

MONIKA JANDU

INTEGRATED SCIENCE
AMBASSADOR

3RD YEAR, MAJOR

THEME OF MY INTEGRATION:

Understanding how genetics and the environment interact to influence one's physiology

WHAT I AM INTEGRATING:

DISCIPLINE #1

Genetics:

Through continued studies in genetics, I hope to gain an insightful understanding of the process of inheritance from one organism to another on a holistic and cellular level. Specifically, I hope to better understand genetic mutations and investigate the ways in which these mutations can lead to abnormal physiological development within organisms.

DISCIPLINE #2

Physiology:

By integrating physiology, I hope to explore the interconnected physiological systems within humans. Specifically, I will look at physiology from a genetic and environmental perspective and see how both influence normal (or abnormal) physiological development.

DISCIPLINE #3

Public Health:

Many diseases such as emphysema (chronic lung disease) have both a genetic and environmental component to it. Knowing this, I hope to explore how interventions such as targeted education and policy reform can improve the health outcomes of individuals.

SAMPLE CURRICULUM RATIONALE

BIOL 330 - Developmental Biology

This course looks into animal development with a particular emphasis on embryology. Taking this class would be beneficial for my physiology integration, as it will provide me with a clear picture of animal development at particular stages of life; something that many other physiology courses do not offer. Additionally, this course is recommended for Biol 463 (Gene Regulation in Development), which is part of my genetics integration.

SPPH 410 - Improving Public Health: An Interprofessional Approach to Designing and Implementing Effective Interventions

This hands-on course allows students to work collaboratively to investigate and propose a solution to a current issue in public health. This course is essential for my public health integration as it will allow me to dive deep into an issue within public health and think critically about potential solutions. Doing so will expose me to a number of public health issues (many of which I may not even currently be aware of) and allow me to see what is currently being done to address these issues.

CONTACT

monikaj3@student.ubc.ca