



**Division:** Science  
**Course name:** Biology 3A  
**Section:** 0396 / **Semester:** Fall 2015

<b>Instructor Name:</b> Vered Mirmovitch	<b>School Website:</b> <a href="http://www.wlac.edu">www.wlac.edu</a>
<b>Class Hours:</b> Monday & Wednesday	<b>Address:</b> 9000 Overland Ave., Culver City, CA 90230
<b>1:00 p.m. – 2:25 p.m.</b>	<b>Location:</b> MSA 005
<b>Office Hours:</b> Monday 2:30-3:30 pm T, TH 11:00 am -1:00 pm W 4-5 pm	<b>Instructor E-mail:</b> <a href="mailto:MirmovV@wla.edu">MirmovV@wla.edu</a>
<b>or by appointment</b>	<b>Location:</b> MSB 229

## **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 3 hours / a week for 16 weeks.**

**It is a 3-unit course. Biology 3B Lab meets 3 hours / a week for 16 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;  
14<sup>th</sup> ed 2014, or 13<sup>th</sup> ed, 2011**

Check the class **Dropbox** site regularly for lecture slideshows.

Optional - 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>SEP 28 (Mon)</b>
<b>EXAMINATION 2.....</b>	<b>OCT 21 (Wed)</b>
<b>EXAMINATION 3.....</b>	<b>NOV 18 (Wed)</b>
<b>FINAL EXAMINATION.....</b> <b>(comprehensive)</b>	<b>DEC 14 (Mon)</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** and short essay questions. 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:**

**Attendance is mandatory.** Roll will be taken. There is a strong correlation between poor attendance and poor grades. Please inform the instructor via e-mail if you are going to be absent due to special circumstances. **You are responsible for information, exam announcements, date changes, etc. presented in class, whether or not you are present.** A student who misses more than two class meetings, might be excluded from the class by the instructor.

Students who are given add slips must complete the process by the 3rd class meeting (Sept. 9). No replacement add slips will be signed.

Please note that if you have any questions you will need to contact me using my college email, **NOT** via Etudes. If you send private messages via Etudes you will not get any response from your instructor.

**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, Nov. 20.**  
(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 slideshows and notes you take in class.
  - 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>AUG 31</b>	<b>Introduction Scientific Method Characteristics of Living Organisms</b>	<b>chapter 1</b>
	<b>W</b>	<b>SEP 2</b>	<b>Evolution by Natural Selection</b>	<b>chapter 27 pp. 541-558; 562-564</b>
<b>2</b>	<b>M</b>	<b>SEP 7</b>	<b><u>No Class: LABOR DAY</u></b>	
	<b>W</b>	<b>SEP 9</b>	<b>Atoms &amp; Molecules Radioactive Dating Thyroid Gland  September 11: Last Day to Avoid a "W" on Permanent Record]</b>	<b>chapter 2 page 22 &amp; page 547 page 400</b>
<b>3</b>	<b>M</b>	<b>SEP 14</b>	<b><u>No Class:</u> <u>ROSH HASHANAH</u></b>	
	<b>W</b>	<b>SEP 16</b>	<b>Atoms &amp; Molecules Radioactive Dating Thyroid Gland  Organic Compounds</b>	<b>chapter 2 page 22 &amp; page 547 page 400  chapter 2 pages 270-273</b>
<b>4</b>	<b>M</b>	<b>SEP 21</b>	<b>Atoms &amp; Molecules Radioactive Dating Thyroid Gland  Organic Compounds</b>	<b>chapter 2 page 22 &amp; page 547 page 400  chapter 2 pages 270-273</b>
	<b>W</b>	<b>SEP 23</b>	<b><u>No Class: YOM KIPPUR</u></b>	
<b>5</b>	<b>M</b>	<b>SEP 28</b>	<b><u>EXAMINATION 1</u></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>SEP 30</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>6</b>	<b>M</b>	<b>OCT 5</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>W</b>	<b>OCT 7</b>	<b>Cell Structure</b> <b>Transport Across the</b> <b>Cell Membrane</b>  <b>Autolysis (Apoptosis)</b> <b>Endosymbiont Theory</b>  <b>Biochemical (Metabolic)</b> <b>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>7</b>	<b>M</b>	<b>OCT 12</b>	<b>Cell Structure</b> <b>Transport Across the</b> <b>Cell Membrane</b>  <b>Autolysis (Apoptosis)</b> <b>Endosymbiont Theory</b>  <b>Biochemical (Metabolic)</b> <b>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>OCT 14</b>	<b>Biochemical (Metabolic)</b> <b>Reactions &amp; Enzymes</b>  <b>Coenzymes</b>  <b>Photosynthesis</b> <b>Reactions &amp; Enzymes</b>	<b>chapter 6</b>  <b>pages 264-273</b>  <b>chapter 8</b>

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<b>8</b>	<b>M</b>	<b>OCT 19</b>	<b>Biochemical (Metabolic) Reactions &amp; Enzymes</b>  <b>Coenzymes</b>  <b>Photosynthesis Reactions &amp; Enzymes</b>	<b>chapter 6</b>  <b>pages 264-273</b>  <b>chapter 8</b>
	<b>W</b>	<b>OCT 21</b>	<b><u>EXAMINATION 2</u></b>	
<b>9</b>	<b>M</b>	<b>OCT 26</b>	<b>Photosynthesis Vision</b>  <b>Cellular Respiration</b>	<b>chapter 8</b> <b>pages 351-355</b>  <b>chapter 7</b>
	<b>W</b>	<b>OCT 28</b>	<b>Photosynthesis 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>10</b>	<b>M</b>	<b>NOV 2</b>	<b>Photosynthesis 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>W</b>	<b>NOV 4</b>	<b>Photosynthesis 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>



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<b>Week</b>	<b>Day</b>	<b>Date</b>	<b>Lecture Topic</b>	<b>Mader Textbook</b>
<b>11</b>	<b>M</b>	<b>NOV 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>W</b>	<b>NOV 11</b>	<b><u>No Class: Veterans Day</u></b>	
<b>12</b>	<b>M</b>	<b>NOV 16</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>NOV 18</b>	<b><u>EXAMINATION 3</u></b>  <b>[FRIDAY Nov. 20: Last Day to Drop]</b>	
<b>13</b>	<b>M</b>	<b>NOV 23</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>W</b>	<b>NOV 25</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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(schedule subject to change)

<b>Week</b>	<b>Day</b>	<b>Date</b>	<b>Lecture Topic</b>	<b>Mader Textbook</b>
	<b>W</b>	<b>NOV 25</b>	<b>Cell Division</b> <b>Chromosome Anomalies</b> <b>Genetics</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>
<b>14</b>	<b>M</b>	<b>NOV 30</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>
	<b>W</b>	<b>DEC 2</b>	<b>Genetics</b>  <b>Molecular Genetics</b>  <b>Viral Infections</b>	<b>chapter 23</b> <b>chapter 24</b> <b>chapter 25</b> <b>pages 532-537</b>  <b>pages 590-596</b>
<b>15</b>	<b>M</b>	<b>DEC 7</b>	<b>Genetics</b>  <b>Molecular Genetics</b>  <b>Viral Infections</b>	<b>chapter 23</b> <b>chapter 24</b> <b>chapter 25</b> <b>pages 532-537</b>  <b>pages 590-596</b>
	<b>W</b>	<b>DEC 9</b>	<b>Viral Infections</b>  <b>Cancer</b>  <b>The Immune System</b>  <b>Molecular Genetics</b>  <b>Biotechnology</b>	<b>pages 590-596</b>  <b>pages 517-520</b>  <b>chapter 13</b>  <b>chapter 25</b> <b>chapter 26</b>
<b>16</b>	<b>M</b>	<b>DEC 14</b>	<b><u>FINAL EXAMINATION</u></b> <b>1:45 pm - 3:45 pm</b>	