**BIOL 11000**
FUNDAMENTALS OF BIOLOGY I
Instructor: David H. Bos
Lab Coordinator: Mark Browning
Estimated Enrollment: 1335
Text: Principles of Life
Authors: Hillis, Sadava, Heller and Price
Publisher: W.H Freeman & Co

ISBN: 978-1-42927632-0 **BioPortal access card REQUIRED** along with the access card you receive the E-book version of Principles of Life

Purchase of bound/loose-leaf hardcopies of the book are OPTIONAL. Note that NEW hardcopies of the book (bound or loose-leaf) come automatically with an access card for BioPortal.

ISBN: 978-1-42925721-3 bound text
ISBN: 978-1-42927605-4 Loose leaf text
*Note: -"i>clicker" version 1 or 2 will be used, please purchase on line or at bookstores.*
**Required: Lab manual - University Bookstore only**

**BIOL 11100**
FUNDAMENTALS OF BIOLOGY II
Instructor: Denise Zielinski
Estimated Enrollment: 160
Text: Biology
Year/Edition: 8th
ISBN Number: 0073227390
Author(s): Raven
Publisher: McGraw-Hill
Hardback
**Required: Lab manual- University Bookstore only**

**BIOL 11200 (Biotechnology students only)**
FUNDAMENTALS OF BIOLOGY I
Instructor: David H. Bos
Lab Coordinator: Mark Browning
Estimated Enrollment: --
Text: (see information above for BIOL 11000)

**BIOL 11300 (Biotechnology students only)**
**FUNDAMENTALS OF BIOLOGY II**  
Instructor: Denise Zielinski  
Estimated Enrollment: --  
Text: Biology  
Year/Edition: 8th  
ISBN Number: 0073227390  
Author(s): Raven  
Publisher: McGraw-Hill (hardback)  

*BIOL 11500*  
**BIOLOGY RESOURCE SEMINAR**  
Instructor: Dennis Minchella/Staff  
Estimated Enrollment: 200  
*There is no textbook required for this course, materials presented in class~*

*BIOL 12100*  
**BIOLOGY I: DIVERSITY, ECOLOGY, AND BEHAVIOR**  
Instructor: Dennis Minchella  
Estimated Enrollment: 445  
Textbook: Life- The Science of Biology (used text may be purchased, BioPortal not required)  
Year/Edition: 9th edition (10th edition will not be used)  
Author(s): Sadava et al.  
Publisher: Sinauer

*BIOL 13500*  
**FIRST YEAR BIOLOGY LABORATORY**  
Instructor: Laurie Iten  
Lab Coordinator: Deborah Anderson  
Estimated Enrollment: 136  
Required Lab Manual: **Boot Camp for Biology Lab**

*BIOL 19500*  
**Biodiversity, Ecology and Education**  
Instructor: Denise Zeilinski  
Textbook: Life- The Science of Biology  
Year/Edition: 9th edition (10th edition will not be used)  
Author(s): Sadava et al.  
Publisher: Sinauer

*BIOL 19500*  
**Ecology of Plant Reproduction**  
Instructor Nancy Emery and Sally Stevens  
Textbooks: TBA
*BIOL 19700
BIOLOGY FRESHMAN HONORS SEMINAR
Instructor: Chris Sahley
Estimated Enrollment: 45
*There is no textbook required for this course*

*BIOL 20100
HUMAN ANATOMY AND PHYSIOLOGY
Instructor: C. David Bridges
Estimated Enrollment: 36
**Required**
Text 1: Lecture Notes (lectures 1-28)
Year/Edition: 2013
ISBN Number:
Author(s): C.D. Bridges
Publisher: Hayden-McNeill

**Recommended**
Text 2: Coloring Guide to Anatomy & Physiology
Year/Edition: 1st/1995
ISBN Number: 978-0697171094
Author(s): J. A. and R. J. Stone, Wm C. Brown
Publisher: McGraw-Hill Science/Engineering/Math
Recommended - purchase is optional

Text 3: Human Anatomy
Year/Edition: Any
ISBN Number:
Author(s): F. H. Martini, M. J. Timmons
Publisher: Prentice Hall

**Optional**
Di Fore’s Atlas of Histology with Functional Correlations either:
Year/Edition: 2008/11th
Author(s): Victor P. Eroschenko
Publisher: Williams and Wilkins

Or
Di Fore’s Atlas of Histology with Functional Correlations
Year/Edition: 2012/12th ed
Author(s): Victor P. Eroschenko
Publisher: Williams and Wilkins

Note: *"clicker" will be used, please purchase online or at bookstores.*

*Required- nonprogrammable calculator with log capability
Further supplemental materials are NOT required or recommended for this course.
Bookstores should not present such material for student purchase.*
*BIOL 20300
HUMAN ANATOMY AND PHYSIOLOGY
Instructor: C. David Bridges
Lab Coordinator: Stuart Michael
Estimated Enrollment: 864

**Required**
Continued:
Text 1: Lecture Notes
Year/Edition: 2013
ISBN Number:
Author(s): C. D. Bridges
Publisher: Hayden-McNeil

**Required**
Text 2: Lab Manual
Year/Edition: 2013
ISBN Number: 978-0-7380-5706-4
Author(s): Stuart Michael, C. D. Bridges
Publisher: Hayden-McNeil

**Required**
Text 3: Di Fore’s Atlas of Histology with Functional Correlations either:
Year/Edition: 2008/11th
Author(s): Victor P. Eroschenko
Publisher: Williams and Wilkins
Or
Di Fore’s Atlas of Histology with Functional Correlations
Year/Edition: 2012/12th ed
Author(s): Victor P. Eroschenko
Publisher: Williams and Wilkins

**Recommended**
Text 4: Coloring Guide to Anatomy & Physiology
Year/Edition: 1st ed/1995
ISBN Number: 978- 0697171094
Author(s): J. A. and R. J. Stone
Publisher: McGraw-Hill Science/Engineering/Math

**Recommended**, Purchase not required
Text 6: Human Anatomy
Year/Edition: Any
ISBN Number:
Author(s): F. H. Martini, M. J. Timmons –Publisher: Prentice Hall

**Recommended, particularly if student is taking a degree in one of the health professions**
*Atlas of the Skeletal Muscles
Year/Edition: 7th
Author(s): R. J. and J.A. Stone
Publisher: McGraw-Hill Education (ISE Editions)
Note: "i>clicker" will be used, please purchase online or at bookstores.
*Required- nonprogrammable calculator with log capability

Further supplemental materials are NOT required or recommended for this course.
Bookstores should not present such material for student purchase.

*BIOL 20500
BIOLOGY FOR ELEMENTARY SCHOOL TEACHERS
Instructor: David Eichinger
Lab Coordinator: Cindy Sheetz
Estimated Enrollment: 200
Text: What is Life? A Guide to Biology with Physiology and 12 month BioPortal access Card which includes the full ebook What is Life 2e w/Physio
Year/Edition: 2013, 2nd edition
ISBN-146413622x
Author(s): Phelan, Jay
Publisher: W.H. Freeman
Or
Loose Leaf text plus 12 month BioPortal Access Card which includes the full ebook What is Life 2e w/Physio
ISBN: 1464136238
Or
12 month BioPortal Access Card includes the full ebook - What is Life 2e w/Physio
(standalone)
ISBN: 1464132100
Lab Packet: Biology for Elementary School
Publisher: LAD Custom Publishing
Note: The packet is only available for purchase at University Bookstore.

*BIOL 22100
INTRODUCTION TO MICROBIOLOGY
Instructor: Thomas Walter
Lab Coordinator: Iris Sun
Estimated Enrollment: 355
Text: No text is required See syllabus for optional background texts that some may find helpful.
Note: "i>clicker" will be used, please purchase online or at bookstores.
Lab Manual: Introduction to Microbiology Required
Year/Edition: 2013
ISBN Number: 978-1-59984-616-3
Author(s): Iris Sun
Publisher: Blue Door Publishing, LLC (800-979-1624)

*BIOL 23000
THE BIOLOGY OF THE LIVING CELL
Instructor: Edward Bartlett
Estimated Enrollment: 300
Text: TBA
Year/Edition:
ISBN Number:  
Author(s):  
Publisher:  

*BIOL 23100  
BIOL III: CELL STRUCTURE AND FUNCTION  
Instructor: Peter Hollenbeck  
Estimated Enrollment: 445  

**Continued:**  
Text: Essential Cell Biology  
Year/Edition: 3rd  
ISBN Number: 0815341296  
Author(s): Alberts, Bray, Hopkin, Johnson, Lewis, Raff, Roberts, Walter  
Publisher: Garland Science Press  

**Required**  
An e-book is available to purchase or rent at [http://store.vitalsource.com/show/978-0-2038-2820-5](http://store.vitalsource.com/show/978-0-2038-2820-5)

*BIOL 23200  
LABORATORY BIOL III: CELL STRUCTURE AND FUNCTION  
Instructor: John Anderson  
Lab Coordinator: Deborah Anderson  
Estimated Enrollment: 440  

Text: A Laboratory Course in Cell and Molecular Biology  
Year/Edition: Current - Diagrams & Class Notes  
Author(s): J.N. Anderson  

**Required**  
May be purchased at Boiler Copy Center

*BIOL 24100  
BIOLOGY IV: GENETICS & MOLECULAR BIOLOGY  
Instructor: Matthew Hale  
Estimated Enrollment: 45  

Text: Genetics: A Conceptual Approach  REQUIRED  
Year/Edition: 4th  
Author(s): Benjamin A. Pierce  
Publisher: W. H. Freeman & Co.

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<th>Must select one Option</th>
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<tr>
<td>9781429254908</td>
<td>Genetics Portal Access Card</td>
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<tr>
<td>9781429292931</td>
<td>Loose Leaf text + Genetics Portal Access Card</td>
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<td>9781429295314</td>
<td>Soft Cover text + Genetics Portal Access Card</td>
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<td>9781429293310</td>
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*BIOL 28600
INTRODUCTION TO ECOLOGY AND EVOLUTION
Instructors: Jeff Lucas
Estimated Enrollment: 40
Text: The Economy of Nature
Year/Edition: 2010 or last edition
ISBN:
Author(s): Ricklefs, R.E.
Publisher: WH Freeman

*BIOL 29400
BIOLOGY RESEARCH
Permission of Department required
"There is no textbook required for this course"

*BIOL 29500
SPECIAL ASSIGNMENTS
Permission of Instructor required
"There is no textbook required for this course"

*BIOL 30100
HUMAN DESIGN: ANATOMY AND PHYSIOLOGY I
Instructor: Rupa De
Lab Coordinator: Brent Branstetter
Estimated Enrollment: 360
Text: Principles of Anatomy and Physiology
Year/Edition: 2011/13th
ISBN:
Author(s): Tortora and Derrickson
Publisher: Wiley & Sons

Text: Human Anatomy and Physiology Lab Manual
Year/Edition: 2009-2010
ISBN Number: (lab manual only)
Author(s): Sandra Grabowski & Sons

*BIOL 39500
MACROMOLECULES
Instructors: Wen Jiang/Clark Gedney
Estimated Enrollment: 40
"There is no textbook required for this course- Lecture Notes from Instructors"

*BIOL 39500
HOUSEHOLD BIOLOGY & CHEMISTRY
Instructor: Alan Friedman
Estimated Enrollment: 30
#1Text: Chemistry in The Home (Paperback
Year/Edition: 2008
Author(s): Henry T. Weed
Publisher: Read Books

**Required**

Since this book is old enough to be in the “public domain”, a free download for the Nook Reader or using Nook software is available from Barnes and Noble at the same link above.
Multiple other on-line versions (including PDF, EPUB and Kindle) are available from The Internet Archive (archive.org) at: [http://www.archive.org/details/cu31924003623521](http://www.archive.org/details/cu31924003623521)

# 2Text: A Short History of Nearly Everything
Author: Bill Bryson
Year: 2004
Broadway Books, New York NY

**Required**

*BIOL 41500
INTRODUCTION TO MOLECULAR BIOLOGY
Instructor: Stephen Konieczny
Estimated Enrollment: 50
Text: Lewin’s Essential Genes
Year/Edition: 2013/3rd
ISBN Number: 9781449644796
Author(s): J. Krebs, et al
Publisher: Jones & Bartlett

*BIOL 42000
EUKARYOTIC CELL BIOLOGY
Instructor: Claudio Aguilar
Estimated Enrollment: 50
Text: Molecular Cell Biology
Year/Edition: 6th
ISBN Number:
Author(s): Lodish, et al
Publisher: W. H. Freeman & Co.

*BIOL 43600
NEUROBIOLOGY
Instructors: Daniel Suter and Arthur Rosen
Estimated Enrollment: 84
Text: From Neuron to Brain
Year/Edition: 2012/5th
ISBN Number: 978-0-87893-609-0
Author(s): Nicholls, Martin, Wallace and Fuchs
Publisher: Sinauer (Order direct and save www.sinauer.com)
**Required/Hardback**
*BIOL 43800
GENERAL MICROBIOLOGY
Instructors: Bruce Applegate/Laszlo Csonka
Estimated Enrollment: 130
Text: Prescott’s Microbiology
Year/Edition: 9th
ISBN 9780073402406
Author(s): Willey, Sherwood & Woolverton
Publisher: McGraw-Hill
(More text options will be coming this summer 2013)

*BIOL 43900
LABORATORY IN GENERAL MICROBIOLOGY
Instructor: Thomas Walter
Estimated Enrollment: 75
No text is required. See syllabus for optional back round texts that some may find helpful
~Lab Manual available for purchase at CopyMat/Chauncey Hill Mall ~

*BIOL 44100
BIOLOGY SENIOR SEMINAR IN GENETICS
Instructor: Henry Chang
Estimated Enrollment 20
Textbook: “There is no textbook required for this course”

*BIOL 44201
INTRODUCTORY MODULE: PROTEIN EXPRESSION
Instructor Sue Karcher
Estimated Enrollment: 40
~Lab Manual available to download from BlackBoard. ~

*BIOL 44202
ANIMAL PHYSIOLOGY
Instructor: Elwood Walls
Estimated Enrollment: 13
Textbook: “No textbook required / Lab Manual provided”

*BIOL 44203
BACTERIAL SYNTHETIC GENETICS LABORATORY
Instructor: Barry Wanner
Estimated Enrollment: 15
~There is no textbook required. Materials will be provided via a wiki and internet ~
*BIOL 44205
## INTRODUCTION TO LABVIEW
Instructor: Clark Gedney  
Estimated Enrollment: 8  
*There is no textbook required for this course/lab manual provided*

### *BIOL 44207*
**PROTEIN STRUCTURE LABORATORY**  
Instructor: Clark Gedney  
Estimated Enrollment: 12  
Text: Protein Structure & Function

### Continued:
Year/Edition: 2004  
ISBN: 0-87893-663-7  
Author(s): Gregory Petsko & Dagmar Ringe  
Publisher: New Science Press

### *BIOL 44215*
**MULTIDISCIPLINARY DESIGN OF SYSTEMS & DEVICES FOR PHYSIOLOGY MEASUREMENTS**  
Instructor: Nancy Pelaez  
Estimated Enrollment: 20  
While not required, a recommended physiology text for reference is:  
Text: Animal Physiology  
Year/Edition: 2012  
Author(s): Hill, Wyse and Anderson  
Publisher: Sinaure  
Or  
Silverthorn, Human Physiology: An Integrated Approach, 5/E. Pearson Benjamin Cummings  
2010

Additional instructional materials will be posted on Blackboard or provided online at [http://wiki.bio.purdue.edu/MultidiscPhysiolLab/](http://wiki.bio.purdue.edu/MultidiscPhysiolLab/)

### *BIOL 44400*
**HUMAN GENETICS**  
Instructor: Susan Karcher  
Estimated Enrollment: 60  
Text: Thompson & Thompson Genetics in Medicine  
Year/Edition: 7th Edition (or most recent edition)-With Student Consult Online Access  
ISBN Number:  
Publisher: Elsevier

### *BIOL 47800*
**INTRODUCTION TO BIOINFORMATICS**  
Instructor: Michael Gribskov  
Estimated Enrollment: 37  
Text: Understanding Bioinformatics  
Year/Edition:  
ISBN Number:  
Author(s): Marketa Zvelebil and Jeremy Baum  
Publisher: Garland Science  
Paperback

### *BIOL 49400*
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Estimated Enrollment</th>
<th>Text Details</th>
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| BIOL 49800  | BIOLOGY TEACHING                   |                    |                      | Permission of Department required  
~*There is no textbook required for this course*~                                                                                                                                                          |
| BIOL 49900  | BIOLOGY HONORS THESIS RESEARCH     |                    |                      | Permission of Department required  
~*There is no textbook required for this course*~                                                                                                                                                          |
| BIOL 53300  | MEDICAL MICROBIOLOGY               | Seema Mattoo       | 25                   | Instructor: Seema Mattoo  
Estimated Enrollment: 25  
Text: Schaechter’s Mechanisms of Microbial Disease  
Year/Edition 5th  
ISBN 9780781787444  
Authors: Engleberg, Dermondy, & DiRita  
Publisher: Lippencott Williams and Wilkins, WoltersKluwer Health                                                                                                                                          |
| BIOL 54100  | MOLECULAR GENETICS OF BACTERIA     | Laszlo Csonka      | 20                   | Instructor: Laszlo Csonka  
Estimated Enrollment: 20  
Text: Molecular Genetics of Bacteria  
Year/Edition: 3rd  
ISBN Number: 1555813992  
Author(s): Larry Snyder and Wendy Champness  
Publisher: ASM Press Washington DC                                                                                                               |
| BIOL 54200  | LABORATORY IN NEUROPHYSIOLOGY      | Donald Ready       | 8                    | Instructor: Donald Ready  
Estimated Enrollment: 8  
~*There is no textbook required for this course/lab manual provided*~                                                                                                                                   |
| BIOL 55900  | ENDOCRINOLOGY                      | John Anderson      | 89                   | Instructor: John Anderson  
Estimated Enrollment: 89  
~*Class Notes; Endocrinology -BIOL 55900; Fall 2013*~                                                                                                                                                   |
| BIOL 58000  | EVOLUTION                          |                    |                      |                                                                                                                                                                                                             |
Instructor: Morris Levy
Estimated Enrollment: 30
Text: Evolution - Required
Year/Edition: 2013/3rd
Author(s): Futuyma
Publisher: Sinauer Associates, Inc.
*Text is required

*BIOL 59100
FIELD ECOLOGY
Instructors: Nancy Emery
Estimated Enrollment: 20
Text: Practical Field Ecology- A Project Guide
Year/Edition: June 2011
Publisher: Wiley-Blackwell
Required/paperback

*BIOL 59500
BIOLOGY TEACHING METHODS FOR SECONDARY SCHOOLS (This course is for Secondary Transition to Teaching and STEM Goes Rural students only)
Instructor: David Eichinger
Estimated Enrollment: 11
Text: Developing Biological Literacy
Year/Edition: 1993, 1st
ISBN Number: 0787201936
Author(s): BSCS
Publisher: Kendall/Hunt Publishing Co.

*BIOL 59500
INTRODUCTION TO BIOINFORMATICS
Instructor: Michael Gribskov
Estimated Enrollment: 2
*There is no textbook required for this course/Papers selected from scientific literature*

*BIOL 59500
METHODS & MEASUREMENTS IN PHYSICAL BIOCHEMISTRY
Instructor: Cynthia Stauffacher
Estimated Enrollment: 28
Text: Principles of Physical Biochemistry
Year/Edition: 1998
ISBN
Author(s): K.E. VanHolde, W.C. Johnson and P.S. Ho
Publisher: Prentice Hall

*BIOL 59500
ECOLOGICAL STATISTICS
Instructor: Esteban Fernandez-Juricic
Estimated Enrollment: 50
Text: A Primer of Ecological Statistics
Authors: Nicholas J. Gotelli, Aaron M. Ellison
Year/Edition: 2004
STATISTICA-software for statistical analysis can be purchased from
http://www.onthehub.com/statsoft/
Students are encouraged to bring a laptop with STATISTICA to class to learn how to run
statistical analyses. *Text and STATISTICA are required*

*BIOL 59500
Neural Mech Health & Disease
Instructor: Ed Bartlett
Estimated Enrollment: 20
Text: No text required

*BIOL 59500
Cell Biology of Plants
Instructors: Dan Szymanski and Christopher Staiger
Estimated enrollment: 20
~There is no textbook required for this course~

*BIOL 59500
Synthetic Biology
Instructor: Barry Wanner
Estimated Enrollment: 10
Textbook: Regenesis
Authors George Church and Ed Regis
Publisher: Basic Books 2012

*BIOL 60000/BCHM 66400
BIOENERGETICS
Instructor: William Cramer
Estimated Enrollment: 20
~There is no textbook required for this course~;

*BIOL 60200
CELLULAR NEUROBIOLOGY
Instructor: Donna Fekete
Estimated Enrollment: 30
Textbook: From Neuron to Brain
Year/Edition: 2012/5th
ISBN Number: 978-0-87893-609-0
Author(s): Nicholls, Martin, Wallace and Fuchs
Publisher: Sinauer (Order direct and save www.sinauer.com)
Required/Hardback

*BIOL 61100
CRYSTALLOGRAPHY OF MACROMOLECULES
Instructor: Michael Rossmann
Estimated Enrollment: 8
~There is no textbook required for this course~

*BIOL 65200
ADVANCED ECOLOGY DISC
Instructor: Nancy Emery, Course Director
Estimated Enrollment: 10
~There is no textbook required for this course~

*BIOL 69100
BIOLOGICAL RESEARCH METHODS
Permission of Department required
~There is no textbook required for this course~

*BIOL 69500
SPECIAL ASSIGNMENTS
Permission of Instructor required.
~There is no textbook required for this course~

*BIOL 69500
STRUCTURAL BIOLOGY SEMINAR
Instructor: Richard Kuhn
Estimated Enrollment: 15
~There is no textbook required for this course~

*BIOL 69600
DEVELOPMENT & DISEASE SEMINAR
Instructor: Elizabeth Taparowsky
Estimated Enrollment: 15
Text: The Emperor of All Maladies: A Biography of Cancer Required
Author: Siddhartha Mukherjee
Publisher: Scribner

*BIOL 69600
ETHICS: LIFE & RESEARCH LABS
Instructor: Seema Mattoo
Estimated Enrollment: 20
Textbook: TBA

*BIOL 69800
RESEARCH MS THESIS
~There is no textbook required for this course~

*BIOL 69900
RESEARCH PHD THESIS
~There is no textbook required for this course~