RECOMMENDED TEXTBOOKS AND REFERENCES BIOLOGICAL SCIENCES ACADEMIC YEAR 2015– 2016 SEMESTER II

BS1006 PRINCIPLES OF GENETICS

Textbook

D. Peter Snustad, <u>Genetics</u>, 6th Edition, International student version, Wiley, 2012 (Call No: QH430.S674 2012a)

Jocelyn E. Krebs, <u>Lewin's essential genes</u>, 3rd Edition, Jones and Bartlett Learning, 2013 (Call no: QH430.K92 2013)

William S. Klug, *Essentials of genetics*, 8th Edition, Pearson, 2013 (Call no: QH430.K66 2013)

BS1007 MOLECULAR & CELL BIOLOGY I

Textbook

Bruce Alberts, <u>Molecular biology of the cell</u>, 6th Edition, Garland Science, 2015 (Call No: QH581.2.M718 2015)

Harvey F. Lodish, *Molecular cell biology*, 7th Edition, W.H. Freeman and Co., 2013 (Call no: QH581.2.M718m 2013)

Reference

Gerald Karp, <u>Cell and molecular biology: concepts and experiments</u>, 7th Edition, Wiley, 2013 (Call no: QH581.2.K18 2013)

BS1008 BIOSTATISTICS

Textbook

Geoffrey R. Norman, *Biostatistics: the bare essentials*, 3rd Edition, B.C. Decker, 2008 (Call no: QH323.5.N842 + 1 CD, E-Book)

BS1100

MOLECULAR & CELL BIOLOGY TECHNIQUES LEVEL 1

Textbook

Rob Reed, David Holmes, Jonathan Weyers, Allan Jones, <u>Practical Skills in Biomolecular</u> Sciences, 2nd Edition, Pearson, Prentice Hall (Call no: QH506.P895)

BS2007

IMMUNOLOGY

Textbook

Kenneth P. Murphy, <u>Janeway's immunobiology</u>, 8th Edition, Garland Science, 2012 (Call no: QR181.M978 2012)

Reference

Abul K. Abbas, <u>Cellular and molecular immunology</u>, 7th Edition, Saunders/Elsevier, 2012 (Call no: QR185.5.A122 2012)

BS2008

EXPERIMENTAL MOLECULAR & CELL BIOLOGY

Textbook

Bruce Alberts, <u>Molecular biology of the cell</u>, 5th Edition, Garland Science, 2008 (Call No: QH581.2.M718 2008 + 1 DVD)

Reference

Robert H. Reed, <u>Practical skills in biomolecular sciences</u>, 3rd Edition, Prentice Hall, 2007 (Call no: QH506.P895 2007)

BS2009

ADVANCED BIOCHEMISTRY

Reference

Donald Voet, *Biochemistry*, 4th Edition, Wiley; 2010 (Call No: QP514.2.V876 2011)

John Kuriyan, <u>The molecules of life: physical and chemical principles</u>, Garland Science, 2012 (Call no: QH506.K96m)

Alan Fersht, <u>Structure and Mechanism in Protein Science: A Guide to Enzyme Catalysis and Protein Folding</u>, 1st Edition, W.H. Freeman & Company; 1998 (Call no: QD431.25.S85F399)

Stephen J. Lippard, <u>Principles of Bioinorganic Chemistry</u>, University Science Books (Call no: QP531.L765)

BS2010 BIOIMAGING

Reference

Douglas B. Murphy, <u>Fundamentals of light microscopy and electronic imaging</u>, 2nd Edition, Wiley-Blackwell, 2013 (Call No: QH211.M978 2013)

BS211S EQUATIONS OF LIFE [Self-paced course]

Reference

A standard mathematics textbook of A-level.

BS2012 GENETICS & GENOMICS

Textbook

L. H. Hartwell, *Genetics, from genes to genomes*, 4th Edition, McGraw Hill, 2011 (Call no: QH430.G328G 2011)

Ricki Lewis, <u>Human Genetics, Concepts and Applications</u>, 10th Edition, McGraw Hill, 2012 (Call no: QH431.L675 2012)

BS2014 MICROBIAL BIOTECHOLOGY

Textbook

E. M. T. El-Mansi, C. F. A. Bryce, Arnold L. Demain, A.R. Allman, *Fermentation Microbiology* and *Biotechnology*, 3rd Edition, Published by CRC Press (E-Book)

BS3008 COMPUTATIONAL BIOLOGY AND MODELING

Textbook

Schlick, Tamar, <u>Molecular modeling and simulation: an interdisciplinary quide</u>, 2nd Edition, Springer, 2010. (Call no: QD480.S344 2010, E-Book)

Hinchliffe, Alan., <u>Molecular modelling for beginners</u>, 2nd Edition, Wiley, 2008. (Call no: QD480.H659M 2008)

Höltje, Hans-Dieter, <u>Molecular modeling: basic principles and applications</u>, 3rd revised and expanded Edition, Wiley-VCH, 2008. (Call no: QH506.M718MMB 2008)

BS3011

PROTEIN FOLDING AND BIOMOLECULAR NMR

Textbook

Roger H. Pain, <u>Mechanisms of protein folding</u>, 2nd Edition, Oxford University Press, 2000 (Call No: QP551.M486)

Jeremy N. S. Evans, *Biomolecular NMR spectroscopy*, Oxford University Press, 1995 (Call no: QP519.9.N83E92)

Reference

Thomas E. Creighton, *Protein folding*, W.H. Freeman and Co., 1992 (Call no: QP551.P967F)

Alan Fersht, <u>Structure and mechanism in protein science: a quide to enzyme catalysis</u> and protein folding, W.H. Freeman, 1999 (Call no: QD431.25.S85F399)

Kurt. Wüthrich, *NMR of proteins and nucleic acids*, Wiley, 1986 (Call no: QP519.9.N83W973)

Andrew E. Derome, <u>Modern NMR techniques for chemistry research</u>, 1st Edition, Pergamon Press, 1987 (Call no: QD96.N8D437)

BS3012

FUNCTIONAL GENOMICS AND PROTEOMICS

Reference

Richard M. Twyman, <u>Principles of proteomics</u>, 2nd Edition, Garland Science, 2014 (Call No: QP551.T975 2014)

Jonathan Pevsner, <u>Bioinformatics and Functional Genomics</u>, 2nd Edition, Wiley-Blackwell, 2009 (Call No: QH441.2.P514 2009)

Chhabil Dass, <u>Fundamentals of Contemporary Mass Spectrometry</u>, Wiley Interscience, 2007 (Call no: QC454.M3D231)

Timothy D. Veenstra, John R. Yates, <u>Proteomics for Biological Discovery</u>, Wiley-Liss, 2006 (Call no: QP551.P967T)

Nobuhiro Takahashi, Toshiaki Isobe, <u>Proteomic Biology Using LC-MS</u>, Wiley Interscience, 2008 (Call no: QP551.T136)

Franz Hillenkamp and Jasna Peter-Katalinic, <u>MALDI MS</u>, Wiley-VCH, 2007 (Call no: QC454.M3M244)

Richard J. Simpson, <u>Proteins and Proteomics: a laboratory manual</u>, Cold Spring Harbor Laboratory Press, 2003 (Call no: QP551.P967PAP)

Igor A. Kaltashov and Stephen J Eyles, <u>Mass Spectrometry in Biophysics</u>, Wiley Interscience, 2005 (Call no: QP519.9.M3K14)

BS3013

DRUG DISCOVERY & DEVELOPMENT, BIOTECHNOLOGY

References

Silverman, Richard B., <u>The organic chemistry of drug design and drug action</u>, 2nd Edition, Elsevier Academic Press, 2004 (Call no: RS403.S587)

Wilson, Charles Owens, <u>Wilson and Gisvold's textbook of organic medicinal and pharmaceutical chemistry</u>, 12th Edition, Lippincott Williams & Wilkins, 2011. (Call no: RS403.W746 2011)

Patrick, Graham L., <u>An introduction to medicinal chemistry</u>, 5th Edition, Oxford University Press, 2013. (Call no: RS403.P314 2013)

Foye, William O., <u>Foye's principles of medicinal chemistry</u>, 7th Edition, Lippincott Williams & Wilkins, 2013. (Call no: RS403.W722 2013)

BS3014

BIOLOGICAL FOUNDATIONS OF BEHAVIOR

Textbook

Michael D. Breed, Animal behavior, Academic Press, 2012 (Call no: QL751.B832)

BS3015

The RNA World

Textbook

Bruce Alberts, <u>Molecular biology of the cell</u>, 5th Edition, Garland Science, 2008. (Call no: QH581.2.M718 2008 + 1 DVD)

John F. Atkins, *RNA worlds: from life's origins to diversity in gene regulation*, Cold Spring Harbor Laboratory Press, 2011 (Call no: QH450.R627rw)

Reference

James E. Darnell, <u>RNA: life's indispensable molecule</u>, Cold Spring Harbor Laboratory Press, 2011 (Call no: QP623.D223)

BS3017

ADVANCED MICROBIAL PATHOGENESIS

Textbook

Wilson B.A., <u>Bacterial pathogenesis: a molecular approach</u>, 3rd Edition, ASM Press, 2011 (Call No: QR201.B34S186 2011)

Reference

Walsh C., Antibiotics: actions, origins, resistance, ASM Press, 2003 (Call no: RM267.W223)

BS3019

NEUROPSYCHOLOGY OF STRESS AND RESILIENCE

Textbook

Robert M. Sapolsky, *Why Zebras don't get ulcers*, 3rd Edition, Holt Paperbacks, 2004 (Call No: QP82.2.S8S241)

BS3020

PLANT BIOTECHNOLOGY

Reference

Arie Altman; Paul Michael Hasegawa, <u>Plant Biotechnology and Agriculture: Prospects for</u> the 21st Century, 1st Edition, Academic Press, 2012 (Call no: TP248.27.P55P713pba)

C. Neal Stewart Jr., <u>Plant Biotechnology and Genetics: Principles, Techniques and Applications</u>, Wiley-Interscience, 2008 (Call no: TP248.27.P55P713 + 1 CD)

Maynard Smith, John, <u>The Major Transitions in Evolution</u>, Oxford University Press, 1997 (Call No: QH366.2.M471m)

BS3022 PROTEIN TRAFFICKING

Textbook

Bruce Alberts, Alexander Johnson, Julian Lewis, Martin Raff, <u>Molecular Biology of the Cell</u>, 6th Edition, Garland Science, 2014 (Call no: QH581.2.M718 2015)

Lukas K. Buehler, *Cell Membranes*, Garland Science, 2016, ISBN: 9780815341963 (Call no: QH601.B928)

ELECTIVES

BS8004 TRADITIONAL CHINESE MEDICINE: A PRIMER COURSE 中医入门

Reference

Sun, Guangren. <u>Zhong yi ji chu li lun</u>, 2nd Edition, Zhongguo Zhong yi yao chu ban she, 2007 (Call no: R601.Z63J 2007)

Gao, Xuemin. <u>Zhong yao xue</u>, 2nd Edition, Zhongguo Zhong yi yao chu ban she, 2007 (Call no: RS180.C5Z63X 2007)

Shi, Xuemin. <u>Zhen jiu xue</u>, 2nd Edition, Zhongguo Zhong yi yao chu ban she, 2007 (Call no: RM184.Z63E 2007A)

CH9200 FOOD MICROBIOLOGY

Textbook

Adams, M. R., *Food Microbiology*, 3rd Edition, Royal Society of Chemistry, 2008 (Call No: QR115.A215 2008)

SP0056 INTRODUCTION TO THE WORKINGS OF THE HUMAN BODY

Textbook

Lauralee Sherwood, <u>Introduction to human physiology</u>, 8th edition, Thomson Brooks Cole, International Edition (Call No: QP34.5.S554 2013)

Bruce Alberts, <u>Molecular biology of the cell</u>, 5th Edition, Garland Science, 2008 (Call No: QH581.2.M718 2008 + 1 DVD)