COURSE: BI 100-02 – First Year Science Seminar: Science, Society, and the Biosphere

TIME: 08:30-09:20 AM, Wednesdays (August 20 - Dec. 6, 2018)

PLACE: Wesselcamper Science Center 120 INSTRUCTOR: Dr. Hank Trapido-Rosenthal Phones: 735-4808 (CU) and 551-3625 (cell) email: henry.trapido-rosenthal@chaminade.edu

OFFICE: WSC 101 **OFFICE HOURS:** When the office door is open, or by

appointment

TEXT: Life Ascending: The Ten Greatest Inventions of Evolution, by Nick Lane; other reading materials will be available on the course Canvas website.

COURSE DESCRIPTION: This course is designed to provide a broad introduction to our planet's biosphere. This will be done by critical reading of review literature, importantly from Nick Lane's book *Life Ascending*, but also including some articles from the primary literature

OBJECTIVES:

- 1. To understand the way the scientific method is used to gain knowledge.
- 2. To gain some basic knowledge of the processes of our natural environment.
- 3. To increase awareness of the complex relationships among all living things and their non-living environment.
- 4. To examine man's past and present relationship with his environment and the possible affects of these relationships on our future.

LECTURES:

- 1. Lecture topics and text assignments are listed in the course outline.
- 2. The instructor reserves the right to add, omit, or change the materials as he sees fit.

ATTENDANCE:

- 1. Presence in class is mandatory & necessary in order for a student to fully grasp concepts.
- 2. Too many unexcused absences will result in a grade reduction.
- 3. If you do miss a class session it is **YOUR** responsibility to ask the instructor or your classmates for the information that you missed.

MISCELLANEOUS:

- 1. *Music Devices and Cellular Phones:* Unless specifically permitted by your instructor, use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes, as it is discourteous and may lead to suspicion of academic misconduct. Students unable to comply will be asked to leave class.
- 2. ADA Accommodations: Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from CUH Couseling Center (Dr. June Yasuhara, 735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations. Please refer any questions to the Dean of Students and review procedures at www.chaminade.edu/student life/sss/counseling services.php

EXAMS, QUIZZES & GRADES:

- 1. All exams & quizzes will consist of multiple choice, true-false, and short essay questions. You will be graded on your ability not only to answer the question (some can be answered in several ways), but also in how effectively you can defend your answer/position using your knowledge of the subject & applying what you learned through the use of appropriate facts/examples. Thus all questions asking for your opinion or position, whether stated or not have an implied "Why?" or "How?" question attached. One short reflection paper will be required.
- 2. Quizzes will be unannounced & if missed cannot be made up w/o a valid excuse.
- 3. If you are absent it is your responsibility to inform the instructor and to inquire about missed assignments, tests, etc. & to make these up on the day of your return to class. Otherwise this will be considered an unexcused absence & the work cannot be made up.
- 4. Grades will be based on the following system & scale:

Grade Scale:		Grading System:	
90% & above	= A	Quizzes	60%
80 - 89.9%	= B	Final	30%
70 - 79.9%	= C	Paper	10%
50 - 69.9%	= D	-	
49.9% & belov	$\mathbf{v} = \mathbf{F}$		

BI 100-01 Course Schedule

Date Subject Readings

20	Course Introductions My past and present, your present and future Entry Examination	
27	Introduction to Science Papal Encyclical: On Care for Our Common Home	Gawande, 2016. The Mistrust of Science. Pope Francis, 2015. Laudato Si (summary)
3	No Class; Week of Labor Day	
10	Earth History Background Meteorology and Oceanography The Oceanic Origin of Life	Lane, Chapter 1
	3	My past and present, your present and future Entry Examination Introduction to Science Papal Encyclical: On Care for Our Common Home No Class; Week of Labor Day Earth History Background Meteorology and Oceanography

	17	Hurricanes	
	24	Why Do We Eat Fish?	
October	1	What Can We Learn from Whales?	Palumbi Articles, Roman et al., 2014
	8	No Class –Week of Discoverers' Day	
	15	Tragedy of the Commons	Hardin Articles
	22	Why Value Marine Biodiversity?	Various Reading, To Be Determined
	29	Why Sex?	Lane, Chapter 5 Diamond, TBD
November	5	Young and Old	Various Reading, To Be Determined
	12	Domestication and Evolution	Diamond, 2002
	19	Why are there disparities between Pacific Islanders and Europeans, Asians, and Americans?	Various Reading, To Be Determined
	26	Review for Final	
		Course Evaluation	
December	6	Final Exam, 8:30	