



**Division:** Science  
**Course name:** Biology 3A  
**Section:** 0392 / **Semester:** Summer 2014

<b>Instructor Name:</b> Vered Mirmovitch	<b>School Website:</b> <a href="http://www.wlac.edu">www.wlac.edu</a>
<b>Class Hours:</b> M,T,W & TH	<b>Address:</b> 9000 Overland Ave., Culver City, CA 90230
<b>8:00 a.m. – 10:05 p.m.</b>	<b>Location:</b> MSA 005
<b>Office Hours:</b> M,T,W & TH	<b>Instructor E-mail:</b> <a href="mailto:MirmovV@wlac.edu">MirmovV@wlac.edu</a>
<b>12:30 p.m. – 1:30 p.m.</b>	<b>Location:</b> MSA 309
<b>or by appointment</b>	

## **BIOLOGY 3-A LECTURE**

**Course Description:** This is a course in general biology designed to fulfill a laboratory science requirement and will also provide a foundation for advanced courses in biology, including human anatomy, physiology, and microbiology. The lecture portion of the course emphasizes the basic principles in biology, cell structure and function, and the levels of organization in the human body. Lecture topics include the scientific method, biological chemistry, cellular respiration, photosynthesis, heredity, molecular genetics, evolution & ecology.

The laboratory portion of the course includes an introduction to the microscope, detailed study of cells and tissues, a survey of the microorganisms, plants, and animals that comprise the 5 Kingdoms of life, and a detailed dissection and study of the fetal pig. Emphasis is on critical analysis and the diversity of life.

**Biology 3-A Lecture meets 2 hours / 4 times a week for 6 weeks.**

It is a 3-unit course. **Biology 3B Lab meets 2 hours / 4 times a week for 6 weeks. It is a 1-unit course.**

**You will receive a separate grade for each.**

**It is not necessary to have the same instructor for both.**

**We recommend that you take both the same semester.**

**Student Learning Objectives:** A student who completes this class will be able to explain:

- (1) the scientific method, its applications & limitations
- (2) the principal characteristics of living organisms
- (3) the levels of organization of matter, from atoms to biomes
- (4) the mechanisms of evolutionary adaptation
- (5) the principal categories of chemicals that make-up living organisms
- (6) the production of energy by cells and how it is used
- (7) interrelationships of organisms with each other and the environment
- (8) how cells reproduce and how organisms reproduce
- (9) the inheritance & transmission of different genetic traits
- (10) the structure & action of genes
- (11) the structure & function of the different organ systems in the body

**Required & Recommended Books:**

**S. Mader; Biology; Inquiry Into Life; McGraw-Hill Publishers; 13<sup>th</sup> ed, 2011, or 14<sup>th</sup> ed 2014**

Check the class Dropbox site regularly for lecture slideshows.

S.A. Fink; Biology Lecture Outline; BioBooks Pub.; 2008

Student Study Guide for Mader's Biology; McGraw-Hill Publishers; [ISBN 978-0-07-298680-8]

[http://highered.mcgraw-hill.com/sites/007340344x/student\\_view0/index.html](http://highered.mcgraw-hill.com/sites/007340344x/student_view0/index.html)

[http://highered.mcgraw-hill.com/sites/0073525529/student\\_view0/index.html](http://highered.mcgraw-hill.com/sites/0073525529/student_view0/index.html)

<http://quizlet.com/subject/inquiry-into-life/>

**Lecture Examination Schedule (Tentative):**

<b>EXAMINATION 1.....</b>	<b>June 24 (Tue)</b>
<b>EXAMINATION 2.....</b>	<b>July 3 (Thu)</b>
<b>EXAMINATION 3.....</b>	<b>July 14 (Mon)</b>
<b>FINAL EXAMINATION.....</b> <b>(comprehensive)</b>	<b>July 24 (Thu)</b>

**Computation of Course Grade:**

2 (of 3) Examinations.....	60% of Course Grade
Final Examination.....	40% of Course Grade

Assuming you take all 3 lecture examinations, the lowest one will be dropped, and the average of the 2 highest will count 60% towards your Course Grade. . About 55% of the questions on the Final Exam will come from the previous 3 lecture exams.

All examinations will consist of objective-type questions (ie., True/False; Multiple Choice; and Matching questions) that will be answered on **SCAN-TRON (882) forms**. You will be expected to provide SCAN-TRON 882 forms (available at the bookstore) and a **soft lead no. 1 pencil with a good eraser** for each examination for computer scoring. The Final Examination is comprehensive for the entire semester. **There are no make-up examinations.**

**Grading Policy:**

89 - 100%	A
77 - 88%	B
62 - 76%	C
50 - 61%	D
below 50%	F

**Practice Quizzes & Exams & Videos:**

<http://www.professorfink.com>

[http://highered.mcgraw-hill.com/sites/007340344x/student\\_view0/index.html](http://highered.mcgraw-hill.com/sites/007340344x/student_view0/index.html)

[http://www.uwgb.edu/markerj/P\\_QZ/Humbio\\_QZ/QZ\\_PAGE.HTM](http://www.uwgb.edu/markerj/P_QZ/Humbio_QZ/QZ_PAGE.HTM)

[http://www.mhhe.com/biosci/genbio/maderbiology7/student\\_index.mhtml](http://www.mhhe.com/biosci/genbio/maderbiology7/student_index.mhtml)

**Attendance Policy:**

Roll will be taken. There is a strong correlation between poor attendance and poor grades. **You are responsible for information, exam announcements, date changes, etc. presented in class, whether or not you are present.**

Students who are given add slips must complete the process by the 3rd class meeting (June 19). No replacement add slips will be signed.

**Withdrawal from Class:**

***You are responsible*** for your credit and enrollment status. Any student withdrawing from class must inform the admissions office of this decision. **Students failing to follow the correct procedure for withdrawals will receive a grade of "F" for the semester. No withdrawals are permitted after Friday, July 17.**  
(see Schedule, page 1.)

**Cheating/Academic Dishonesty:**

Each student is expected to do his/her own work on all assignments, reports, examinations, etc. **CHEATING ON AN EXAM WILL RESULT IN AN "F" FOR THE COURSE.**

Here is a list of some actions that are considered cheating:

**NO TALKING DURING THE EXAM.**

**KEEP YOUR EYES ON YOUR OWN EXAM.**

**USING NOTES OF ANY KIND (ON CARDS, STRIPS OF PAPER, DESK TOP, ETC.) DURING AN EXAM IS NOT PERMITTED.**

Showing a fellow student your exam, or passing information in any way is not permitted.

Place your answer sheet(s) directly in front of you.

If you have a question, quietly walk up to the instructor and whisper your question.

Translation dictionaries are not permitted.

Changing the answers on a returned Exam & claiming it was scored wrongly.

**All of these demonstrate a lack of Honesty & Integrity which is Essential in all jobs, all relationships, & in all Areas of Life.)**

### **Recommendations for Succeeding in Class:**

- 1. Expect to Work. This is not supposed to be easy.**
- 2. Get to class on time, every time, and stay the whole time.**
  - Never miss class unless you're dead, & take good notes.
- 3. Find someone in the class to contact if you miss a meeting.**
- 4. Be organized! Use a daily calendar to set times for regular studying for each of your classes.**
- 5. Study & Review each night the class is given.**
  - Learning is easier if you schedule time daily to read, to think & review.
  - Every time you study. spend at least 10 minutes reviewing previous lessons.  
(These "refresher shots" are the secret for long-term memory.)
  - Focus your studying on the class Lecture Notes.
  - Read the relevant chapters in your textbook; hi-lite pertinent lines, & add these notes to your class notes (never read without writing).
  - Use the CD-ROM & Web-Sites.
  - Use associations to help you remember things.
  - Prepare note cards and carry them with you to review.
- 6. Increase your studying the weekend before a scheduled Exam!!**
- 7. Anything you turn-in (exams, lab reports) should look neat.**

**TENTATIVE SCHEDULE OF TOPICS**  
(schedule subject to change)

<b>Week</b>	<b>Day</b>	<b>Date</b>	<b>Lecture Topic</b>	<b>Mader Textbook</b>
<b>1</b>	<b>M</b>	<b>JUN 16</b>	<b>Introduction Scientific Method Characteristics of Living Organisms</b>	<b>chapter 1</b>
	<b>T</b>	<b>JUN 17</b>	<b>Evolution by Natural Selection</b>	<b>chapter 27 pp. 541-558; 562-564</b>
	<b>W</b>	<b>JUN 18</b>	<b>Atoms &amp; Molecules Radioactive Dating Thyroid Gland</b>	<b>chapter 2 page 22 &amp; page 547 page 400</b>
	<b>TH</b>	<b>JUN 19</b>	<b>Atoms &amp; Molecules Radioactive Dating Thyroid Gland</b>  <b>[MONDAY JUN 20: Last Day to Avoid a "W" on Permanent Record]</b>	<b>chapter 2 page 22 &amp; page 547 page 400</b>
<b>2</b>	<b>M</b>	<b>JUN 23</b>	<b>Atoms &amp; Molecules Radioactive Dating Thyroid Gland</b>  <b>Organic Compounds</b>	<b>chapter 2 page 22 &amp; page 547 page 400 chapter 2 pages 270-273</b>
	<b>T</b>	<b>JUN 24</b>	<b><u>EXAMINATION 1</u></b>	
	<b>W</b>	<b>JUN 25</b>	<b>Organic Compounds</b>  <b>Hormones Structure of ATP Structure of DNA</b>	<b>chapter 2 pages 270-273</b>  <b>pages 396-398 page 40 &amp; page 102 pages 40 &amp; 504-505</b>

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<b>Week</b>	<b>Day</b>	<b>Date</b>	<b>Lecture Topic</b>	<b>Mader Textbook</b>
	<b>TH</b>	<b>JUN 26</b>	<b>Organic Compounds</b> <b>Hormones</b> <b>Structure of ATP</b> <b>Structure of DNA</b>	<b>chapter 2</b> <b>pages 270-273</b>  <b>pages 396-398</b> <b>page 40 &amp; page 102</b> <b>pages 40 &amp; 504-505</b>
<b>3</b>	<b>M</b>	<b>JUNE 30</b>	<b>Cell Structure</b>  <b>Transport Across the Cell Membrane</b>  <b>Autolysis (Apoptosis)</b>	<b>chapter 3</b>  <b>chapter 4</b>  <b>p. 82-83</b>
	<b>T</b>	<b>JUL 1</b>	<b>Cell Structure</b>  <b>Transport Across the Cell Membrane</b>  <b>Autolysis (Apoptosis)</b>  <b>Endosymbiont Theory</b>  <b>Biochemical (Metabolic) Reactions &amp; Enzymes</b>	<b>chapter 3</b>  <b>chapter 4</b>  <b>p. 82-83</b>  <b>p. 63</b>  <b>chapter 6</b>
	<b>W</b>	<b>JUL 2</b>	<b>Biochemical (Metabolic) Reactions &amp; Enzymes</b>  <b>Coenzymes</b>  <b>Photosynthesis</b>	<b>chapter 6</b>  <b>pages 264-273</b>  <b>chapter 8</b>
	<b>TH</b>	<b>JUL 3</b>	<b><u>EXAMINATION 2</u></b>	
	<b>F</b>	<b>JUL 4</b>	<b>HAPPY 4TH OF JULY!</b>	

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<b>4</b>	<b>M</b>	<b>JUL 7</b>	<b>Photosynthesis</b> <b>Vision</b>  <b>Cellular Respiration</b>  <b>Regulation of the Blood Sugar level</b>	<b>chapter 8</b> <b>pages 351-355</b>  <b>chapter 7</b> <b>page 409</b>
	<b>T</b>	<b>JUL 8</b>	<b>Ecosystems</b>  <b>Biomes</b>  <b>Fossil Fuels</b>	<b>chapter 34</b>  <b>chapter 35</b>  <b>p. 751</b>
	<b>W</b>	<b>JUL 9</b>	<b>Ecosystems</b>  <b>Biomes</b>  <b>Fossil Fuels</b>	<b>Chapter 34</b>  <b>Chapter 35</b>  <b>P. 751</b>
	<b>TH</b>	<b>JUL 10</b>	<b>Reproductive System</b>  <b>Cell Division</b>  <b>Chromosome Anomalies</b>	<b>chapter 21</b> <b>pages 398-399, 404</b>  <b>pp. 85-89 &amp; 90-98</b>  <b>chapter 26</b> <b>pages 526-531</b> <b>page 545</b>
<b>5</b>	<b>M</b>	<b>JUL 14</b>	<b><u>EXAMINATION 3</u></b>	
	<b>T</b>	<b>JUL 15</b>	<b>Reproductive System</b>  <b>Cell Division</b>  <b>Chromosome Anomalies</b>   <b>Genetics</b>	<b>chapter 21</b> <b>pages 398-399, 404</b>  <b>pp. 85-89 &amp; 90-98</b>   <b>chapter 23</b> <b>chapter 24</b> <b>chapter 25</b>



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<b>Week</b>	<b>Day</b>	<b>Date</b>	<b>Lecture Topic</b>	<b>Mader Textbook</b>
	<b>W</b>	<b>JUL 16</b>	<b>Genetics</b> <b>Molecular Genetics</b>	<b>chapter 23</b> <b>chapter 24</b> <b>chapter 25</b>
	<b>TH</b>	<b>JUL 17</b>	<b>Genetics</b> <b>Molecular Genetics</b>  <b>[THURSDAY July 17: Last Day Drop]</b>	<b>chapter 23</b> <b>chapter 24</b> <b>chapter 25</b> <b>pages 532-537</b>
<b>6</b>	<b>M</b>	<b>JUL 21</b>	<b>Viral Infections</b>  <b>Cancer</b>  <b>The Immune System</b>	<b>pages 590-596</b>  <b>pages 517-520</b>  <b>chapter 13</b>
	<b>T</b>	<b>JUL 22</b>	<b>Viral Infections</b>  <b>Cancer</b>  <b>The Immune System</b>  <b>Molecular Genetics</b>	<b>pages 596-602</b>  <b>pages 517-520</b>  <b>chapter 13</b>  <b>chapter 25</b>
	<b>W</b>	<b>JUL 23</b>	<b>Molecular Genetics</b> <b>Biotechnology</b>	<b>chapter 25</b> <b>chapter 26</b>
	<b>TH</b>	<b>JUL 24</b>	<b><u>FINAL EXAMINATION</u></b>	