



Lutheran School of Theology at Chicago

Course # and Title:

RHTH/CC 601 Chance, Necessity, Love: An Evolutionary Theology of Cancer: Advanced Seminar in Religion and Science

Instructors: Dr. Leonard Hummel and Dr. Lea Schweitz, with guest lecturers

Semester/Year: Fall 2017, Mondays, 6:30-9:30pm

Instructors:

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Course Description:

In his now classic work, *Chance and Necessity*, Jacques Monod provided an explanatory framework not only for the biological evolution of species, but, as has become recently apparent, for the evolutionary development of cancers. That is, contemporary oncological research has demonstrated that cancer is an evolutionary disease that develops according to the same dynamics of random occurrences and law-like regularities at work in all evolutionary phenomena. And just as various challenges are raised for religious studies by the dynamics of chance and necessity within biological evolution, so this particular question is raised by contemporary cancer science: Where is love, divine and human, within the evolutionary chance and necessity operative in all dimensions of cancer?

In this course, we will consider the phenomenon of cancer as case-study to explore enduring issues in science and religion including: race, racism, sex, sexism, evolution, creationism, neo-Darwinism, epigenetics, free-will, determinism. Through interdisciplinary pedagogy, the course aims to provide learners with an understanding of the problematics and promises for religious studies brought on by evolutionary theory not only for the case of cancer but for all biological phenomena.

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1100 East 55th Street | Chicago, Illinois 60615-5199 | 773.256.0700 | www.lstc.edu

Course Rationale: (Why do we offer this course? Which of LSTC's degree program learning outcomes does it address?)

As a 600-level seminar in theological studies, the Advanced Seminar in Religion in Science supports LSTC's advanced studies programs in theological studies; in addition, the Advanced Seminar is the cornerstone course for the Religion and Science concentration in LSTC's Advanced Studies program.

The Advanced Seminar meets LSTC's curricular goals by providing learning opportunities for a student to develop and to demonstrate progress toward:

1. Mastering a particular area of concern in the field of religion and science dialogue and its relationship to the discipline of theology (Th.M. Curriculum Outcome #1 /Ph.D. Curriculum Outcome #2 and #5);
2. Developing a research program and research methodology (Th.M. Curriculum Outcomes #2 and #3 / Ph.D. Curriculum Outcome #1); and
3. Engaging in scholarly discussion and presentation (Th.M. Curriculum Outcome #6 /Ph.D. Curriculum Outcome #4).

History of the Advanced Seminar:

Since 1965, an advanced seminar on religion in the context of the sciences has been offered for faculty, students, and professionals in the Chicago area. Ralph Wendell Burhoe founded the seminar under the auspices of the Center for Advanced Study in Religion and Science (CASIRAS) and Meadville/Lombard Theological School. In 1970, CASIRAS affiliated with the Association of Chicago Theological Schools (ACTS). In the 1970s, Philip Hefner, Professor of Systematic Theology at the Lutheran School of Theology at Chicago (LSTC), joined Burhoe in directing the seminar. In 1988, the Zygon Center for Religion and Science (ZCRS) was founded by LSTC and CASIRAS and began sponsoring the Advanced Seminar. From this tradition, the Advanced Seminar takes its shape as a multidisciplinary network of persons seeking to understand how the sciences and the religions engage each other and to interpret the fundamental issues that are posed in this engagement. The goal is to gain insight into the import of the sciences for the critical function of religion in its role as a cultural vehicle of ultimate values and concerns.

The Advanced Seminar in Religion and Science is designed as a research seminar for faculty, students, and other professionals. Course credit is available via registration through the Lutheran School of Theology at Chicago (LSTC) or cross-registration through member schools of the Association of Chicago Theological Schools (ACTS); the course number is T-672. For more information about ZCRS, please visit www.zygoncenter.org, email zcrs@lstc.edu, or call 773-256-0670.

Course Learning Outcomes: (What *difference* will this course make to students' knowledge, skills, attitudes, and practices?)

Learners will show progress towards:

1. Demonstrating scientific literacy, particularly in the biological sciences;
2. Formulating research questions that integrate this knowledge with contemporary theological concerns;
3. Analyzing and assessing theological proposals in light of current scientific understandings of cancer and evolution; and
4. Communicating research questions, analyses, assessments, and theological proposals in written and oral forms.

Strategies for Learning: (How shall we go about achieving these outcomes?)

In order to deliver the outcomes listed above, we will:

1. Dialogue with leading scholars addressing the agenda above; and
2. Read, discuss, and research in areas related to the seminar themes.

Students will be required to:

3. Attend and participate in all seminar meetings;
4. Read all required readings;
5. Present verbal responses to readings and lectures, including participation in the seminar meetings and acting as primary host and first respondent for one lecturer;
6. Write and workshop a 750 word blog post (**Due as assigned during the course**);
7. Develop a research question, in consultation with the instructors;
8. Develop and submit a research proposal (which includes a research question, a preliminary thesis, and a research bibliography), in consultation with the instructors (**Due: 30 October 2017**);
9. Present research paper at a final seminar panel (**Due: 6 December 2017**)
10. Write a final seminar paper addressing the student's research question and utilizing the student's research bibliography. At the Master's level, recommended length is 10-15 pages. M.Div. students are invited to apply the seminar topic to ministry themes and practices. At the Ph.D. level, recommended length is 20-25 pages. (**Due: 8 December 2017**)

Assessment: (How shall we know if we—students and instructors—have been successful in achieving the outcomes?)

Students will receive credit for attendance and participation in the seminar meetings.

All written work will receive a grade. The seminar paper will be the main determinant of the final grade. Students are encouraged to consult with the instructors and lecturers throughout the semester. Final papers will be given grades and comments by the instructor.

Students will be invited to provide assessment through a midterm and a final course evaluation. LSTC requires students to submit a final course evaluation on LSTCnet before his/her grade is released.

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Course Readings:

- Leonard Hummel and Gayle Woloschak, *Chance, Necessity, Love: An Evolutionary Theology of Cancer* (Eugene, Oregon: Cascade Press, 2017)
- Mel Greaves, *Cancer: The Evolutionary Legacy* (New York: Oxford University Press, 2000)
- Rebecca Skloot, *The Immortal Life of Henrietta Lacks* (New York: Crown Publishing, 2010)
- Deanna Thompson, *Hoping for More: Having Cancer, Talking Faith, and Accepting Grace* (Eugene, Oregon: Cascade Press, 2012)
- Keith Waillo, *How Cancer Crossed the Color Line* (New York: Oxford University Press, 2010)

Useful Web-Links

Center for Evolution and Cancer: <http://cancer.ucsf.edu/evolution>

International Agency for Research on Cancer (IARC): <http://www.iarc.fr/>

International Union Against Cancer (UICC): <http://www.uicc.org/>

American Cancer Society: <http://www.cancer.org>

National Cancer Institute: <http://www.cancer.gov/>

NCI Cancer Bulletin: <http://www.cancer.gov/ncicancerbulletin>

The Emperor of All Maladies: <http://video.pbs.org/program/story-cancer-emperor-all-maladies/>

Additional readings will be provided by the instructors and guest lecturers. It is expected that students will read additional materials to support their learning. The instructors welcome questions about additional readings.

Note: Course profiles provide only a preliminary snapshot of the course offered. It does not take the place of the course syllabus, which will be provided by the course instructor.