Biology 3 – Introduction to Life Science
Syllabus

Summer 2013
Section: 70000
Class Meetings: June 17 – July 25, 2013
Monday, Tuesday, Wednesday, Thursday 9:00AM - 12:20PM,
LFS, Rm 11

Instructor: Whitney Menefee, M.S.
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Course Description
This course is recommended for the non-biological science and pre-education majors. This is an introductory course using biological concepts. The organismal structure, function, inheritance, evolution, and ecology are covered. Field trips may be required.

I. Course Outcomes:
- Evaluate current scientific literature and examine how the scientific method is employed in biological research.
- Identify levels of biological organization and apply these concepts to living systems.
  - By examining anatomical and physiological features.
  - By investigating chemical and energy relationships.
- Assess human impacts on natural systems and critically evaluate solutions to environmental problems.
- Explore the cellular basis of life through the study of microscopy.
- Apply the principles of Mendelian genetics to evolutionary theory and human medicine.
- Recognize the function of DNA and how its discovery has impacted modern science.
- Classify the wide range of living organisms and identify the evolutionary mechanisms that have impacted this diversity.
- Recognize the chemical basis of life.

II. Prerequisite: none

III. Required Materials:
- Text Book/eBook: *Essentials of Biology, 3rd Ed.* Mader, S. McGraw-Hill.
- Online Access to McGraw-Hill Connect
  - Both of the above can be purchase at: **http://connect.mcgraw-hill.com/class/w_menefee_biol_3_-_summer_2013_-_reedley_college**
- Scantrons: (4) 882-E (exams)

IV. Technology/Blackboard:
- Check your Reedley college email accounts and blackboard regularly for announcements.
- All lecture and lab PowerPoints, Lab Material, handouts, notes, and schedules will be posted on blackboard. Some assignments require submission on blackboard.

V. Evaluation of Student Progress

Exams	3 @ 100 points each	300 points
Cumulative Final Exam	1 @ 100 points	100 points
Lab Reports	15 @ 10 points each	150 points
Writing Assignments	3 @ 50 points each	150 points
LearnSmart Quizzes	3 @ 30 points each	90 points
Case Studies	3 @ 15 points each	45 points
Bioethical Posts	4 @ 7.5 points each	30 points
		865 points

Grades will be assigned on a percentage basis:

100 – 90	89-80	79-70	69-60	less than 60
A	**B**	**C**	**D**	**F**

VI. Class Policy's

- **Attendance Policy:**
  - Students are expected to attend all class sessions. Sign in sheets will be used and each student must sign in for himself ONLY.
  - Students will be dropped from this course if the do not attend the first lecture and lab without prior notification to the instructor.
  - Excessive absences of 10 hours of lab and/or lecture (prior to the drop date), lack of participation, etc., may be causes for a student to be dropped from this course. Excessive tardies (10 min late) will NOT be tolerated (three tardies equals an absence). *If you miss 10 hours or more of this class after the ninth week, it will result in the lowering of your grade by one letter grade.*
- **Make-up Policy**: Lecture Exams may only be made up due to extreme circumstances, at the discretion of the instructor, if arranged with the instructor *before the scheduled exam period (at least 1 hr prior) or with a documented medical excuse.* ***No late assignments will be accepted.***
- Lab reports are due at the end of each lab period on which they are assigned. All work is due on the assigned due date. **No late work is accepted.**
- NO cell phones, beepers, ect. are allowed to go off or be used during this class. If they ring or are used during a test or quiz, the student will receive a 0 for that exam or quiz. You cannot make up these assignments.
- **COLLEGE POLICY ON CHEATING AND PLAGIARISM**
  "Students at the Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share responsibility for seeing that their education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences. Please see Disciplinary Procedures in the Student Conduct Standards and Grievance Procedures Handbook available in the Vice-President of Student Services office." Student Handbook pg. 46
- If you have a verified need for an academic accommodation or materials in alternate media (i.e. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or section 504 of the Rehabilitation Act, please contact the instructor as soon as possible.

Tentative Lecture and Lab Schedule (***This schedule is subject to change with notification)

Dates		Lecture Topics	Lab	Reading	Assignments Due
Week 1	M 6/17	Course Intro Can Science Cure a Cold?	Scientific Method	1.4, 1.5	
	T 6/18	Can Antibiotics Cure a Cold? (Cells)	Microscopes Cells	4.1-4.4, 17.1, 17.3	Bb: Bioethical Post #1 (due by 11:59PM)
	W 6/19	Why we eat Carbohydrates & Diabetes	Research	25.1-25.4, 24.3. 3.2, 27.2 (Diabetes Mellitus, pg. 532-533)	
	Th 6/20	Energy: Cellular Resp. & Photosynthesis	Photosynthesis	6.1-6.3, 7.1, 7.4	
Week 2	M 6/24	Fats & Obesity Weight Loss	LearnSmart Quizzes	25.1 – 25.4, 3.2	
	T 6/25	A case of corn High Fructose Corn Syrup	Peer Feedback	Articles on Bb	Rough Draft: Health Food Brochure
	W 6/26	Sugar and Spice Video: King Corn	Exam #1 Review Session	5.4 (Osmosis), Article on Bb	LearnSmart Quizzes (due by 11:59)
	Th 6/27	Exam #1	Nutrition Case Study		Final Draft: Health Food Brochure Bb: Bioethical Post #2 (due by 11:59PM)
Week 3	M 7/1	What is infection Hygiene	Microbes	26.1-26.4	
	T 7/2	Vaccination Antibiotic Resistance	Research	26.4, 17.3 Articles on Bb	
	W 7/3	Allergies Autoimmune Diseases	LearnSmart Quizzes	26.5	
	Th 7/4	No Class – Happy Independence Day!			
Week 4	M 7/8	Mitosis/Meiosis Genetics	M/M WS Genetics	8.1-8.3, 9.1-9.4, 10.1, 13.1-13.4	
	T 7/9	Cancer	Peer Feedback Exam #2 Review Session	8.5, 12.1-12.3, Articles on Bb	Rough Draft: MMR Vaccine Write-up
	W 7/10	Biotechnology	DNA Extraction	11.1-11.4	Bb: Bioethical Post #3 (due by 11:59PM)
	Th 7/11	Exam #2	Infection Case Study		Final Draft: MMR Vaccine Write-up
Week 5	M 7/15	Climate Change	Carbon Footprint	31.2(Carbon Cycle), 32.1	
	T 7/16	Biodiversity	Animal Diversity	32.2, 18.1-18.3, 19.1-19.5	
	W 7/17	Conservation	Research	30.1, 30.3, 30.4, 31.1-31.3	
	Th 7/18	Zoo Field Trip			
Week 6	M 7/22	Ecology of the Central Valley & Video	Peer Feedback LearnSmart Quizzes	Articles on Bb	Rough Draft: Save the World Proposal
	T 7/23	River Research	River Walk Exam #3 Review Session	Articles on Bb	Bb: Bioethical Post #4 (due by 11:59PM)
	W 7/24	Exam #3	Conservation Case Study Final Review Session		Final Draft: Save the World Proposal
	Th 7/25	Final Exam			