Strengthen your expertise in human genomics!

Human Variation and Disease

15-WEEK COURSE BEGINS AUGUST 31, 2021
DEADLINE TO APPLY: JULY 31, 2021
CLASS MEETS WEEKLY ONLINE VIA ZOOM, FROM 6:30–8:00 P.M. PT

As human genomics research rapidly moves from promise to practice, the importance of foundational knowledge in human genomics and its applications for healthcare and drug discovery is becoming more vital for professionals in a wide variety of settings.

Human Variation and Disease will be an in-depth study of the types of DNA variation found in the human genome, including single nucleotide (SNVs), copy number (CNVs), and structural variants (SVs), at both the individual and population scale. This course will discuss the impact of highly penetrant variants on human health, especially as it relates to rare diseases, and the impact of common variation on complex traits and diseases. Topics in this course will include the technologies used to detect DNA variants and to diagnose genetic disease in all types of clinical settings, from prenatal to adult, and the ethical considerations of genetic and genomic testing.

Keck Graduate Institute (KGI) has a reputation of preparing students for industry with hands-on, active learning. As a student in this course, you will be a part of a dynamic learning community within The Claremont Colleges.

CLICK HERE FOR MORE INFORMATION
FAQ

How much does this course cost?
This course is $1,980 for 3 credit units. However, registrants in this pilot course for fall 2021 will receive a 50% discount in tuition.

Is the course entirely online?
Yes, the course will be entirely online and will include both synchronous meetings and asynchronous work. The course will be delivered using the Canvas course platform and Zoom.

How much time can I expect to spend on coursework between class sessions?
There will be a minimum of approximately 1.5 hours of asynchronous work required between class sessions.

What do I need to do to apply for the course?
- Complete a brief application
- Submit a short statement of interest
- Submit your resume or CV

Where do I find the application?
Visit the apply page. Select “Certificate in Applied Genomics” as your Program of Interest. Select “Fall 2021” for the Term. Continue with the application. There is no application fee.

Are there pre-requisites for this course?
Successful completion of CAG 9001 or an advanced degree in a relevant field of biology (Masters, PhD, MD, etc.) is required for admission.

Does the course carry credit?
Yes, this course carries 3.0 credits.

May I take this as an individual course?
You may enroll either as a stand alone course or continue to complete the Certificate in Applied Genomics.

What is the Certificate in Applied Genomics?
Developed with funding from Amgen, the Certificate in Applied Genomics will provide professionals in the life and health sciences with an understanding and appreciation for the science behind the headlines and the tools to dive into the data analysis challenges and ethical considerations in this rapidly changing field.

What courses are in the Certificate in Applied Genomics?
- Applied Genomics – Translating Concept to Clinic (1.5 credits)
- Human Variation and Disease (3 credits)
- Clinical Genetics: Actionability and Genome Editing (3 credits)
- DNA & RNA Sequencing (3 credits)
- Epigenomics (3 credits)
- Applied Genomics Capstone (1.5 credits)

How do I get more information about this course and the Certificate in Applied Genomics?
You can email admissions@kgi.edu for additional information or visit kgi.edu/cag.