OKLAHOMA BAPTIST UNIVERSITY
SCIENCE CAPSTONE
GNSC 4951
SPRING 2010

CATALOG COURSE DESCRIPTION
Seminar course designed to allow senior science students to reflect on the sum of their undergraduate science experiences, prepare for entrance into future scientific endeavors, contemplate the integration of faith and science, and to demonstrate competency in the application of knowledge and skills acquired through completion of an independent research project.

COURSE OBJECTIVES
This type of course is only successful when all students participate. Classroom discussions will be largely based on student-led presentations. The overall approach to the Science Capstone is intended to sharpen students' skills in:

- critical thinking and data analysis
- writing and public speaking
- the open exchange of ideas
- experimental design

CLASS DATES
Friday, 2:00 – 2:50pm, Wood Sci., Bldg. Room 118

INSTRUCTOR
Bradley Jett, Ph.D. [course coordinator]
Office: WSB 119B
Phone: 405-878-2043
Office Hours: T 11am – 1pm; W 1pm – 3pm; R 12-1pm
Email: brad.jett@okbu.edu

CO-INSTRUCTORS
Nathan Malmberg, Ph.D. [course coordinator]
Shawna York, Ph.D. [course coordinator]
Dale Utt, Ph.D.
Michael Jordan, Ph.D.
Albert Chen, Ph.D. [course coordinator]
John McWilliams, Ph.D.

CREDIT HOURS
1 Credit

TEXTBOOKS TO PURCHASE
None

PREREQUISITES
Senior Science Majors

CLASS FORMAT – "Group Discussion"

- Discussion topics will be determined by the group at the first class meeting.
- Each student (or group of students) will be assigned a class period for which they are responsible for leading the discussion.
- Each student discussion leader will prepare and distribute reading materials to all classmates and faculty at least 72 hours prior to the assigned class period.
- ALL Capstone students are expected to have completed the reading materials prior to class and to participate meaningfully in the discussion.
- A portion of the meeting time will be devoted to addressing concerns/questions pertaining to ongoing independent research projects.
- Each student will prepare a formal presentation of his/her independent research project and deliver it to the class on the designated presentation date.

GRADING

Grades will be based on three criteria; quality of the independent research project and its presentation, quality and creativity of the student's assigned weekly topic presentation, and participation in classroom discussion. Evaluation forms will be distributed to faculty and students prior to presentations. Presentation evaluation forms will be completed by all participants; however, the faculty overseeing the student's project will be responsible for collecting the evaluation forms at the end of class and assigning a grade for the presentation. Insightful questions and comments directed to the presenter will be considered in evaluating classroom discussion participation. The final exam will consist of a 3-page reflective essay. Final course grades of A (90-100%), B (89-80%), C (79-70%), D (69-60%), or F (59-0%), will be determined according to the following weighted criteria:

- Independent research project and presentation: 65%
- Discussion topic presentation: 15%
- Participation in classroom discussion: 15%
- Final Exam: 5%

ATTENDANCE

The Oklahoma Baptist University attendance policy will be followed according to guidelines published in the Student Handbook.

STUDENTS WITH DISABILITIES

Oklahoma Baptist University complies with Section 504 of the Rehabilitation Act and with the Americans with Disabilities Act. Students with disabilities who need special accommodations must make their requests and submit documentation to the Director of Student Services. The Student Services office is located in the Geiger Center, Room 101.

ADDITIONAL IMPORTANT ACADEMIC INFORMATION FOR OBU STUDENTS

Please refer to the following link,
http://www.okbu.edu/academics/forms/syllabus_attachment_spring10.pdf for important information regarding class attendance policies academic policies and expectations, tutoring information, library hours, important dates and holidays, inclement weather policies, chapel attendance policies, and more.

COURSE SCHEDULE

DATE	IN-CLASS ACTIVITY
Jan 29	Introduction, course overview, and select weekly discussion topics.
Feb 5	Discussion #1, “Stem Cells/Synthetic Organs”
Feb 12	Discussion #2, “Inherit the Wind: the Teaching of Evolution”
Feb 19	Discussion #3, “Pharmaceutical Research and Distribution”
Feb 26	Discussion #4, “Transgenics”
Mar 5	Discussion #5, “The Health Care Industry”
Mar 12	Discussion #6, “Space Exploration”
Mar 19	NONE - SPRING RECESS
Mar 26	Discussion #7, “Climate Change and Environ. Stewardship”
Apr 2	Discussion #8, “Alternative Energy”
Apr 9	Discussion #9, “STDs, Vaccines, and Public Policy”
Apr 16	Research Presentations
Apr 23	Research Presentations
Apr 30	Research Presentations
May 7	Research Presentations

FINAL EXAM: May 10 (Monday), 1:00pm – 3:00pm