Rationale:

The science on cancer is as clear and certain as it gets: this disease is one of evolutionary development. That is, cancers progress according to evolutionary principles when cells—“the very fiber of our being” in the language of a Novena to Saint Peregrine—go their own way and, thereby threaten the rest of that “fiber.” While religious perspectives, questions, and arguments abound in church and society regarding evolution in general, remarkably few struggle to make meaning of the evolutionary nature of cancer. Even rarer—and arguably more urgent—is practical theological inquiry into faithful understandings and wise practices by pastoral leaders and pastoral theologians in response to cancer as an evolutionary phenomenon.

Cancer is a disease replete with paradox. On the one hand, it touches the lives of both the more powerful and the less powerful. On the other hand, differences in cancer vulnerability do occur through occasionally inherited predisposition to the disease and through the ways that poverty and social injustice generally affect its incidence and outcome. Cancer also is a disease that may or may not be treated successfully depending on the stage of its detection and on the treatment and aggressiveness of the disease. Still, the occurrence of cancers in particular persons may be prevented through individual and social efforts, and new treatments for care and cure have been and continue to be developed. Therefore, the following assertion is puzzling but it is also quite true: cancer is something that both cannot and can be changed.

The underlying reason for this paradox is located in the nature of the disease itself: cancer evolves through the complex interplay of chance occurrences and law-like regularities that sometimes may be altered and other times not. Furthermore, just as DNA mutations and natural selection for those mutations are involved in the evolution of various species, so also mutational mechanisms and forces of selection are at work in the evolution of individual cancers. This may be said another way, with a more ironic emphasis: while physical operations of chance and necessity promote the evolution of life, so those very same forces drive the development of a disease that may destroy life.

Cancer is a disease whose origin and progression often vex and confuse cancer patients and those who care for them. Those diagnosed with the disease often struggle to understand its possible causes and future course. Family members wonder what they must accept and may hope for. Pastors hear much about cancer: newly suspected causes, new possible cures and new dangers in treatment—and then worry about and hope for their people. The evolutionary chance and necessity at work in the onset and development of cancer perplex people about what can be changed and what cannot be changed about this disease.

In our considering best pastoral practices in response to cancer, our guiding
questions will be these: (1) How may God be preached, taught, and, in pastoral care, understood if the development of life and the development of cancers are linked by evolution? (2) What does pastoral wisdom look like if cancers are something that, as evolutionary phenomena, sometimes can be changed and, at other times, cannot be? (3) What are faithful and wise pastoral responses to social and economic issues generated by and in response to the evolution of cancers? The provisional answers put forth by our community of inquiry will initiate the development of a pastoral theology of cancer and evolution.

OBJECTIVES: FROM LUTHER SEMINARY COURSE
The goals of this course are to enable students:
(1) to articulate faithful understandings regarding the basic science of cancers
(2) to demonstrate an understanding of the principles of pastoral care for cancer
(3) to articulate faithful and wise pastoral responses to social and economic issues generated by and in response to cancers

DEGREE OBJECTIVES:
M. Div:
• Demonstrate engagement in spiritual, Intellectual and ethical formation
• Interpret God’s Word faithfully and thoughtfully as public speakers, listeners, and writers
• Analyze cultural contexts of ministry
• Integrate theological conversation and experience in order to collaborate with peers in ministry in an evangelical and ecumenical manner
Diaconal Ministry (M.A.M.S.–Diaconal Ministry)
• Articulate the Word of God in and for a hurting world, using the fruits of biblical, historical, and theological studies
• Carry out a particular service on behalf of the church with credibility in the world
• Equip the baptized for faithful ministry in the world and in the church
• Participate in the community of Word and Sacrament, and in the diaconal communities of their own denomination and the broader church
• Articulate and act out a vision of diakonia that addresses human need

STM
• Engage in knowledgeable and creative thinking, writing and speaking in the chosen area of research.
• Apply the knowledge gained to other contexts of theology and ministry

STRATEGIES:
(1) To complete three to four page review of Greaves book and three to four page reviews of any two starred (*) books (Objectives One, Two and Three)
(2) To complete one-half to one page weekly distance-learning reports reflecting on learning from on-site congregation activities with co-directors
of the Louisville Project. Reports will be filed weekly for Sessions Seven-Twelve (Objectives One, Two, and Three)

(3) To complete one group student presentation (Objectives One, Two and Three)

ASSESSMENT:
- Completion of three to four page review of Greaves' book and three to four page reviews of any two starred (*) books. Please turn in hard copies of your reviews and submit electronic copies by email at the beginning of the class period for which the book was assigned (each review is 10% of total grade)
- Completion of weekly distance learning reports that reflect on learning from on-site congregation activities with site pastors (30% of total grade)
- In Class Group Presentation (40% of total grade)

RUBRICS FOR BOOK REVIEWS:
Rubrics
Superior, A Paper gives **thoroughly lucid account** of (1) authors’ intents in writing/editing the book (2) how authors attempted to achieve these intents (3) the success of the authors' attempts to achieve these intents (4) empathic and theologically informed appraisal of the value/worth of the authors' intents. **Thoroughly lucid means** (a) citations employed to all key points of 1-4; (b) grammar, syntax and spelling nearly completely perfect (c) flow of argument from beginning to end of review is clearly and completely apparent.

Good, B Paper gives **moderately lucid account** of (1) authors’ intents in writing/editing the book (2) how authors attempted to achieve these intents (3) the success of the authors' attempts to achieve these intents (4) empathic and theologically informed appraisal of the value/worth of the authors' intents. **Moderately lucid means** (a) citations employed in most key points of 1-4; (b) grammar, syntax and spelling usually perfect (c) flow of argument from beginning to end of review is most often clearly and completely apparent.

Sufficient, C Paper gives **occasionally lucid account** of (1) authors’ intents in writing/editing the book (2) how authors attempted to achieve these intents (3) the success of the authors' attempts to achieve these intents (4) empathic and theologically informed appraisal of the value/worth of the authors' intents. **Occasionally lucid means** (a) citations employed in some key points of 1-4; (b) grammar, syntax and spelling sometimes perfect (c) flow of argument from beginning to end of review is occasionally clearly and completely apparent.

Failure, F Paper gives **seldom or nearly never gives lucid account** of (1) authors’ intents in writing/editing the book (2) how authors attempted to achieve these intents (3) the success of the authors' attempts to achieve these intent (4) empathic and theologically informed appraisal of the value/worth of the authors’ intents. **Seldom or nearly never means** (a) citations seldom or nearly never employed in key points of 1-4;
(b) grammar, syntax and spelling very often incorrect perfect; (c) flow of argument from beginning to end of review is not very apparent.

RUBRICS FOR DISTANT LEARNING REPORTS
Superior, A
Students will offer reports with (a) **Clear and completely lucid account** of their activities in congregation;” (b) **extensive use** of theological source material from the class or other theological sources to evaluate their activities in the congregation; (c) grammar, syntax and spelling **nearly completely perfect** (d) flow of argument from beginning to end of review that is **clearly and completely apparent**.

Good, B
Students will offer reports with (a) **moderately lucid account** of their activities in congregation; (b) **moderate use** of theological source material from the class or other theological sources to evaluate their activities in the congregation; (c) grammar, syntax and spelling **sometimes perfect** (d) flow of argument from beginning to end of review that is **most often clearly and completely apparent**.

Sufficient, C
Students will offer reports with (a) **occasionally lucid account** of their activities in congregation; (b) **occasional use** of theological source material from the class or other theological sources to evaluate their activities in the congregation; (c) grammar, syntax and spelling **occasionally perfect** (d) flow of argument from beginning to end of review that is **occasionally clearly and completely apparent**.

Failure, F
Students will offer reports with (a) **never or nearly never lucid account** of their activities in congregation; (b) **Never or nearly never use** of theological source material from the class or other theological sources to evaluate their activities in the congregation; (c) grammar, syntax and spelling **nearly never perfect;** (d) flow of argument from beginning to end of review that is **never or almost never clearly and completely apparent**.

RUBRICS FOR GROUP STUDENT PRESENTATION
SUPERIOR, A
Participants evidence in their presentation: (a) **Full disclosure** of resources used for presentation; (b) **Clear and compelling critical analysis and clear warrant** for the use of resources for presentation; (c) Presentation of material in which flow of argument from beginning to end is **clearly and completely apparent**.

GOOD, B
(a) **Mostly clear disclosure** of resources used for presentation; (b) **Mostly clear and compelling** critical analysis and clear warrant for the use of resources for presentation; (c) Presentation of material in which flow of argument from beginning to end is **mostly apparent**.

SUFFICIENT, C
(a) **Occasional disclosure** of resources used for presentation; (b) **Occasionally clear**
and compelling critical analysis and clear warrant for the use of resources for presentation; (c) Presentation of material in which flow of argument from beginning to end is occasionally apparent.

FAILURE, F
(a) Infrequent or no disclosure of resources used for presentation; (b) Infrequent or no critical analysis and clear warrant for the use of resources for presentation; (c) Presentation of material in which flow of argument from beginning to end is infrequent or not at all apparent.

Student Assignments in Pastoral Sites
Beginning with Session Eight during the week of November 2nd and ending with Session Twelve during the week of November 30th, students will spend nine-ten hours per week related to their work in Pastoral Sites. These nine-ten hours will include time for transportation to and from sites, reading, activities at the site, and reporting on-line their activities. Activities will vary from site to site but may include: (1) worship; (2) group and individual meetings with site pastor; (3) educational forums; (5) meetings with congregants and others; (6) pastoral visitation with congregants and others; (7) other ministerial activities arranged between student and site pastor.

Class sessions seven through twelve will not be held on campus during the Monday time. Students will post weekly “Distant Learning Reports,” the rubrics for which are noted above, regarding their activities in pastoral sites.

The purpose of the site visits and work associated with these sites is to provide students learning and information so that they may make a final in-class group presentation that addresses the following:

- Given our experiences at this pastoral site, this is what we have learned about
  - Congregational ministry (e.g., worship, preaching, education, pastoral care, and other congregational activities) for persons with cancer, their families, the church and the community
  - Pastoral wisdom regarding cancers as evolutionary phenomena that sometimes can be changed and, at other times, cannot be
  - Faithful and wise pastoral responses to social and economic issues generated by and in response to the evolution of cancers

COURSE TEXTS ON RESERVE AND FOR PURCHASE
* Walter Wangerin, Letters from the Land of Cancer (Grand Rapids, Michigan: Zondervan, 2010)
Pamela N. Brown, Facing Cancer Together: How to Help Your Friend or Loved One (Minneapolis: Augsburg, 1999)
James T. Patterson, The Dread Disease: Cancer and Modern American Culture (Cambridge: Harvard University Press, 1987)
Gilbert H. Welch, Should I Be Tested for Cancer? (Berkeley: Univ. of CA Press, 2004)
Sidney J. Winawer and Moshe Shike, Cancer Free: The Comprehensive Cancer Prevention Program (Simon & Schuster, 1995)

**COURSE TEXTS THAT MAY BE DOWNLOADED**


**Useful Web-Links**
Center for Evolution and Cancer: [http://cancer.ucsf.edu/evolution](http://cancer.ucsf.edu/evolution)
American Cancer Society: [http://www.cancer.org](http://www.cancer.org)

**COURSE TEXTS AT LEONARD HUMMEL’S OFFICE IN WENTZ LIBRARY**
Barbara Clow, Negotiating Disease: Power and Cancer Care, 1900-1950 (Toronto: McGill-Queens Press, 2001)

**OUTLINE OF CLASS SESSIONS**

**Session One/September 14:** Introduction: Purpose and Goals of the Course.
Pastoral Theology and Pastoral Care: Some Definitions

**Session Two/September 21:** Cancer as an Evolutionary Disease
"Cancer as an Evolutionary Disease" Presentation by Jennifer A. A. Gubbels, Assistant Professor of Biology, Augustana College, Sioux Falls, SD 57197

Additional Resources:
Cancer and Evolutionary Medicine: prepared for Summer Institute, July 22nd - 25th, 2002, Johns Hopkins Medical School Campus, by Arthur Renkwitz and Douglas Becker;
http://www.fastol.com/~renkwitz/evolution_cancer.htm
Nature Milestones Cancer
http://www.nature.com/milestones/milecancer/index.html
Session Three/September 28 Congregational Pastoral Care for Cancer
Presentations and Discussion Panel with Congregational Site Pastors:
Reverend David Albertson, Living Grace Lutheran Church, 3520 Sugarloaf Parkway, Suite F-03, Urbana, MD 21704; Reverend Stephen Herr, Christ Lutheran Church, 30 Chambersburg Street, Gettysburg, PA 17325; Reverend Susan J. McCarthy, Benders Evangelical Lutheran Church, Biglerville, PA, 17307; Reverend Terry McCarthy, Saint Paul’s Luther Church (Broadway), 1214 Broadway, Hanover, PA 17331;

Session Four/October 5 Cancer as an Evolutionary Disease, Continued
Assigned Viewing: “The Phylogenomics of Cancer” http://www.youtube.com/watch?v=OaR1YLtgQVo
“DNA 4/5 Curing Cancer” PBS Documentary http://www.youtube.com/watch?v=r-BRcktorKE&playnext=1&list=PL70D5DD17671A639C&feature=results_video
In Class Viewing, “Darwinian Ideas about Cancer,” Prof Howard Varmus, Director, National Cancer Institute, Bethesda, MD

Greaves Book Review Due

Session Six/October 19: Chance, Necessity, Love: An Evolutionary Theology of Cancer
Submission of Proposal for Site Pastoral Learning Due

Session Seven/Week of October 26: Fall Academy Week

Session Eight/Week of Nov. 2: The Very Fiber of Our Being: A Pastoral Theology of Cancer
Meeting of study groups at pastoral sites. Moodle-room Distance Learning Reports. Second Book Review Due

Session Nine/Week of November 9: The Very Fiber of Our Being: A Pastoral Theology of Cancer
Meeting of study groups at pastoral sites. Moodle-room Distance Learning Reports

Session Ten/Week of November 16: The Very Fiber of Our Being: A Pastoral Theology of Cancer
Meeting of study groups at pastoral sites. Moodle-room Distance Learning Reports
Session Eleven/Week of November 23: The Very Fiber of Our Being: A Pastoral Theology of Cancer.
Meeting of study groups at pastoral sites. Moodle-room Distance Learning Reports. Wrap-up and Assessment of work via Moodlerooms. **Third Book Review Due**

Session Twelve/Week of November 30: The Very Fiber of Our Being: A Pastoral Theology of Cancer.
Meeting of study groups at pastoral sites. Moodle-room Distance Learning Reports. Wrap-up and Assessment of work via Moodlerooms

Session Thirteen/December 7: Two Student Group Presentations

Session Fourteen/December 14: Two Student Group Presentation/Wrap-up and Assessment of class

**SAMPLE DESCRIPTIVE REPORT:**

- Completion of three to four page review of Greaves book and three to four page reviews of any two starred (*) books (each review is 10% of total grade)
- Completion of weekly distance learning reports that reflect on learning from on-site congregation activities with pastors of congregations (30% of total grade)
- In Class Group Presentation (40 % of total grade).