

## Preliminary and Level 1

**BIOL0011 Preliminary Biology I •****BIOL0012 Preliminary Biology II**

Campbell Biology. *Reece, Urry, Cain, Wasserman, Minkorsky and Jackson*, 2010, 9<sup>th</sup> Ed. Pearson Global Edition. ISBN10: 0321739752; ISBN13: 9780321739759

**BIOL1017 Cell Biology •****BIOL1018 Molecular Biology and Genetics**

Cell Biology, Genetics, Molecular Biology, Evolution and Ecology: *P. S. Verma & V. K. Agarival*, 2000

**BIOL1262 Living Organisms I**

Stern's Introductory Plant Biology: *Bidlack, James and Shelley Jansky*, 2010, 12<sup>th</sup> Ed.

**BIOL1263 Living Organisms II**

Animal Diversity: *Hickman CP, Roberts LS, Keen SL, Larson A and Eisenhower DJ*, 2007, 4<sup>th</sup> Ed.

## Level 2

**BIOL2164 Principles of Molecular Biology**

Gene Cloning and DNA Analysis: An Introduction, *T. A. Brown*  
Molecular Biotechnology: Principles and Applications of Recombinant DNA, *Bernard R. Glick, Jack J. Pasternak, Cheryl L. Patten*, 4<sup>th</sup> Ed  
An Introduction to Genetic Engineering, *Desmond S. T. Nicholl*, 3<sup>rd</sup> Ed.

**BIOL2401 Research Skills and Practices in Biology**

Practical Skills in Biology, *A. Jones, R. Reed and J. Weyers*, 5<sup>th</sup> Ed.

**BIOL2402 Fundamentals of Biometry**

Statistics Explained, *Perry R. Hinton*, 2014, 3<sup>rd</sup> Ed.

A Prime of Ecological Statistics, *N. J. Gotelli and A. M. Ellison*, 2013, 2<sup>nd</sup> Ed.

Biostatistical Analysis, *J. H. Zar*, 2009, 5<sup>th</sup> Ed.

Statistics for the Life Sciences, *M.L. Samuels and J.A. Witmer*, 2015, 5<sup>th</sup> Ed.

Biostatistics for the Biological and Health Sciences: International Edition, *M.M. Triola and M.F. Triola*, 2006.

**BIOL2403 Principles of Ecology**

Elements of Ecology: International Edition, *T.M. Smith and R.L. Smith*, 2008, 7<sup>th</sup> Ed.

**BIOL2406 Eukaryotic Microbiology**

Brock Biology of Microorganisms, *M.T. Madigan, J.M. Martinko and J. Parker*

Phycology, *R.E. Lee*

Introduction to Fungi, *J. Webster and R.W.S. Webber*

Algae: Anatomy, Biochemistry and Biotechnology, *L. Barsanti and P. Gualtieri*

Introductory Mycology, *C.J. Alexopoulos, C.W. Mims and M. Blackwell*

**BIOL2407 Biological Evolution**

Evolution Analysis, *S. Freeman, and J. C. Herron*, 2010, 5<sup>th</sup> Ed.

**BIOL2408 Diving for Scientists**

Scuba Diving, *D. K. Graver*, 2009, 4<sup>th</sup> Ed. ISBN 0-7360-4539-2

**BOTN2401 Plant Form and Systematics**

An Introduction to Plant Structure and Development: Plant Anatomy for the Twenty-First Century, *C.E. Beck*, 2010, 2<sup>nd</sup> Ed. ISBN-10: 0521518055, ISBN-13: 978-0521518055.

**BOTN2402 Physiology of Plants**

Plant Physiology, *L. Taiz and E. Zeiger*, 2006, 5th Ed.

**ZOOL2403 Maintenance Systems in Animals •****ZOOL2404 Coordination & Control in Animals**

Vertebrates: Comparative Anatomy, Function and Evolution, *K.V. Kardong*, 2012, 6<sup>th</sup> Ed.

Functional Anatomy of the Vertebrates, *W. Walker, K. Liem, W. Bernis and L. Grande*, 2013, 3<sup>rd</sup> Ed.

## Level 3

**BIOL3400 Issues in Conservation Biology**

Essentials of Conservation Biology, *R. Primack*

**BIOL3403 The Biology of Soil**

[Prescribed]

The Biology of Soil: A community and ecosystem approach (Biology of Habitats), *R. Bardgett*

Fundamentals of Soil Ecology, *D. Coleman, D. Crossley Jr, and Paul Hendrix*, 2<sup>nd</sup> Ed.

The nature and properties of soils, *N.C. Brady and R.R. Weil*, 2016, 15<sup>th</sup> Ed.

Soil Microbiology, Ecology and Biochemistry, *E.A. Paul*, 2014, 4<sup>th</sup> Ed.

Principles and applications of soil microbiology, *D.D.M. Sylvia, J.J. Fuhrmann, P.G. Hartel and D.A. Zuberer*, 2005, 2<sup>nd</sup> Ed.

**BIOL3404 Virology**

Plant Pathology, *G.N. Agrios*, 2005

Principles of Molecular Virology, *Alan Cann*, 2001

Basic Virology, *M. Hewlett and E. Wagner*, 2004

**BIOL3405 Pest Ecology & Management**

Entomology and Pest Management, *L. P. Pedigo and M.E. Rice*, 2005, 5<sup>th</sup> Ed.

**BIOL3406 Freshwater Biology**

Ecology of Freshwater: A view for 21st century, *B. Moss*, 2010, 4<sup>th</sup> Ed.

Tropical Stream Ecology, *D. Dudgeon*, 2008, 1<sup>st</sup> Ed.

**BIOL3407 Oceanography**

Oceanography: An Invitation to Marine Science, *T. Garrison*

**BIOL3408 Coastal Ecosystem**

The Biology of Mangroves and Seagrasses, *P. Hogarth*

**BIOL3409 Caribbean Coral Reefs**

A Field Guide to Coral Reefs: Caribbean and Florida. *E. H. Kaplan, S. L. Kaplan and R. T. Peterson*, 1999

**BIOL3410 Water Pollution Biology**

[Prescribed]

Biology of Freshwater Pollution, *C. Mason*, 2002, 4<sup>th</sup> Ed.

[Highly Recommended]

Toxicology of aquatic pollution. Physiological, Molecular and Cellular Approaches, *E.W. Taylor*, 2009, 1<sup>st</sup> Ed.

[Recommended]

Water Pollution Biology, *P.D. Abel*, 1996, 2<sup>nd</sup> Ed.

**BOTN3401 Principles of Plant Biotechnology**

Plant Biotechnology and Genetics: Principles, Techniques and Application, *C. Stewart*, 2008

**BOTN3402 Introduction to Plant Breeding**

Breeding Field Crops, *J.M. Poehlman and D.A. Sleper*, 4<sup>th</sup> Ed.

**BOTN3403 Horticulture**

Principles of Horticulture, *C.R. Adams, K.M. Bamford and M.P. Early*, 5<sup>th</sup> Ed.

**BOTN3404 Economic Botany**

Plants and Society, *E. Levetin and K. McMahon*

Fundamentals of Pharmacognosy and Phytotherapy. *M. Heinrich, J. Barnes, S. Gibbons and E. Williamson*, 2004, 6<sup>th</sup> Ed. ISBN-10: 0443071322, ISBN-13: 978-0443071324

**BOTN3405 Plant Ecophysiology**

Physiological Ecology of Tropical Plants, *U. Luttge*, 2008

Plant Physiological Ecology, *H. Lambres, F.S. Chapin and T.L. Pons*, 2007

**BOTN3406 Tropical Forest Ecology**

An Introduction to Tropical Rain Forests, *T.C. Whitmore*

The Tropical Rain Forest, *R.W. Richards*, 2<sup>nd</sup> Ed.

Tropical Forest and its Environment, *K.A. Longman and J. Jenik*

**ZOOL3063 Comparative Animal Physiology**

[Prescribed]

Animal Physiology, *R.W. Hill, G.A. Wyse and M. Anderson*, 2016, 4<sup>th</sup> Ed.

Environmental Physiology of Animals, *P. Willmer, G. Stone and I. Johnson*, 2005, 2<sup>nd</sup> Ed.

[Recommended]

Comparative Animal Physiology, *P.C. Withers*, 1992

Animal Structure and Function (Biology: The Unity and Diversity of Life), *C.Starr*, 2009

Animal Physiology: Adaptation and Environment. *K. Schmidt-Nielsen*, 2008, 5<sup>th</sup> Ed.

**ZOOL3403 Entomology**

A Field Guide to Insects: America North of Mexico, *D.J. Borror and R.E. White*

Borror and DeLong's Introduction to the Study of Insects, *C.A. Triplehorn and N.F. Johnson*, 7<sup>th</sup> Ed.

**ZOOL3404 Parasitology**

Foundation of Parasitology, *L.S. Roberts and J. Janovy*, 2008, 8<sup>th</sup> Ed.

**ZOOL3405 Vertebrate Biology**

[Prescribed]

Vertebrate Life, *F. Pough, C. Janis and J. Heiser*, 2008, 8<sup>th</sup> Ed.

[Highly Recommended]

Functional Anatomy of the Vertebrates, *W. Walker, K. Liem, W. Bernis and L. Grande*, 2001, 3<sup>rd</sup> Ed.

Vertebrates: Comparative anatomy, Function and Evolution, *K.V. Kardong*, 2012, 6<sup>th</sup> Ed.

**ZOOL3406 Immunology**

Immunology: A Short Course, *R. Coico and G. Sunshine*, 2015, 7<sup>th</sup> Ed.

**ZOOL3408 Sustainable Use of Marine Fishable Resources**

Fisheries Biology, Assessment & Management, *M. King*, 2007, 2<sup>nd</sup> Ed.

Marine Fisheries Ecology, *Jennings, Kaiser & Reynolds*, 2009