THE OHIO STATE UNIVERSITY

# Prerequisite Course Content Requirements

Please reference this list to determine whether a course will count as a required prerequisite for the Genetic Counseling Graduate Program. Courses should cover most of the content topics listed below. If you have questions or would like to have your syllabus reviewed, please reach out to us at OhioStateGCProgram@osumc.edu.

## Biochemistry

- Cell structure and function
- Metabolism
- Respiration (i.e. biochemical/cellular pathways)
- Genetic replication
- Transcription
- Translation in plants, animals, and microorganisms

## Statistics

- Probability and statistics
- Experimental designs
- Sampling
- Data analysis and interpretation

## Genetics

- Molecular genetic principles
- Transmission genetics of prokaryotes and eukaryotes
- Developmental and non-chromosomal genetics
- Recombinant DNA and genomics
- Genetics and evolution of populations

## Psychology

- Introduction to psychological theories, principles and concepts relevant to the biology of behavior
- Sensation/perception
- Consciousness
- Memory, learning, intelligence, development
- Social psychology
- Personality
- Stress and health
- Psychopathology and treatments, and its application to human experiences