

Electronic signature	IP address	Date Time
Lorraine Jolivet	71.192.109.45	9/21/2025 6:33:00 AM

Questions/Answers

Q 1) I hereby affirm that I have viewed the class "Biostatistics and Biochemistry" in its entirety. I have already or will shortly complete 1 to 2 hours of self study, research, reading, reflection and/or application of the concepts/skills presented using the AIU online library or other mediums.

A 1) Yes

Q 2) Provide a short summary of the concepts or topics you learned about today" (minimum 300 characters)

A 2) Today I learned about how biochemistry and biostatistics are applied across different fields such as agriculture, food science, and biotechnology. In agriculture, biochemistry helps in developing crop varieties resistant to pests and diseases and in studying biochemical pathways in plants to improve yield and quality. In food science, it is applied to create new food products, enhance nutritional value, and analyze how foods are metabolized in the body to influence health. In biotechnology, biochemistry is used to study and manipulate DNA and RNA, advancing tools for genetic engineering, gene therapy, and the production of biopharmaceuticals like recombinant proteins and monoclonal antibodies. It also supports the development of new biocatalysts (enzymes and microbes) for industrial applications, including biofuel production. Alongside this, biostatistics plays a crucial role in analyzing experimental data, validating findings, and ensuring that research in these fields is statistically sound. It provides the methods to design experiments, test hypotheses, and interpret results, which strengthens the reliability of discoveries in biochemistry-based research. This integration of biochemistry and biostatistics demonstrates how science not only explores the molecular basis of life but also translates knowledge into practical solutions for food, health, and environmental challenges.

Q 3) What is the most important concept(s) that you gained for today's Live Class? (minimum 300 characters)

A 3) The most important concept I gained from today's Live Class is how biochemistry and biostatistics work together to solve real-world problems. Biochemistry provides insight into the molecular processes in plants, food, and human health, while biostatistics ensures that research findings are valid, reliable, and applicable. Understanding this connection helps in developing better crops, safer and more nutritious food, advanced medicines, and innovative biotechnological solutions.

Q 4) How would you apply what you learn today to improve your life of work? (minimum 300 characters)

A 4) I would apply what I learned today by using biochemistry to better understand health, food, and environmental systems while applying biostatistics to make evidence-based decisions. This means relying on scientific data to design effective programs, evaluate outcomes, and develop innovative solutions that improve healthcare, nutrition, and overall quality of life.

Q 5) Independent Research: AIU Live Classes are a starting point for further learning beyond the class. Search similar content either online or in the AIU online library and review it then share the name or link here. If its from AIU Library copy the Source or ISSN, [show me how?](#) (can be a video, academic publication, web site, lecture or book) (minimum 10 characters)

A 5) https://www.aiu.edu/student_pub/biostatistics-and-biochemistry-samuel-sefuka/