

Science and Human Nature: Biological Sciences (COR401)
Fall 2014 (Dr. Baube)

Office: Goslin Hall 227

Office Hours: MWF 10:30- 11:30, TTh 11:30- 1:00 and by appointment (phone (including voicemail), walk-in, e-mail)

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Objectives: This course is the last course in the Oglethorpe University core sequence. This course is explicitly designed to, as much as possible, extend and expand on themes and ideas presented in earlier courses. In addition, the course is separate in its own right.

The primary goal of this course is apply evolutionary theory to the study of humans as biological, psychological and social beings. In the process we will discuss the scientific method, Darwinian natural selection and the basics of heredity. By the end of the course you should have an appreciation for the scientific method and the theory of evolution as the unifying theory of the biological sciences.

Learning Objectives:

Skills

- Become intelligent consumers of science; be able to recognize basic research designs when reading secondary sources and ask questions about how data were collected.
- Develop critical thinking skills – become a skeptic of what is presented to you as scientific knowledge.
- Present information in a scientific format.
- Continue to develop writing and public speaking skills

Content

- Be able to identify sound science and distinguish it from other ways of knowing.
- Understand that science is a cumulative and self-correcting process, that it is tentative, and that it is a human endeavor
- Understand the difference between science and other ways of knowing
- Appreciate the role of science in society, and of society in science.
- Acquire an understanding of evolution, particularly Darwin's theory of evolution by natural selection, as the unifying theory of the biological sciences.
- Become familiar with the evidence for evolution and appreciate its breadth and depth.
- Be able to explain and differentiate kin selection and apparent altruism.

Prerequisites: Junior or senior academic standing and successful completion of the Core Curriculum *at least* through COR 202 (Human Nature and the Social Order II); or with permission of the instructor.

You are required to monitor your Oglethorpe University student email account. It just makes sense, since information of interest (and potential time-saving) is conveyed by email. Moreover, it is against University policy for me communicate with your by email through any other system (i.e. gmail, yahoo mail, etc...).

Attendance: During the semester you will get sick, get caught in traffic, have family and personal emergencies or you simply don't want to face me. For all of the above-stated reasons (and more) you are allowed **three (3)** recorded absences for whatever reason(s).

In a course with 30 class periods and periodic attendance-taking, missing 3 classes is 10% of the course (or more, depending on how lucky you are with your absences)! This many absences *strongly* suggests a lack of commitment. Your final grade will reflect this lack of commitment.

Don't tell me why you missed any class- *It doesn't matter*. Simply be aware that starting with your fourth miss I note in my log, your grade will be impacted. For each miss after three, your final grade will be lowered by ½ letter grade- that is, 5 percentage points. For example, five periods missed class periods will result in an 89% final grade (B+) becoming at 79% (C+).

A logged arrival more than ten minutes late will be considered a *missed class* that will count toward your total allowed. There is an attendance function in Moodle that I will use to keep you updated on your attendance.

Moodle Page: I continue to integrate the capabilities of OU's Moodle Course Management System (CMS) into the course. The strengths of the system include very ready access to the majority of course materials. In addition, it provides direct access to your course grades. (Given the structure of the course, it cannot provide the complete picture. However, you will have ready access to a lot of the numbers determining your final grade.)

The downside is that, in some cases, it is not particularly intuitive in its use. We will all learn how to use Moodle.

I will post all the readings not found in the required texts, along with supporting materials (video links, audio links, review sheets), etc... In addition, one component of your grade will be required Moodle forum posts on readings of significance to the major themes of the course.

Naturally, you will need an account and to access the course page on a regular basis. If you don't have an account, you will need to contact IT *as soon as possible*.

You are responsible for any and all materials posted to the course page, even those not present at the start of the course (that is, added as the course proceeds).

Grading:

Attendance: three (3) absences for any reason (see above). As described above, each absence beyond three (3) will result in a ½ letter grade reduction in your final grade, as described above.

Participation (+5%): Your regular participation in discussions and in answering questions posed during class is expected. I will informally monitor your input and provide a grade at the end of the semester. Regular, quality participation will result in an *increase* in your final grade of up to 5 percentage points. Failure to participate can result in a *decrease* of up to 5 percentage points in your final grade. Typical, occasional participation is expected as part of the course will result in no change in your final grade.

Examinations (32%): two examinations will provide the largest single grade for the semester. The format will be short answer and essay. The content will reflect major themes and important details from *all* resources assigned. Early in the weekend prior to each examination I will post to my web page a review sheet that will serve as the conceptual framework for the exam.

PLEASE NOTE- I make no guarantees that the content covered in the review sheet will be the sole information tested on the examination. The review sheet is provided merely as guidance. Ultimately, you are responsible for ALL assigned material, whether or not it appears on the review sheet.

Also, we may not get to all readings and major themes in class. As best I can, I will highlight those ideas prior to an examination or on the review sheet. However, regardless, you are responsible for ALL material assigned in class on examinations- whether or not it is covered in class or on the review sheet.

Writing and presentation assignments (32% total):

- A) i) As we close our first major course theme, you will prepare your first writing assignment. You have the option to, and are encouraged to, work as a group of TWO. The details of the assignment will be provided when assigned. It will be 4-5 pages in length with all standard rules applying: 10-pt. font, narrow margin pages, standard rules on citations.
ii) There will be a second 4- 5 page final, paper assigned late in the semester. This will be done individually.
- B) "Evolution is all around us" presentation and research paper: Students will work in teams of three (3) to develop a group presentation outlining the details, and significance, of a major example from the biological literature of micro-evolutionary change. I will provide a list of topics, from which your group will select one to present. These projects will be developed in five stages, with each group having its own unique deadlines. (Please keep in mind that this course develops *very quickly*. It is imperative that these deadlines be met; whether by the work of one or all. There will be consequences to the *team* by missed deadlines.)
1. *Brief* topic review- stating in your own words the main point of the example to be presented.
 2. *Annotated* bibliography- containing at least two (2) primary literature references and two (2) general references.
 3. Meeting with Dr. Baube- review the outline of your (draft) presentation with Dr. Baube. (Your final presentation is *required* to incorporate the comments provided in this meeting by Dr. Baube.)
 4. Oral presentation- 30 minutes maximum (25 minutes optimum) with a PowerPoint presentation and speaking by *each* team member.
 5. Final paper- 4- 5 pages developing more completely the example with specific and explicit reference to resources used.

The syllabus shows the schedule for presentations.

The deadline for each step is as follows:

Step 1. (Topic Review)	Friday September 26 th (posted to Moodle)
Step 2. (Annotated Bibliography)	Friday October 10 th (posted to Moodle)
Step 2. (Meeting)	Friday October 31, Friday November 7 or Friday November 14 (by sign-up)
Step 3. (Presentation)	Tuesday November 18, Wednesday November 19, Sunday November 23 or Monday November 24 (by sign-up)
Step 4. (Paper)	Friday December 5 (posted to Moodle)

Moodle forums (8%): To help you keep up with reading assignments (many of which are quite complex), and ensure you are prepared for class, I will be using Moodle Forums for a pre-class discussions. At roughly 5 points during the semester a new forum topic will be posted with specific reading references (also noted in syllabus) and guidelines for your response. I may ask you to respond to a prompt. I may also ask that you reply *twice* to an ongoing discussion thread.

These are low-stakes assignments (*i.e.* doing poorly won't kill your grade). I will assign a grade that takes into account the clarity and coherency of your response, along with a consideration of the degree to which you demonstrate familiarity with the reading and your ability to connect to the broader themes of the course. In other words, I will reward engagement, synthesis and connections to what we are doing in the course and/or what you have experienced in other Core courses.

You are expected to respond to four (4) of the five (5); each worth 10 points (40 points total).

Quizzes/Problem sets (28%)- Compared to years past, I am decreasing the importance of quizzes to the composition of your final grade. However, old habits die hard.

Quizzes: Periodically I will start class with a short (20- 30 minute) 20-point "pop" quiz based on that day's readings or a recent theme of significance. Questions will be inspired by study questions provided with many readings, major ideas of the readings or a question posed as a thought question in a prior class. Late arrival to class will not only result in an absence but also may result in a missed quiz.

Projects: You will also be given short assignments based on films or in-class exercises that are equal in weight to a quiz.

A total of 8 quizzes/projects will be evenly scattered throughout the semester. The lowest one (1) grade will be dropped for a total of 140 points towards your final grade.

Grade Accounting:

Assignment(s)	Points
Exam #1	80
Exam #2	80
Writing assignments *	"Superstitions"*** 40
	Final Paper 50
"Evolution is Everywhere" research, presentation and writing assignment ***	70
Quizzes/Problem sets (8 @ 20- 1 low)	140
Moodle Forum discussions (5 @ 10- 1 low)	40
Total****	500

* Assignment grade adjusted downward to reflect penalty for late submission of assignment (see below).

** Completed singly or as a group of TWO

*** Completed as a group of THREE

**** *Final* grade adjusted i) downward or upwards to reflect class participation (see above) and/or ii) downward to reflect accumulated absences beyond the allotted three (see above).

The corresponding letter grade assigned at the end of the semester is based on the grade scale described in the current Oglethorpe University Bulletin is as follows:

Grade	Percentage	Points			
A	92.5- 100	462.5- 500.0	C	72.5- 76.49	362.5- 382.0
A ⁻	89.5- 92.49	447.5- 460.0	C ⁻	69.5- 72.49	347.5- 362.0
B ⁺	86.5- 89.49	432.5- 447.0	D ⁺	66.5- 69.49	332.5- 347.0
B	82.5- 86.49	412.5- 432.0	D	59.5- 66.49	297.5- 332.0
B ⁻	79.5- 82.49	397.5- 412.0	F	59.49 and below	297.0 and below
C ⁺	76.5- 79.49	382.5- 397.0			

The grading scale as presented rounds up grades. E.g. a PERCENTAGE SCORE of 89.40% (447.0 pts.) earns a B+, while a percentage score of 89.50% (447.5 pts.) earns an A-. Unfortunately, though the difference is a mere ½ point, the result is the difference between a B⁺ (GPA= 3.3) and A⁻ (GPA= 3.7). This is the downside of a +/- grading system and one you must live with. The lesson- work hard to earn every ½ point and avoid penalties dues to absences, late submission of assignments or weak class participation.

Please note: the actual number of Moodle Forums, quizzed and problems set may differ from these specific numbers. The total number of points out of which your final grade is determined will be adjusted accordingly.

Important dates:

Day	Date	Course information		Important general information
Monday	08/25			Last day to drop or add the course for 100% refund
Thursday	10/09	Midterm Exam		
Tuesday	10/14			No class: Fall break holiday
Monday	10/20			Last day to drop class with a "W"
Tuesday	11/18	6:00-9:00pm	Group Presentations	
Wednesday	11/19	6:00-9:00pm		
Sunday	11/23	1:00-4:00pm		
Monday	11/24	6:00-9:00pm		
Thursday	11/27			No class: Thanksgiving holiday
Thursday	12/11	Final Exam 8:00- 11:00am (8:00am section)		
Tuesday	12/16	Final Exam 8:00- 11:00am (9:45 section)		

Resources: The following are the various readings and videos assigned for the course. ALL ARE REQUIRED! Those in **Boldface** are to be purchased from the University bookstore (cheap!). The remainder will be available by using information or links provided in our Moodle course.

Books/Articles/Commentaries:

Augustine, Norman. 1998. What we don't know does hurt us. How scientific illiteracy hobbles society. *Science* 279: 1640-1641 (<http://www.sciencemag.org/cgi/content/full/279/5357/1640>)

Begley, S. 2009. What Alters our Genes? Was a "fraud" really a discovery? *Science* Sept 28.

Bryson, Bill. 2003. **A Short History of Nearly Everything*. Broadway.

Darwin, Charles. 1858. "On the tendency of species to form varieties: and on the perpetuation of varieties and species by natural means of selection". *J. of the Linnean Society* July 1 45-62. (<http://darwinonline.org.uk/content/frameset?viewtype=text&itemID=F350&pageseq=1>)

Dawkins, Richard. 2009. *The Greatest Show in Earth*. Free Press.

Dennett, Daniel. 1995. *Darwin's Dangerous Idea*. Simon & Schuster. (ISBN: 0-684-82471-X)

Gorman, K. 2007. "Cooking up Bigger Brains". *Scientific American*, Dec. 16. <http://www.scientificamerican.com/article.cfm?id=cooking-up-bigger-brains>

Grant, Rosemary. 2003. Evolution in Darwin's Finches: a Review of a Study on Isla Daphne Major in the Galápagos Archipelago. *Zoology* 106: 255- 259.

Levitt, Steven D. and Stephen J. Dubner. 2009. *Super Freakonomics*. Harper Collins.

Maddox, Brenda. 2003. The double helix and the "wronged heroine". *Nature* 421: 407- 408. (http://www.biomath.nyu.edu/index/course/hw_articles/nature4.pdf)

Monastersky, Richard. 1999. The killing fields, What robbed the Americas of their most charismatic mammals? *Science News* 156: 360-361. (http://www.sciencenews.org/pages/sn_arc99/12_4_99/bob1.htm)

Pinker, Steven. 1997. "Why they kill their newborns". *The New York Times*. November 2, 1997. (<http://www.gargaro.com/pinker.html>)

Pinker, Steven. 2002. "The Blank Slate". Viking Press.

Platt, John R. 1964. "Strong Inference". *Science* 146 (3642) pp. 347- 353.

Ridley, Matt. 1996. *The Origins of Virtue; Human Instincts and the Evolution of Cooperation*. Viking. (hard copy edition: ISBN: 0-670-87449-3; soft cover is available)

Watson, James D. and Francis H. Crick. 1953. A Structure for Deoxyribose Nucleic Acid. *Nature* 171: 737-738. (<http://www.nature.com/nature/dna50/archive.html>; annotated version: <http://www.exploratorium.edu/origins/coldspring/ideas/>)

Watson, James D. and Francis H. Crick. 1953. Genetical Implications of the structure of Deoxyribonucleic Acid. *Nature* 171: 964-967. (<http://www.nature.com/nature/dna50/archive.html>)

Wilson, Edward O. 1998. Scientists, scholars, knaves and fools. *American Scientist* 86: 6-7. (<http://www.americanscientist.org/issues/num2/1998/1/scientists-scholars-knaves-and-fools/1>)

Commercial videos:

Darwin's Dangerous Idea (volume 1: *Evolution* series). 2001. WGBH Boston/NOVA.

Double Helix. 2001. BBC/Films for the Humanities and Sciences.

Great Transformations (volume 2: *Evolution* series). 2001 WGBH Boston/NOVA.

Judgment Day: Intelligent Design on Trial. WGBH Boston. <http://www.youtube.com/watch?v=x2xyrel-2vl>

Video file:

Matters of Life and Death (*A Science Odyssey* series). 2005. WGBH Boston.
http://www.youtube.com/watch?v=I_xlxU7TDHE

Penalty for submission of assignments after the due date: All assignments submitted late will be assigned a penalty of ½ letter grade (*i.e.* 5%) for each 24 hour span (or part thereof) late- beginning at the *start* of class. This penalty will be subtracted from the grade earned on that work.

Statement of policy on incompletes: An incomplete will not be assigned except under extraordinary circumstances. For example, serious illness that requires absenting yourself from the course for an extended period of time may necessitate the assignment of an incomplete. I will not assign an incomplete to a student concerned of impending failure in the course or are unwilling to take an examination or makeup examination. An incomplete will only be assigned after the student and I 1) agree on the course of study to finish the course, 2) create a time table to accomplish the work, and 3) agree to the grade to be assigned if the work is satisfactorily completed and the grade assigned if it is not.

Please note carefully: (from the University Bulletin) "If the student completes the work within thirty days of the last day of exams (of the semester in question), the instructor will evaluate the work and turn in a revised grade. Any "I" not changed by the professor within forty-five days of the last day of exams will *automatically* change to an "F".

Conduct/Policy of Academic Dishonesty

It is standard practice for faculty to state their policy on academic dishonesty.

My policy is simple and not easily subject to misinterpreted: honesty is the **only** policy. Students found in violation of this policy, with suitable proof, will receive 0.00s on all affected work and, if appropriate, will be prosecuted to the fullest extent possible within the guidelines of the Oglethorpe University disciplinary system.

Please reread the University's expectations of students in this regard as it appears in the "Oglethorpe University Honor Code" in the current Oglethorpe University Bulletin. This policy is also detailed in "The O Book" (the student guide to Oglethorpe University) and below.

Read this information carefully- you are responsible for *all* of it.

11. The following definitions from section 5 of the Honor Code:

Cheating:

The unauthorized possession or use of notes, texts, or other such materials during an examination.

Copying another person's work or participation in such an effort.

An attempt or participation in an attempt to fulfill the requirements of a course with work other than one's original work for that course.

Students have the responsibility of avoiding participation in cheating incidents by doing their own work, taking precautions against others copying their work, and in general not giving or receiving aid beyond what is authorized by the instructor.

Plagiarism:

Plagiarism includes representing someone else's words, ideas, data, or original research as one's own, and in general failing to footnote or otherwise acknowledge the source of such work. One has the responsibility of avoiding plagiarism

by taking adequate notes on reference materials, including material taken off the internet or other electronic sources, used in the preparation of reports, papers, and other coursework.

Note also- because I can't be sure what you are doing, the use of cell phones for *any reason* (conversion, text messaging, etc...) during exams and quizzes will be considered a violation of the student code of conduct (at the least) and possibly prosecution under the honor council disciplinary system. **Get in the habit of *turning off* (not just silencing) your cell phone at the start of every class- its polite and does not leave you open to second-guessing as to what you are up to.**

Addendum to Conduct/Policy of Academic Dishonesty- Policy on the use of the internet/web for the preparation of assignments in COR 401:

The web is a valuable resource. It can provide useful insights in organizing and preparing papers and other assignments. However, students have become too dependent on the web as the sole (and un-refereed) source of information for such assignments. By design, the information on the web is available to all users in a typically unfiltered, unanalyzed form. For the student it is often difficult, if not impossible, to discriminate reliable from "crackpot" information. As a result, professors often bemoan the lack of rigor used in the selection of source material for assignments. My solution to this problem is to require the use of resources that have met the test of editorial and peer-review scrutiny. As a result, we both can be reasonably assured of the quality of the work you cite as an "authority".

In practice, here is the policy that is required for all web/internet sources:

I DO encourage the use of sources outside of those assigned in class.

I DO recognize that the internet/web is the obvious choice for quick, diverse and contemporary information on the topic at hand.

Therefore, as your "reference", "literature" and/or "citation" sources for assignments in this class you may only use those for which there is a printed, published, edited, and/or reviewed version.

For example, you may use online versions of papers, essays and commentaries from on-line versions of journals (*e.g. Nature, Science, Scientific American*), periodicals (*e.g. Discover, Bioscience*) and books (*e.g. The Origin of Species*).

However, this resource (with *rare* exceptions) must be available in print. (That is, what you use must be an online posting of a resource originally found in print in a resource with peer review and/or an editorial process.)

Therefore, online commentaries that are not printed, published or refereed are not acceptable. Classic examples of this are 1) personal web pages, 2) ListServ and chat threads, and Facebook/Twitter. These are opinions with no rigor or accountability.

Wikipedia is in a "gray area" with respect to this policy. Though it is edited (to a certain degree) and the contributions tend to be from interested writers knowledgeable on the topic, it is also not truly edited in the sense I mean in this policy. So, it *is* acceptable to use Wikipedia as one resource. (In fact, I've found it to be a good place to start to learn important terms and concepts and to begin understanding the issues associated with a topic.) *However*, using Wikipedia as your primary (or worse yet, sole) resource shows poor judgment and profound laziness. Use it to get started then don't go back.....

You must include the citation, in standard format, for the original work. Moreover, you should also include the web address/URL that directed you to the print source.

I will perform random checks on all work submitted for a grade. Violations of this simple policy will result in the assignment of an F (0 points) for the assignment and, in severe cases, possible expulsion from the course.

Exceptions to this policy are possible, but **MUST** be cleared with me prior to inclusion in an assignment. Failure to do so can result in the penalties described above.

For example:

There are many, many web sites that deal with various aspects of evolution, genetics, human behavior and other topics considered in this course. A significant number are of dubious quality, at best. Here are 2 that are directly relevant and which cross-link to other reliable & intellectually honest sites.

<http://www.simonyi.ox.ac.uk/dawkins/WorldOfDawkins-archive/index.shtml>. The name of this page is "The World of Richard Dawkins" and has lots of stuff.

<http://www.talkorigins.org/>. The name of this page is "The TalkOrigins Archive" and contains materials on Darwin, including the full text of his book "On the Origin of Species", plus a wealth of material on natural selection and creationism.

Specific honor code guidelines:

The above comments are general, and wide-reaching, in their scope. Let me add some specific comments as they relate to this course, keeping in mind that plagiarism *has* resulted in a senior failing the course *and* being dismissed from the institution as the student was about to graduate.

- If a student has any electronic device on his/her person during an exam. This includes cell phones, smart phones, iPads and anything similar. The only possible exception would be a calculator by permission or requirement of the instructor.
- If any student has informed any other student of the content of an exam prior to that student taking the exam.
- If I find any significant similarity between submitted assignments received from 2 or more students, when the assignment is assigned as individual work.
- If I find any materials lifted verbatim from references, including internet sources- excessive quoting is strongly discouraged. I perform spot checks on all submitted materials. Text that is cut/pasted without attribution from electronic sources (with or without minor, cosmetic changes) is a particularly egregious violation.

Particularly in reference to the previous two points, I **MUST** collect the work of all student suspects and immediately submit it to the Honor Council. As a faculty member (also bound to the Honor Code), I must do this- I have no choice. I turn in the materials and leave it to the Honor Council to objectively and dispassionately adjudicate the case.

Electronic Devices: In the spirit of fostering a respectful and professional work environment, disturbances from conversation in class, cell phone calls, text message, etc.. could result in you being asked to leave class; thus forfeiting your noted attendance for the day. Cell phones and any other form of communication (laptop, iPad, etc...) must be relinquished before exams. Laptops are allowed in class, it is not necessary to seek permission for their use in class with me. However, any unprofessional or distracting use of these devices will result in a pointed, and likely embarrassing, demand to stop immediately.

Excessive use of any of these technologies necessarily distracts you from what is happening in class and will naturally result in a participation deduction.

Class Schedule- COR 401
Dr. Baube (Fall 2014)

NOTE: a great deal of time and effort has gone into preparing this schedule. However, experience proves that it is a virtual certainty that the schedule will change over the semester. I reserve the right to make any changes in the schedule and the content/assignments of class periods and exams. I will provide as much warning and detail as possible.

The following are codes indicating sections from the assigned texts to be bought from the bookstore:

DDI- D. Dennett *Darwin's Dangerous Idea*

OV- M. Ridley *The Origins of Virtue*

Submission of written assignments (essays, for example)

You are to submit your work *twice*, one copy electronically and a second copy on paper

1. Submit a copy to me electronically through Moodle. It is suggested that you convert your work to .pdf (Adobe Acrobat) format, if possible.
2. Submit a copy without your name (using our "code" system) on paper. Remember to use the "code" system and NOT your name.

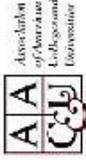
Date	Topic(s)	Reading(s) to be prepared for that day	Films, Audio, Labs, Exercises, etc... scheduled for that day	Exam/Assignment <u>due that day</u>
<i>"Starting in the Middle"</i>				
08/19	Introduction to course; syllabus, format and policies; Pretesting			Pretest1; Pretest2
08/21	Discuss N. Augustine; Discuss S. Pinker ("Newborns")	N. Augustine "What We Don't Know Does Hurt Us"; S. Pinker "Why they kill their Newborns"		Moodle Forum #1 (Pinker)
08/26	Discuss DDI; Pre-Darwinian thinkers	DDI (pp. 17- 23); S. Pinker "The Blank Slate" (pp. 5- 13, 51- 58)	Start video "Darwin's Dangerous Idea" (30 min)	
08/28	Video		Finish video "Darwin's Dangerous Idea" (90 min)	
09/02	Discuss Wilson; Discuss DDI	DDI (pp. 23- 25, 28- 34, 453- 454); E.O. Wilson "Scientists Scholars Knaves and Fools"		
09/04	Nature of Science and logic; hypo card game	R. Dawkins "What is a Theory? What is a Fact?"	Hypo game exercise	Moodle Forum #2 (Dawkins)
09/09	Continue Nature of Science and logic; Pellegra case study; assign writing assignment #1	Watch video segment: <i>Matters of Life and Death</i> (http://www.youtube.com/watch?v=lxU7TDHE) 14:23- 25:12 min; J.R. Platt "Strong Inference"	Video "Matters of Life and Death" (Pellegra; 10 min; at home)	
09/11	Introduce natural selection	Charles Darwin "On the tendency of species..."		
09/16	Discuss Darwin; continue Natural Selection	DDI Chpt. 2; B. Bryson "Darwin's Singular Notion"; DDI (pp. 48- 52, 56)		
09/18	Continued....		Video "Great Transformations" (60 min)	
09/23	Discuss Grant	R. Grant "Evolution in Darwin's Finches:..."		Writing Assignment #1 due (singly or as a team of <i>no more</i> than two (2))
<i>"The Modern Synthesis"</i>				
09/25	Video		Start video "Double Helix" (90 min)	"Evolution is Everywhere" exercise: Topic choice, Team

				member list and Topic review due Friday 09/26 (to Moodle)
09/30	Video; Discuss "The Double Helix" ; start the Archives	<i>DDI</i> Chpt. 5 (read carefully pp. 104-118)	Finish video "The Double Helix" (20 min)	
10/02	Exam #1 (set aside 90- 120 min between 9:00am and 5:00pm (starting no later than 3:00))			
10/07	finish the Archives; start modern genetics	Scan: J.D. Watson and F.H. Crick "A Structure for Deoxyribose Nucleic Acid"; Scan: J.D. Watson and F.H. Crick "Genetical Implications..."; <i>DDI</i> pp. 113- 118; B. Maddox "The Double Helix..."		Moodle Forum #3 (Maddox)
10/09	"Discovery" of DNA		"Discovery of DNA" PowerPoint	"Evolution is Everywhere" annotated bibliography due Friday 10/10 (by Moodle)
10/14	No class: Fall Break Holiday			
10/16	Continued	Begley, S. "What Alters our Genes"; Hominid evolution reading TBA	Extract DNA; mutate bacteria	Moodle Forum #4 (Hominid reading)
"Humans as Biological, Psychological and Social Beings"				
10/21	Analyze and discuss Mutation laboratory		Analysis of bacterial mutation lab	
10/23	Ridley	<i>OV</i> (prologue & Chpt. 1); S. Levitt & S. Dubner "Monkeys are people too"; K. Gorman "Cooking up bigger brains"		
10/28	Prisoner's Dilemma	<i>OV</i> (Chpts. 2, 3); <i>DDI</i> (pp. 253- 255)		
10/30	Prisoner's Dilemma in Action			"Evolution is Everywhere" team conferences Friday 10/31 (by appointment)
11/04	<i>OV</i> & start video	<i>OV</i> (Chpts. 4, 7)	"Judgment Day: Evolution on Trial" (30 min)	Moodle Forum #5 (Ridley)
11/06	Finish video		"Judgment Day: Evolution on Trial" (90 min)	"Evolution is Everywhere" team conferences Friday 11/07 (by appointment)
11/11	Human Origins in the broader context;		Human Evolution timeline PowerPoint; Hominid skull exercise	
11/13	Continued...	<i>OV</i> (Chpt. 11); R. Monastersky "The Killing Fields: What Robbed the Americas of their Most Charismatic Mammals?"		"Evolution is Everywhere" team conferences Friday 11/14 (by appointment)
11/18	Ecology as Religion; Paper #2 assigned	<i>OV</i> (Chpt. 12)		"Evolution is Everywhere" presentations: 11/18 (Tu), 11/19 (W), 11/24 (M) 6:00- 9:00pm; 11/23 (Su) 1:00- 4:00 (by appointment)
11/20	Continued....			

11/25	Property and Trade			
11/27	No class: Thanksgiving Holiday			
12/02	TBA			
12/04	TBA and Wrap-up			Posttest #1; Posttest #2; "Evolution is Everywhere" paper due; Paper #2 due

ORAL COMMUNICATION VALUE RUBRIC

for more information, please contact valuel@aacu.org



The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can be shared nationally through a common dialog and understanding of student success.

The type of oral communication most likely to be included in a collection of student works is an oral presentation and therefore is the focus for the application of this rubric.

Definition

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

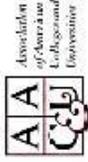
Framing Language

Oral communication takes many forms. This rubric is specifically designed to evaluate oral presentations of a single speaker at a time and is best applied to live or video-recorded presentations. For panel presentations or group presentations, it is recommended that each speaker be evaluated separately. This rubric best applies to presentations of sufficient length such that a central message is conveyed, supported by one or more forms of supporting materials and includes a purposeful organization. An oral answer to a single question not designed to be structured into a presentation does not readily apply to this rubric.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- **Central message:** The main point/thesis/"bottom line"/"take-away" of a presentation. A clear central message is easy to identify, a compelling central message is also vivid and memorable.
- **Delivery techniques:** Posture, gestures, eye contact, and use of the voice. Delivery techniques enhance the effectiveness of the presentation when the speaker stands and moves with authority, looks more often at the audience than at his/her speaking materials/notes, uses the voice expressively, and uses few vocal fillers ("um," "uh," "like," "you know," etc.).
- **Language:** Vocabulary, terminology, and sentence structure. Language that supports the effectiveness of a presentation is appropriate to the topic and audience, grammatical, clear, and free from bias. Language that enhances the effectiveness of a presentation is also vivid, imaginative, and expressive.
- **Organization:** The grouping and sequencing of ideas and supporting material in a presentation. An organizational pattern that supports the effectiveness of a presentation typically includes an introduction, one or more identifiable sections in the body of the speech, and a conclusion. An organizational pattern that enhances the effectiveness of the presentation reflects a purposeful choice among possible alternatives, such as a chronological pattern, a problem-solution pattern, an analysis-of-parts pattern, etc., that makes the content of the presentation easier to follow and more likely to accomplish its purpose.
- **Supporting material:** Explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities, and other kinds of information or analysis that supports the principal ideas of the presentation. Supporting material is generally credible when it is relevant and derived from reliable and appropriate sources. Supporting material is highly credible when it is also vivid and varied across the types listed above (e.g., a mix of examples, statistics, and references to authorities). Supporting material may also serve the purpose of establishing the speakers' credibility. For example, in presenting a creative work such as a dramatic reading of Shakespeare, supporting evidence may not advance the ideas of Shakespeare, but rather serve to establish the speaker as a credible Shakespearean actor.



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Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (all one) level performance.

	Capstone 4	3	Milestones 2	Benchmark 1
Organization	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation.
Language	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.
Delivery	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.
Supporting Material	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/ authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/ authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/ authority on the topic.	Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/ authority on the topic.
Central Message	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported).	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.