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**Office Hours:** By appointment and  
Tuesday, 1:00-4:00 p.m.

**Class Meeting:** Thursday,  
1:10-4:00 p.m.  
Kansas-Winger 307

### **Course Description**

This course provides a special opportunity to equip ministers with the information needed to be religious in a scientific age and to be ministers to persons struggling with science issues. Such issues are increasingly at the heart of what it means to be human and to conduct one's life with integrity. The course addresses the mutual relevance of pastoral concerns, science, and Christianity. Part of the course explores how Christianity has influenced the development of science, how science has impacted the content of theology, how Christianity and science are set in cultural context, and how Christianity can engage in interreligious dialogue about science. (3 semester credit hours)

### **Course Teaching-Learning Objectives**

1. The priorities for teaching and learning in this course are (a) the consonance of theology and science and (b) imaginative integration of theology and science for ministry contexts.
2. Teaching and learning begin with understanding method (how scholars investigate topics and draw conclusions), sources (what information scholars consult to form new ideas), and language (how scholars express ideas) in the integration of science and Christian theology. Students should familiarize themselves with scholarly methods of religious studies and models in scientific worldviews.
3. Teaching and learning depend on sophisticated reading of texts. Students should develop the skills of empathetic and critical reading. The diverse contexts that form theology and science create worldviews that may not be your own. Diverse worldviews demand charitable readings of texts for the sake of understanding the authors' points of view and with awareness that theology and science are neither abstracted from culture nor limited to singular "correct" forms of expression.
4. Teaching and learning involve comparison of religious and scientific worldviews and their related value systems. Comparison of worldviews requires attention to the historical contexts, philosophical frameworks, and cultural values that create and sustain worldviews.
5. Teaching and learning involve critical thinking, analysis, evaluation, and synthesis. One pedagogical strategy for appropriating these skills is reading texts and writing assignments with awareness of perspectives marginalized by class, gender, race, religion, and sexual orientation.

## Required and Recommended Texts

All required texts are on reserve at the Saint Paul School of Theology library.

- Barbour, Ian G. *Religion and Science: Historical and Contemporary Issues*. New York: HarperCollins; HarperSanFrancisco, 1997. (Chapters 5 and 6 only are required, but this is an important book to have in your personal library.)
- Cole-Turner, Ronald. *Human Cloning: Religious Responses*. Louisville, KY: Westminster John Knox Press, 1997. (Chapter 5 only is required.)
- Cole-Turner, Ronald, and Brent Waters. *Pastoral Genetics: Theology and Care at the Beginning of Life*. Cleveland, Pilgrim Press, 1996.**
- Haight, John F. *God after Darwin: A Theology of Evolution*. Boulder, CO: Perseus Books Group; Westview Press, 2000.**
- Howell, Nancy R. "Co-creation, Co-redemption, and Genetics." *American Journal of Theology and Philosophy* 20:2 (May 1999): 147-163.
- Howell, Nancy R. "A Whiteheadian Case for Diversity in Science and Religion." *CTNS Bulletin* 19:4 (Fall 1999): 3-10.
- Lindberg, David C., Ronald L. Numbers, eds. *God and Nature: Historical Essays on the Encounter between Christianity and Science*. Berkeley: University of California Press, 1986. (Chapter 16 only is required.)
- McFague, Sallie. *The Body of God: An Ecological Theology*. Minneapolis: Fortress Press, 1993.**
- Menchú, Rigoberta. *I, Rigoberta Menchú: An Indian Woman in Guatemala*. London and New York: Verso, 1984. (Chapters VII and VIII only are required.)
- Morris, Henry M., ed. *Scientific Creationism*. Green Forest, AR: Master Books, 1996. (Chapter 1 only is required.)
- Murray, Thomas H., et al., eds. *The Human Genome Project and the Future of Health Care*. Bloomington and Indianapolis: Indiana University Press, 1996. (Chapter 4 only is required.)
- Peters, Ted. *Playing God?: Genetic Determinism and Human Freedom*. New York and London: Routledge, 1997. (Chapter 4 only is required.)
- Richardson, W. Mark, and Wesley J. Wildman. *Religion and Science: History, Method, Dialogue*. New York and London: Routledge, 1996. (Part I only of the book is required, but students will also be interested in the extensive bibliography in Appendix A. This book is an important book to keep in your personal library.)
- Shiva, Vandana. *Staying Alive: Women, Ecology, and Development*. London and Atlantic Highlands, NJ: Zed Books, 1989. (Chapters 1 and 2 only are required.)
- Tuana, Nancy. *The Less Noble Sex: Scientific, Religious, and Philosophical Conceptions of Woman's Nature*. Bloomington and Indianapolis: Indiana University Press, 1993. (Chapters 2 and 3 only are required.)

## Supplemental Texts

The following supplemental texts are on reserve at the Saint Paul library.

- Barbour, Ian G. *Myths, Models, and Paradigms: A Comparative Study in Science and Religion*. New York: Harper & Row, 1974.
- Cole-Turner, Ronald. *The New Genesis: Theology and the Genetic Revolution*. Louisville, KY: Westminster John Knox, 1993.
- Gerhart, Mary, and Allan Russell. *Metaphoric Process: The Creation of Scientific and Religious Understanding*. Fort Worth: Texas Christian University, 1994.

- Hefner, Philip. *The Human Factor: Evolution, Culture, and Religion*. Philadelphia: Fortress Press, 1993.
- Moore, Mary Elizabeth Molino. *Ministering with the Earth*. St. Louis, MO: Chalice Press, 1998.
- Pederson, Ann. *Where in the World Is God?: Variations on a Theme*. St. Louis, MO: Chalice Press, 1998.
- Peters, Ted, editor. *Cosmos as Creation: Theology and Science in Consonance*. Nashville: Abingdon, 1989.

## Course Schedule

February 6 Introduction

The course begins with review of the syllabus and of the standpoint of the course, which is contemporary scholarship that engages both science and religion through dialogue or integration. Brief discussion and lecture explore the relationship of science and religion. This session includes the PBS video, *Faith and Reason*.

February 13

- Recommended Reading: Barbour, *Religion and Science*, Chapter 4
- Supplemental Reading: Barbour, *Myths, Models, and Paradigms*  
Gerhart and Russell, *Metaphoric Process*

### Unit 1: History

The first unit of the course surveys the history of the relationship of science and religion in the West. Does history support the contention that the predominant relationship between science and religion is warfare? Where is there evidence that common concerns have shaped both science and religion? In what ways are science and religion products of a predominant worldview (for example, the Enlightenment)? Where is there genuine conflict between science and religion? How have both science and theology collaborated to sustain view of gender and race within historical worldviews? What theological doctrines were supported and influenced by science? Did theology likewise influence scientific method and theory? How?

February 20

- Required Reading: Richardson and Wildman, eds., *Religion and Science*, Part I (read the chapter by Welch and one other)  
Tuana, *The Less Noble Sex*, Chapter 3
- Recommended Reading: Lindberg and Numbers, eds. *God and Nature*, Chapters 1, 2, 6, and 18  
Richardson and Wildman, eds., *Religion and Science*, Part I (remaining chapters)

## Unit 2: Method

The second unit of the course examines the method, sources, models, paradigms, criteria for adequacy, and language in theology and science. What are the places of consonance and dissonance between science and religion? What are the sources that inform theology and science? What is authoritative for theology and science? Is there any sense in which science is authoritative for theology? How do metaphors and models contribute to theological and scientific concepts? What are the critical criteria for determining the adequacy of theological or scientific claims? How do culture and language effect method, language, and theory in science and religion?

February 27

Required Reading: Barbour, *Religion and Science*, Chapters 5 and 6

Recommended Reading: Richardson and Wildman, eds. *Religion and Science*, Part II

March 6

Required Reading: Howell, "A Whiteheadian Case for Diversity in Science and Religion"

## Unit 3: Genetics

The third unit of the course considers genetics and theology. From the perspective of science, how do the Human Genome Project and experimentation toward human cloning express an understanding of the meaning and value of humanity? What is the worldview that informs the perspective of genetics on humans and nature? What can Christian theology draw from genetics to express views of humanity, nature, God, creation, Christ, salvation, redemption, and theodicy in the contemporary context? Does theology have contributions to make to genetics? How do gender, race, and sexual orientation issues create alternative perspectives from which to consider theological and scientific constructs? What is the role of ordained clergy or lay minister in the dialogue between genetics and theology?

March 13

Due: Science-Religion Dialogue on Required Reading  
Presenters: \_\_\_\_\_

Required Reading: Cole-Turner and Waters, *Pastoral Genetics*, Introduction and chapters 1-3

Recommended Reading: Cole-Turner, *The New Genesis*

March 20

Due: Science-Religion Dialogue on Required Reading  
Presenters: \_\_\_\_\_  
\_\_\_\_\_

Required Reading: Cole-Turner and Waters, *Pastoral Genetics*, Chapters  
4-6

March 27

Due: Science-Religion Dialogue on Required Reading  
Presenters: \_\_\_\_\_  
\_\_\_\_\_

Required Reading: Cole-Turner and Waters, *Pastoral Genetics*, Chapters  
7-8  
Cole-Turner, ed., *Human Cloning*, Chapter 5

April 3

Reading Week

April 10

Required Reading: Howell, "Co-creation, Co-redemption, and Genetics"  
Murray et al., eds., *The Human Genome Project and the  
Future of Health Care*, Chapter 4  
Peters, *Playing God?*, Chapter 4

#### Unit 4: Evolution

The fourth unit of the course considers evolution and theology. Reviewing the history of Darwinism and Christian theology, we discern the real and rumored conflicts. What are the real claims of Darwinian and neo-Darwinian theory? Do such claims threaten Christianity? How do some scholars see consonance between evolution and theology? How might a Christian understand, God, humans, creation, theodicy, and eschatology in light of evolution? What is creationism and how does a creationist bring theology and science into dialogue? How did evolution and theology adopt perspectives on gender and race that were part of the cultural worldview of Darwin's time? What theological options are there for ministers who must address evolution controversy in the church or community? How else might ministry engage evolutionary biology?

April 17

Reading Week

April 24

Due: Science-Religion Dialogue on Required Reading  
Presenters: \_\_\_\_\_  
\_\_\_\_\_

Required Reading: Lindberg and Numbers, eds., *God and Nature*, Chapter

Recommended Reading: Haught, *God after Darwin*, Preface and Chapter 1  
 Lindberg and Numbers, eds., *God and Nature*, Chapters 14 and 15  
 Peters, ed., *Cosmos as Creation*, Chapter 6 and 8  
 Supplemental Reading: Barbour, *Religion and Science*, Chapters 3 and 9

May 1

Due: Science-Religion Dialogue on Required Reading  
 Presenters: \_\_\_\_\_  
 \_\_\_\_\_

Required Reading: Haught, *God after Darwin*, Preface and chapters 2-4

Supplemental Reading: Haught, *God after Darwin*, Preface and chapters 5-6  
 Hefner, *The Human Factor*  
 Richardson and Wildman, eds., *Religion and Science*,  
 Case Study VI

May 8

Due: Science-Religion Dialogue on Required Reading  
 Presenters on Haught: \_\_\_\_\_  
 \_\_\_\_\_  
 Presenters on Tuana: \_\_\_\_\_  
 \_\_\_\_\_

Required Reading: Haught, *God after Darwin*, Chapter 7-10 and conclusion  
 Tuana, *The Less Noble Sex*, Chapter 2

Unit 5: Ecology

The fifth unit considers ecology (but not environmental ethics). What is the science of ecology and how is it unique among the natural sciences? How does Sallie McFague integrate ecology, evolution, and big bang cosmology into theology? How does ecology contribute to Christian views of God, humans, nature, Christ, church, and eschatology? How do Shiva and Menchú integrate ethnoscience and religion? What lessons for religion-science integration can be drawn from (so-called) Third World contexts? How do considerations of class, gender, race, and world religions call us to construct new bridges between ecology and religion? In light of ecology, how might ministers provide leadership and create worship? Is there a sense in which clergy and lay ministers can minister to or with the earth?

May 15

Due: Class Participation Self-Evaluation Work Sheet

Due: Ministry Project Presentations

Presenters: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Required Reading: McFague, *The Body of God*, Chapters 2-3

Supplemental Reading: McFague, *The Body of God*, Introduction and chapter 1  
Moore, *Ministering with the Earth*  
Pederson, *Where in the World Is God?*

May 22

Due: Ministry Project Presentations

Presenters: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Required Reading: McFague, *The Body of God*, Chapter 5

Recommended Reading: McFague, *The Body of God*, Chapters 4, 6-7  
Menchú, *I, Rigoberta Menchú*, Chapters VII and VIII  
or  
Shiva, *Staying Alive*, Chapters 1 and 2

## Course Requirements

1. ***Class participation*** is required of each student. By class participation, I mean that each student must attend class regularly and engage in discussions. Students must attempt all required reading and written assignments. This does not mean that students fully understand material, but that they are familiar with the texts and know which passages are puzzling. Class participation allows students to raise questions and to achieve some understanding of course content. Class participation requires collaborative small group work and may include ungraded writing assignments in class. Submitting required written assignments on time is important for good class participation. At the end of the semester, students assess the quality of their class participation and assign themselves a letter grade. This is accomplished through a self-evaluation work sheet, which makes explicit the criteria for good class participation. By consensus students determine what percentage of their grade is reflected in class participation. The instructor also assigns a class participation grade. The Class Participation Self-Evaluation Work Sheet (attached to the syllabus) is due Thursday, May 9.
2. ***Science-Religion Dialogue*** is an oral class responsibility. In teams, students are responsible for conducting a 30-minute science-religion dialogue. Student teams name three to five important themes from the reading assignment for the day and then propose one or more questions to prompt class discussion of the reading assignment for the day. Other students in the course are expected to support the student dialogue leaders by preparing well for the dialogue. Dates for dialogue are listed in the class schedule above (March 13, 20, 27, April 17, 24, and May 2).
3. A ***research paper proposal*** is required in support of the research paper assignment (see number 4 below). A good research paper requires a good foundation. The research paper proposal is an opportunity to write a one-paragraph description of the problem in science and religion that the research paper addresses and to summarize the resources that inform the science and theology. The research paper proposal must include deadlines for both the research paper and the ministry project (see number 5 below), plus a brief description of the ministry project. The research paper proposal, which is usually 2 double-spaced pages, is due no later than March 6.
4. A ***research paper*** of 14-17 pages is required. Select a topic in science that interests you and prepare a paper exploring dialogue or integration of science and religion. The paper may be historical or contemporary. The paper should include one section (4-5 pages) describing a scientific discipline and a particular scientific project. The paper should include a section (4-5 pages) on the theological questions raised in dialogue with science. Be clear that this paper is a theology paper, not an ethics paper, and stay focused on theological doctrines. Finally, the remainder of the paper should discuss how theology might respond to or take account of science. The third section may also explore how science might be affected by theology. The final section must include either dialogue or integration of science and religion. The paper must be typed in 11 or 12 point fonts and double-spaced with margins of 1 inch. The paper must follow guidelines for form and citations found in Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*, sixth edition. The paper is due no later than April 10, but students must commit in the research paper proposal to a particular date as a self-assigned deadline. Students may co-author papers with another student in the course.

5. A **ministry project** is required. The ministry project includes a class presentation and a 5-8-page paper. Based on your research paper, this project works on an application of research to ministry and should model what ordained and lay clergy undertake in preparation and planning. Reflect on how your research topic in science and religion might inform actual practice of ministry. Here are examples of acceptable projects: a sermon on science and religion, a worship liturgy on science and religion, a Sunday School or Church School lesson (the text the class might read) and a lesson plan for the teacher, a series of letters to the newspaper about a science and religion issue, a report to an ethics review board of a hospital or medical school research facility, a high school youth retreat plan and supporting prayers, readings, homily, and activities, a case study about a counseling session including questions for discussion and analysis of the case. The paper must be typed in 11 or 12 point fonts and double-spaced with margins of 1 inch. The paper must follow guidelines for form and citations found in Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*, sixth edition. The paper is due no later than May 9, but students must commit in the research paper proposal to a date as a self-assigned deadline. Students may co-author the ministry project. Presentations are scheduled May 9 and 16.

Professorial Idiosyncrasies: (1) Please do not submit written work in binders or folders—a single staple in the upper left corner is preferred. (2) Consider submitting papers printed on the unused side of scratch paper or printed on both sides of a clean sheet of paper made from recycled fibers.

## Grading

Criteria for grading follow.

Students in consultation with the instructor determine how grading will be assessed. At the end of the term, students receive letter grade in accordance with policies and descriptions outlined in the 2002-2004 catalog (page 41).

Class Participation		_30_%
Self-evaluation	_15_%	
Professor evaluation	_15_%	
Science-Religion Dialogue		_20_%
Research Paper Proposal		_15_%
Research Paper		_17.5%
Ministry Project and Presentation		_17.5%

## Student Responsibilities

Student must abide by policies established in the Saint Paul handbook and catalog. Pay special attention to the policies on Integrity of Work Submitted and Class Attendance found on page 41 of the catalog. The professor reserves the option to fail a student for a single instance of plagiarism. The professor reserves the option to fail a student strictly for failure to attend class regularly or for habitual tardiness.

## Professor's Responsibilities

My job is to teach with integrity the scholarship representative of my field, to see that students learn as much as possible, and to create a comfortable environment for learning. These goals cannot be accomplished without genuine attention to the unique strengths, experiences, and expectations that both the professor and students bring to the classroom. My goal is to provide encouragement and support for your learning. Sometimes flexible procedures and learning options are necessary to facilitate the kind of teaching and learning that should occur here. I am anxious to hear what energizes you, what disappoints you, where you disagree, and what helps you learn. PLEASE SEE ME IF YOU HAVE QUESTIONS, CONCERNS, OR SPECIFIC NEEDS.

## Learning-Disabling Conditions

It is the Saint Paul faculty commitment to facilitate the learning of students capable of graduate-level seminary work. Any student who has a condition that may prevent full demonstration of his/her abilities (e.g., difficulty seeing or hearing, dyslexia, or other learning disabilities) should contact the instructor and the Associate Dean of Spiritual and Professional Development immediately to discuss learning needs, alternatives that have worked for the student in the past, and mutually accountable accommodations to ensure the student's full participation and evaluation in the course.

If you need course adaptations or accommodations because of a disability, if you have emergency information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. Please see me whether the accommodations you need are long-term or short-term.

## Criteria for Evaluating Course Work

Regardless of whether you write a paper, answer an essay question, voice an oral presentation, or create any original project, the academic context requires that certain minimal requirements characterize your work. While there are subjective components in the grading process, most professors are concerned that you become well educated in four basic qualities of excellent academic work:

1. ***Demonstration of an empathetic understanding of the content of texts and resources.*** Your topic should not only be well researched in the library, through interviews and observations, and from assigned readings and class discussions, but you should be able to provide a fair description and a clear understanding of texts and resources. This is apparent in the ability to describe and discuss precisely and accurately what an author has written or a speaker has said. Evaluation, response, and critique follow accurate representation of another's ideas—earn the privilege of criticizing a viewpoint by showing that you really understand it.
2. ***Clear critical thinking that provides appropriate specific evidence for conclusions.*** Use the most precise historical, empirical, or contemporary data or information to support the claims of your thesis and paragraphs. Conclusions follow from and are supported by evidence. Be sure that your evidence is relevant, accurate, and detailed. Even creative writing requires logical relationships among ideas to assist your readers in following the plot or main point.
3. ***Creativity that moves beyond reporting someone else's ideas.*** Your creative addition to academic discourse might include questioning, evaluating, applying, criticizing (positively or negatively), developing, or responding. You might see a connection between two or more ideas. You might see information from a unique perspective. The minimal requirement of academic work is correctly reporting what is read or discussed. Excellent work moves beyond repetition of others' ideas to unique insights, organization, correlations, and theses. Work to find your own scholarly and professional voice.
4. ***Flawless grammar, spelling, and form.*** Excellent written work is conscious of proofreading and good communication. Oral presentations are equally accountable for careful expression. A brilliant thesis can be lost in a paper or project that obscures its ideas with careless communication. Your readers and listeners should not have to guess what you mean—help them by speaking and writing well.

**Class Participation Self-Evaluation Work Sheet**  
**Saint Paul School of Theology**

**Nancy R. Howell**

**Name:** \_\_\_\_\_ **Course:** \_\_\_\_\_

Circle the number that best describes your class participation in each category if 1 is excellent, 2 is very good, 3 is average, 4 is satisfactory, and 5 is poor.

**Preparation**

- |   |           |
|---|-----------|
| I conscientiously attempted reading assignments.  | 1 2 3 4 5 |
| I reflected seriously on reading assignments.   | 1 2 3 4 5 |
| I worked to bring depth to comments and questions by preparing more than superficially for class.         | 1 2 3 4 5 |
| I prepared written assignments on time and when the syllabus or my self-assigned deadlines required them. | 1 2 3 4 5 |
| I checked spelling, grammar, quotations, and footnotes before submitting papers.                          | 1 2 3 4 5 |

**Class**

- |  |           |
|--|-----------|
| I attended class weekly.   | 1 2 3 4 5 |
| I always attended class on time.   | 1 2 3 4 5 |
| I contributed to class discussions.  | 1 2 3 4 5 |
| When I talked in class, I remained focused on the topic of class discussion. | 1 2 3 4 5 |
| I listened respectfully to comments and questions raised by other students.  | 1 2 3 4 5 |
| I brought my questions to class or to the professor.                         | 1 2 3 4 5 |
| I expressed disagreement constructively.                                     | 1 2 3 4 5 |
| I shared my responsibilities for successful class sessions.                  | 1 2 3 4 5 |
| I supported other students' efforts in class discussions or assignments.     | 1 2 3 4 5 |

**Attitude**

- |  |           |
|--|-----------|
| I remained involved and engaged in the course.   | 1 2 3 4 5 |
| I was constructive in relationships with others.   | 1 2 3 4 5 |
| I put extra effort into the course—such as study groups/partners, library research, recommended or supplemental reading. | 1 2 3 4 5 |
| I contributed my share of the work in collaborative writing or projects.   | 1 2 3 4 5 |
| I made appointments with the professor when I needed assistance or wanted to discuss the course.                         | 1 2 3 4 5 |
| I took responsibility for my learning.   | 1 2 3 4 5 |
| My understanding of theology has grown.  | 1 2 3 4 5 |
| My understanding of ministry has grown.  | 1 2 3 4 5 |

I assign myself the following letter grade: \_\_\_\_\_  
(Enter A, A-, B+, B, B-, C+, C, C-, D, or F in the blank.)

Please submit any additional reflections on class participation that should affect your grade in writing on the back of this page. This work sheet is intended to assist you in thinking about the quality of your participation in class. Any interpretations, additions, or connections of criteria should be included in your additional reflections.

## **TH 351 Science, Theology, and Ministry Research Paper Writing Guide**

The research paper represents the kind of scholarship necessary as background for addressing science issues in ministry settings. The purpose of the research paper is to engage students in undertaking the library research and integrative thinking required for interdisciplinary work in science and theology. The intention of this assignment is to provide students an opportunity to explore in detail a selected topic in science and theology and to demonstrate competence in individual or group work independent of the classroom. *See the syllabus for a further description of the research paper.*

The research paper is a formal writing assignment. A formal writing assignment requires conformity with an established manual of style and scholarly forms of research, written expression, and critical thinking.

- I. Proposals (optional)
  - A. Submitted for evaluation at least 3 weeks before the research paper is due, but no later than March 6.
  - B. Revised until an adequate course of research and writing are evident
    1. Bibliography and project description must match.
    2. Topic must be directly related to the theme of the course.
    3. Deadlines for the research paper and ministry project must be included.
  
- II. Form
  - A. Length: 14-17 pages, roughly 200-250 words per page, 11 or 12 point font
  - B. Typed, double spaced
  - C. Margins: 1-inch
  - D. Research paper
  - E. Co-authorship permitted
  
- III. Style
  - A. Manual of style: Kate L. Turabian, *A Manual of Style for Writers of Term Papers, Theses, and Dissertations* (for style questions not addressed by Turabian, see *The Chicago Manual of Style*)
  - B. Elements: title page, page numbering, margins, footnotes or endnotes, bibliography
  
- IV. Content
  - A. Should conform to the proposal
  - B. Must refer to both science and theology sources
  - C. Must present material with awareness of method and models in science and theology
  - D. Must include one section (4-5 pages) describing a scientific discipline and a particular scientific project
  - E. Must include one section (4-5 pages) on the theological questions raised in dialogue with science—Be clear that the paper is not about ethics
  - F. Must include in the final section, informed by research, how theology might respond to or take account of science through dialogue or integration of science and theology
  
- V. Deadline
  - A. No later than April 10.
  - B. Students must commit in writing to a date as a self-assigned deadline.
  
- VI. Grading: See the syllabus, “Criteria for Evaluating Coursework”

## **TH 351 Science, Theology, and Ministry Ministry Project Writing Guide**

The ministry project is a creative pastoral application of research and writing in science and religion. The purpose of the ministry project is to engage students in integrative thinking and praxis, which reflects back on the research paper that integrates science and theology and plans imaginatively for the application of science and theology to a particular need in the church and world. The intention of this assignment is to provide students an opportunity to apply to a ministry context a selected topic in science and theology and to demonstrate competence in individual or group work independent of the classroom. *See the syllabus for a further description of the ministry project.*

The ministry project includes a formal writing assignment. A formal writing assignment requires conformity with an established manual of style and scholarly forms of research, written expression, and critical thinking. Within a ministry context, this means working toward effective modes of communication and modeling excellent oral and written communication skills.

- I. Form
  - A. Length: 5-11 pages, roughly 200-250 words per page, 11 or 12 point font
  - B. Typed, double spaced
  - C. Margins: 1-inch
  - D. Co-authorship with another student in the course is permitted.
  
- II. Style
  - A. Manual of style: Kate L. Turabian, *A Manual of Style for Writers of Term Papers, Theses, and Dissertations* (for style questions not addressed by Turabian, see *The Chicago Manual of Style*)
  - B. Elements: title page, page numbering, margins, footnotes or endnotes, bibliography
  
- III. Content
  - A. Must conform to the background developed in the research paper on theology and science
  - B. Must apply theology and science to a ministry context
  - C. Must reflect on how your research topic in science and religion informs the practice of ministry
  - D. May take a number of creative forms: sermons and liturgy, curriculum design and lesson plans, report to a hospital or ethics review board, letters to the newspaper editor, youth retreat plan and supporting prayers, readings, homily, and activities, a case study about a counseling session including questions for discussion and analysis of the case.
  - E. Should include an “artist’s statement” if the project is very creative or if the use of science and theology is more oblique than direct
  - F. Should reflect on the context for ministry as well as your theology of ministry and leadership style
  
- IV. Deadline
  - A. No later than May 9, with presentations on May 9 and 16
  - B. Student must commit in writing to a date as a self-assigned deadline—these dates have already been submitted in the proposal

- V. Presentation
  - A. Describes the project in relation to the research paper
  - B. May, if appropriate, demonstrate the ministry (e.g., preaching a sermon)
- VI. Grading: See the syllabus, “Criteria for Evaluating Coursework”

## **TH 351 Science, Theology, and Ministry Research Paper Proposal**

The written and oral assignments for the course are designed to encourage integrative thinking about theology and ministry. The research paper proposal is the initial plan for a coherent and interdisciplinary semester-long project on science, theology and ministry.

The proposal is due no later than March 6. Please type and double space answers to the following requests for information:

1. Please name (in a very general and descriptive way) the title of your project. The title of the proposal is not necessarily the title of the research paper or ministry project.
2. Please provide a 30-50-word description of the research paper. Be sure to indicate a specific science issue and Christian doctrines. Indicate what your research question is.
3. Please list 3-5 books or 5 articles that will inform your research paper about science.
4. Please list 3-5 books or 5 articles that will inform your research paper about theology.
5. Please suggest one idea for the ministry project. Describe a ministry project related to the information in the research paper in 30-50 words.
6. Select a date between March 20 and April 10 as the deadline for the research paper. Write the date in the proposal. Note that the professor will hold you accountable for the deadline that you select. The deadline does not need to be the day of a class meeting. Papers may be submitted in person, in my mailbox, or as an e-mail attachment.
7. Select a date between April 10 and May 9 as the deadline for the ministry project paper. Write the date in the proposal. Note that the professor will hold you accountable for the deadline that you select. The deadline does not need to be the day of a class meeting. Papers may be submitted in person, in my mailbox, or as an e-mail attachment.
8. Please indicate your preferred date for the ministry project presentation. Select from the two dates, May 9 or 16.