up to 5% of the final grade will be given for active participation. This means attendance of all scheduled in-person and Zoom meetings, being prepared for class, and initiating and participating in class discussions. Participation credit will be awarded for the mid-year evaluation. This is an "all or none" credit, all students must submit the evaluation in order for everyone to receive the credit.

Grading System

Students will receive a final letter grade. To pass this course you must achieve an overall score of at least 80% (a B- equivalent) as required by the Department of Human Genetics.

Grading Scale

A	95 – 100
A-	90 – 94.9
B+	87 – 89.9
B	83 – 86.9
B-	80 – 82.9
No Credit	below 80.0



Standard Policies

The Americans with Disabilities Act.

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 801-581-5020. CDS will work with you and the instructor to make arrangements for accommodation. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

Addressing Sexual Misconduct.

Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

Campus Safety.

The University of Utah values the safety of all campus community members. To report suspicious activity, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

Alternate Name and/or Personal Pronoun

Class rosters are provided to the instructor with the student's legal name as well as 'Preferred' first name (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, we will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise us of any name or pronoun changes (and please update CIS) so we can help create a learning environment in which you, your name, and your pronoun will be respected.

Current COVID-19 Campus Guidelines

COVID-19 Guidelines change rapidly. Please access the most current information COVID-19 Central @ The U. coronavirus.utah.edu