

Biochemistry: A Brief Course

1. FST 1201 BIOCHEMISTRY II

2. INSTRUCTOR

Mr. Abel Aukwase (BSc: Food Science and Technology, MSc Food Technology, PhD Candidate)

3. COURSE TYPE

Core for year 1 BSc: Food Science and Technology

4. COURSE STRUCTURE

Course credits (CU): 3 CU i.e. 3 contact hours per week per semester
Course duration: 15 weeks (45 h) – 30 lecture hours; 30 practical hours

5. COURSE DESCRIPTION

Brief introduction of biochemistry. Enzymology: overview of enzymes, properties of enzymes, classification and nomenclature of enzymes, factors affecting enzyme activity, enzyme kinetics, enzyme inhibition; Metabolism and bioenergetics: Introduction and definitions, laws of thermodynamics (1st and second law), metabolism and metabolic control mechanisms of carbohydrates, lipids, proteins and amino acids, nucleic acids, vitamins and minerals.

6. COURSE OBJECTIVES

General objective

The course is designed to equip students with knowledge on the biochemical reactions that take place in the body and the importance of such biochemical reactions in life

The specific objectives

- To equip students with knowledge on enzymes mechanisms and how such mechanisms affect metabolism
- To equip students with knowledge on how energy is produced, utilized and stored in the body

7. RECOMMENDED READING LIST

- Bell, G.H, Smith D. E and Paterson, C. R (1976). Text book of Physiology and Biochemistry, 9th Edition, Churchill Livingstone, London
- Conn, E.E and Stumpf, P.K (1976). 45th Edition, John Wiley & sons Inc.
- Lehninger, A. L (1982). Principles of Biochemistry, Worth publishers, Inc, New York
- Stryer, L (1981). Biochemistry, 2nd Edition, W. H. Freeman and Company, New York
- Christopher, K.M and van Holde, K.E. (1990). Biochemistry, The Benjamin/Cummings Publishing Company, Inc. New York

8. 4. COURSE CONTENT, METHODS OF INSTRUCTION, TOOLS AND EQUIPMENT REQUIRED

TOPIC	CONTENT	METHOD OF INSTRUCTION / Time allocated	TOOLS / EQUIPMENT NEEDED
1. Overview of enzymes	<ul style="list-style-type: none"> • Definitions • Properties of enzymes • Classification and nomenclature of enzymes • Factors affecting enzyme activity • Effect of substrate concentration on enzyme 	Interactive lecture (2 hrs)	Chalk /Markers Blackboard/White board LCD projector, Computer

Biochemistry: A Short Course First Edition. John L. Tymoczko (Author), Jeremy M. Berg (Author), Lubert Stryer (Author) & 0 more. This item: Biochemistry: A Short Course by John L. Tymoczko Paperback \$Explore the impact of biochemistry on bioenergy and health, discovering why graduates are Skills from biochemistry; A brief history of biochemistry; Everyday. The most fundamental criterion that a toxicologist should evaluate is the dose- versus-response relationship. One of the i principal problems in environmental. Our BSc Biochemistry course will give you a grounding in a subject that forms the basis of virtually all of the biological sciences. Many exciting discoveries made. On Jun 26, H G van Eijk (and others) published: A brief course in clinical biochemistry. Biochemistry, by Professor Terry Brown of the University of Manchester, is designed to be the textbook of choice for any short biochemistry course. This course explores the molecules of life, starting with building blocks and culminating Principles of Biochemistry integrates an introduction to the structure of. A Degree Built By You. You'll customize your plan of study with help from faculty advisors and your research mentors, choosing from a broad list of available. The course focuses on molecular mechanisms of protein function with particular emphasis on membrane proteins. The structure and functional mechanisms of. Thirdly, click the biochemistry course and then enter the biochemistry course consisted of notice area, course characteristic area, course brief introduction area. Introductory Molecular Biology course for Biochemistry and Molecular Biology majors. The course is designed to provide students with a firm grounding in. Biochemistry, sometimes called biological chemistry, is the study of chemical processes within and relating to living organisms. Biochemical processes give rise. He had for years been responsible for teaching a one semester introductory biochemistry course for pharmacy students. In , the College of Dentistry had . The textual matter might well have included brief descriptions of some of the new instruments which have come into prominent use in analytic biochemistry. Applicants are strongly advised to visit the Medical Sciences Graduate School website to help them identify the most suitable course and. This is an introductory course in biochemistry, designed for both biology and chemical engineering majors. A consistent theme in this course is the development. A brief introduction to molecular biology for nonspecialists. Subjects vary, but have included biochemical basis of the origin of life, biochemical genetics. And as a further boost for your CV, studying on this course means you can become a student undergraduate Associate Membership of the Biochemical Society. you brief descriptions of each module, including general information about assessment . At the end of the BSc (hons) Biochemistry course you will be able to.

[\[PDF\] The Cell Cycle: Principles of Control \(Primers in Biology\) \(Primers in Biology\)](#)

[\[PDF\] Delphi Programming with COM and ActiveX \(Programming Series\) \(Charles River Media Programming\)](#)

[\[PDF\] The Wages of War, 1816-1965: A Statistical Handbook](#)

[\[PDF\] Ascension Through Orbs](#)

[\[PDF\] Organische Chemie: Eine Einführung für Lehramts- und Nebenfachstudenten \(Springer-Lehrbuch\) \(German\)](#)

[\[PDF\] Coloring Books for Adults - Christmas Mandalas \(Xmas\)](#)

[\[PDF\] The Great Lone Land A Narrative of Travel and Adventure in the North-West of America](#)