# EVOLUTION AND CHRISTIAN THEOLOGY (BL A356/Th 356, Section 01) (3 credits) Monday, Wednesday and Friday 12:10-1 p.m. Macelwane 201 Syllabus – Spring 2006

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Prerequisite: 6 hours of theology.

**WebCT site:** This course has a WebCT site (<u>http://webct.slu.edu/</u>). You will have access to the syllabus online, as well as assigned reading materials, various announcements, class notes and assignments. Your user name for the site is your email user name (all in capitals) and your password is the last four digits of your student I.D. Here are the directions for accessing the class site:

Go to WEBCT.slu.edu

Click on Spring/Fall 2005 courses tab at top of page

Next page: Click on words "Log into"

Next page: Enter username, password

Username: SLU e-mail username in uppercase letters (w/out @slu.edu)

Password: last 4 digits of SSI #

### **Texts:**

Barbour, Ian. 2000. *When Science Meets Religion*. HarperCollins Publishers. San Francisco. 205 pp.

Miller, Kenneth R. 1999. *Finding Darwin's God.* Cliff Street Books. New York. 338 pp. Kauffman, Stuart. 1995. *At Home in the Universe*. Oxford University Press. New York. 321 pp.

Haught, John F. 2000. God After Darwin. Westview Press. Boulder, CO. 221 pp.

Haught, John F. 2003. Deeper than Darwin Westview Press. Boulder, CO. 214 pp.

**Optional, not required**: Teilhard de Chardin, Pierre. 1959. *The Phenomenon of Man*. Harper & Bros. New York.

## Selected readings from:

Campbell, Neil A, L. G. Mitchell, and J. B. Reece.2000. *Biology, Concepts and Connections*. Benjamin/Cummings. San Francisco. 809 pp.

Speiser, E.A. 1964. *Genesis*. The Anchor Bible. Doubleday & Co., Inc. Garden City, N.Y. 378 pp.

Various other readings that will be assigned.

**Brief statement of course strategy:** This course will be a dynamic process of reading, lecture, and class discussion. To acquire the skills hoped for by this course will require diligence in keeping abreast of required reading assignments, and will involve class lecture and discussion. There is no adequate text for a course such as this. The readings have been pragmatically selected to empower students to understand options for dialog and understanding between empirical modern biology and modern, informed Christian thought, and to synthesize their own positions with respect to these options.

**Learning Objectives:** A student successfully completing BL A293 should have developed the ability to take a position on the relationship between evolution and religion, to which (s)he can speak and write competently in non-specialized but educated groups. In order to meet this goal, this course attempts the following objectives:

- 1) An understanding of the following:
  - a. critical method used by modern biblical scholarship to most closely estimate the intent of the author(s) of a given passage, especially with respect to the creation stories in Genesis;
  - b. basic chemistry as related to living systems, biology of the cell, cell reproduction, Mendelian genetics, the structures and roles of DNA, RNA, and proteins in living organisms, and basic evolutionary principles;
  - c. complexity hypothesis as a tool for thinking about the emergence of order, for understanding how natural selection may work with relational, complex systems, and for understanding flaws that exist in hard deterministic positions that some scientists take;
  - d. modern Christian theology of evolution, in light of the above background.
- 2) The ability to analyze positions with respect to the relationship between evolution and Christian thought such that students will be able to synthesize the above material to perceive and argue for an integrated position, in writing and orally.

**Assessment:** In order to create an optimal learning environment for you, I will be asking you for your input through course assessment throughout the semester. Course assessment is not the same as course evaluations. Assessment is an ongoing process designed to understand and improve student learning. I will analyze and interpret this data and use the resulting information to document, explain and improve student learning in this course. Therefore, your input will be extremely valuable in order to create an optimal learning environment for you and for future students.

Learning Objective 1) will be assessed through lecture exams and written assignments; Learning Objective 2) will be assessed through performance in class discussions, written assignments, and exams.

**Format:** This course will consist of classroom lectures, interactive discussions (that you will be expected to participate in), a cooperative learning project, problems and other assignments, all based on assigned readings. Lecture will cover material in your readings as well as supplemental information. It will be important to come to class having read the assignment for that day for at least three reasons: 1) quiz; 2) to be prepared for the lecture/discussion; 3) to be

ready for any questions that might come your way. The professor often asks questions to the class.

**Class attendance:** Class attendance is MANDATORY if you expect to be successful in this course. The material is cumulative in how it is handled in class discussion – that is, material from previous readings and classes will be prerequisite to material presently being covered in any given class. The dynamics of the class will be such that insights gained in class discussion will become part of the corpus of the "common wisdom." Students who miss more than 5 class meetings will receive the grade of F/A.

**Exams and quizzes:** The first two exams will be in large part multiple choice, short answer, and perhaps matching, but will also have at least one essay question. The second exam will cover mostly material since the first exam, although essay questions will presuppose familiarity and understanding with material covered in the first exam. Learning for this course is cumulative (subject matter learned later requires familiarity with previously learned material). The final exam will be open book, in the form of a researched writing assignment given at least four weeks in advance. It will consist of one or more questions, which may require you to develop a position or an argument of your own on evolution and Christianity. The questions will be answered using footnotes to refer to all references, and a References page, listing all sources not drawn from class reading assignments. All factual statements must be referenced. References may come from class reading assignments or other reliable sources.

Exams will be based heavily, though not exclusively on lecture material and class discussion. The questions will be designed to test not only your mastery of the material, but also your abilities to analyze and synthesize material to present coherent arguments and positions. Exams must be taken at the scheduled times. This information will be available on the WebCT site.

Quizzes will be given at almost all class sessions. The objective is to assist you in keeping abreast of the reading assignments.

If you must miss an exam or quiz you must contact me and submit a written request for a makeup at least <u>two</u> weeks prior to that quiz or exam date. All makeup exams will be one-hour oral examinations to be held at my convenience. You will need to provide in the request what your conflict is and provide official written documentation of the conflict and contact information. Legitimate conflicts and excuses require official written documentation, and are limited to death or near-death instances in the immediate family, a student's illness that requires immediate doctor's care, a University sponsored event (not club sports) and regularly scheduled religious obligations. Excuses that will NOT be considered include personal travel arrangements, non-University sponsored events, a conflicting appointment, a previous illness that interfered with your study time or an illness that does not prevent you from coming to the exam. Unexcused exam and quiz absences will be counted as zero in the calculation of your final grade.

Final Exams for all courses are set by the administration on a campus wide basis and we cannot change the time of the exam or offer a makeup for this exam. If you miss the Final Exam, you will receive a zero for that exam. Exams will be kept until the end of the Spring 2005 semester and then will be discarded. If the final exam for this course is a closed book exam, it will be due at the end of the scheduled time for the class exam. If it is substituted by a

position paper, it will be due at the time of the last class.

**Classroom Morale:** In order to maximize the achievement of your goal and our ability to facilitate your learning experience, let us agree to the following basic rules of etiquette:

## For your part:

Come to class on time, ready to work;

Do not converse during class time unless called upon or otherwise encouraged to converse by one of us;

If you wish to say something, raise your hand and wait to speak until invited you to do so;

Treat everyone in the class, including yourself, with respect;

Be attentive and aware of what goes on in class;

Use all available resources and be proactive in your learning experience.

## For my part:

I will be in class on time, ready to work;

I will dismiss class on time;

I will always be respectful and courteous toward you, and of anything you have to add to class;

I will do my best to present lecture material in as clear, interesting and enjoyable manner as possible;

I will attempt to be as aware and helpful as we can of any needs you might have in succeeding in your educational project here at S.L.U., and I will attempt to assist you to meet those needs as best we can.

**Exams and Assignments:** Assignments will be given in numerous formats such as (but not exclusively) in-class assignments, WebCT online assignments, take home assignments, and class quizzes.

The grade you <u>earn</u> will be based on your performance on exams, assignments, class participation, and final exam/writing assignment. Your final grade will be based on the total percentage you earn in this course. There will be <u>NO</u> extra credit assignments. Final grades will be posted on WebStar. This will be the <u>only</u> access to your final grade. Instructors cannot give out grades over the phone or through email or in person.

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Course Component	Percent	Points
Exam I	20%	200
Exam II	20%	200
Final	25%	250
Assignments, quizzes	20%	200
Class participation	15%	150

### **Grading:**

### **Percentages for Grade Calculation:**

A:	90-100%
B+:	87-89%
B:	80-86%
C+:	77-79%
C:	70-76%
D:	60-70%
F:	0-59%

### St. Louis University Withdraw/Drop Policy:

The deadline to drop this course without receiving a "W" is Friday, September 5. The final deadline to drop the course and receive a "W" is Halloween. If a student withdraws from the course without authorization or, when the student is dropped from the course because of excessive absence, the course grade will be "AF". In order to withdraw from this course you must fill out a Withdraw form (you can get these at the Biology Office, MW 128, or the Registrar's Office in DuBourg Hall) and have it signed by me.

**Student Disabilities Statement:** Saint Louis University does not discriminate in the recruitment or admissions of persons based on disability. Saint Louis University is committed to providing equal access to employment and educational opportunities for persons with disabilities. The objectives are to enable persons with disabilities in the University to function adequately, both personally and professionally. Students with disabilities needing accommodations should contact Student Educational Services, Atlas Laster, Jr., Ph.D. (Disabilities Coordinator)(977-2965). It is the student's responsibility to notify the instructor and the University of any needs that require accommodations in a prompt manner. The student should provide documentation of the disability to the Disabilities Coordinator (977\_2930).

Academic Integrity: The following is a statement of minimum standards for student academic integrity at Saint Louis University: The following is a statement of minimum standards for student academic integrity at Saint Louis University.

The University is a community of learning, whose effectiveness requires an environment of mutual trust and integrity, such as would be expected at a Jesuit, Catholic institution. As members of this community, students, faculty, and staff members share the responsibility to maintain this environment. Academic dishonesty violates it. Although not all forms of academic dishonesty can be listed here, it can be said in general that soliciting, receiving, or providing any unauthorized assistance in the completion of any work submitted toward academic credit is dishonest. It not only violates the mutual trust necessary between faculty and students but also undermines the validity of the University's evaluation of students and takes unfair advantage of fellow students. Further, it is the responsibility of any student who observes such dishonest conduct to call it to the attention of a faculty member or administrator.

Examples of academic dishonesty would be copying from another student, copying from a book or class notes during a closed-book exam, submitting materials authored by or editorially revised by another person but presented as the student's own work, copying a passage or text di rectly from a published source without appropriately citing or recognizing that source, taking a test or doing an assignment or other academic work for another student, tampering with another student's work, securing or supplying in advance a copy of an examination without the knowledge or consent of the instructor, and colluding with another student or students to engage in an act of academic dishonesty.

Where there is clear indication of such dishonesty, a faculty member or administrator has the responsibility to apply appropriate sanctions. Investigations of violations will be conducted in accord with standards and procedures of the school or college through which the course or research is offered. Recommendations of sanctions to be imposed will be made to the dean of the school or college in which the student is enrolled. Possible sanctions for a violation of academic integrity include, but are not limited to, disciplinary probation, suspension, and dismissal from the University.

<u>http://business.slu.edu/dsmis/guilliamsj/misb493/sluacademicintegrity.html</u> Recommendations of sanctions to be imposed will be made to the dean of the school or college in which the student is enrolled. Possible sanctions for a violation of academic integrity include, but are not limited to, assignment of a failing grade in the course, disciplinary probation, suspension, and dismissal from the University.

Note: Syllabus is subject to modification at the instructors' discretion. Changes, should they occur, will be announced in class. You are responsible for keeping track of any changes in course assignments or schedule.

Date		Торіс	Reading (for next class)
Mon	VIII/23	Introduction to course	<ol> <li>Speiser, xx-11; "Creation Myths;"</li> <li>"Mesopotamian cosmology"</li> </ol>
Wed	VIII/25	Modern Biblical Criticism; 1 <sup>st</sup> creation story	1. Speiser, 14-15, 18-23, 25-28; 2. "Gilgamesh and the Huluppu Tree"
Fri	VIII/27	Modern Biblical Criticism:2 <sup>nd</sup> Creation Story	Barbour, pp. xi-38
Mon	VIII/30	Introduction/Overview: positions taken by scientists and religionists	Barbour, pp. 90-118
Wed	IX/1	Evolution and Continuing Creation	Barbour, pp. 119-149
Fri	IX/3	Genetics, Neuroscience, and Human Nature	Barbour, pp. 150-180
Mon	IX/6	LABOR DAY HOLIDAY	
Wed	IX/8	God and Nature	
Fri	IX/10	God and Nature	Campbell, pp. 16-29
Mon	IX/13	ABC's of chemistry	Campbell, pp. 32-47
Wed	IX/15	Chemistry of cells	Campbell, pp. 50-80
Fri	IX/17	The cell and its basic functioning	Campbell, pp. 126-150

## \*Lecture schedule BLA 293 - Fall 2004

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Mon	IX/20	Reproduction and Inheritance	Campbell, pp. 154-162, 172-175
Wed	IX/22	Reproduction and Inheritance	
Fri	IX/24	Basic Genetics	
Mon	IX/27	Basic Genetics	Campbell, pp. 184-201
Wed	IX/29	DNA	
Fri	X/1	Review for Exam	
		, RNA, transcription, translation	Campbell, pp. 256-278
		Evolution	Prepare for exam
		Review	Prepare for exam
		EXAM I	Miller, pp. 18-56
Mon	X/4	"Eden's Children," or the explanatory power of evolutionary theory	Miller, pp. 57-80
Wed	X/6	"God the Charlatan," or a look at "creation science"	Miller, pp. 81-128
Fri	X/8	"God the Magician," or a look at "intelligent design"	Miller, pp. 129-164
Mon	X/11	"God the Mechanic," or a look at Behe's "intelligent design"	Kauffman, pp. 3-30
W ed	X/13	Introduction to Complexity Hypothesis	Kauffman, pp. 31-45
Fri	X/15	The origins of life (Complexity)	Kauffman, pp. 47-69
Mon	X/18	FALL BREAK	
Wed	X/20	We the expected (Complexity)	Kauffman, pp. 71-92
Fri	X/22	Order for free (Complexity)	Kauffman, pp. 93-112
Mon	X/25	The mystery of ontogeny (Complexity)	Prepare for exam
Wed	X/27	Catch up/review	Prepare for exam
Fri	X/29	EXAM II	Haught I, pp. 1-22, 32-44 (engagement)
Mon	XI/1	Beyond Design; Darwin's dangerous idea	Haught I, 32-44; 45-56
Wed	XI/3	Engagement; Darwin's gift to theology	Haught I, pp. 57-80
Fri	XI/5	Religion, Evolution, and Information	Haught I, pp. 81-104
Mon	XI/8	A God for Evolution	Haught I, pp. 145-164
Wed	XI/10	Evolution, Ecology, and the Promise of Nature; Final paper assignment	Haught I, pp. 165-191
Fri	XI/12	Cosmic Evolution and Divine Action; Conclusion	Haught II, pp. vi-25
Mon	XI/15	Religion and Truth; ways of reading	Haught II, pp. 27-54
Wed	XI/17	Depth if Nature; Not to despair	Haught II, pp. 55-83
Fri	XI/19	Beneath Evolution; Deeper than Dawkins	Haught II, pp. 85-102
Mon	XI/22	Deeper than design	Haught II, pp. 103-119

Wed	XI/24	THANKSGIVING HOLIDAYS	
Fri	XI/26	THANKSGIVING HOLIDAYS	
Mon	XI/29	Religion and deep Darwinism	Haught II, pp. 121-145
Wed	XII/1	Truth after Darwin; Darwin and the deities	Haught II, pp. 147-160
Fri	XII/3	Deeper than death	Haught II, 161-175
Mon	XII/6	A deeper theology	
		Catch-up/discussion/review	

\* These dates were those used while this course was taught as BL A293 during fall 2004.