Department of Mathematics, Physics, and Statistics TT&P Prompts and Readings

Prompt 1:

The department of Math, Physics, and Statistics is comprised of faculty in these disciplines whose main connection is that they share a common language of mathematics to describe the world and the physical universe. Many atheists and theists alike recognize that the universe is described by sets of " beautiful" mathematical equations. The beautiful equations remind us of a God who loves beauty and uses it to build and sustain the universe. Reflect on the connection of your faith with your discipline as it pertains to mathematical beauty in the physical world. Feel free to expand beyond the readings recommended and bring insights from your unique discipline. You may also discuss the notion of beauty in this context. (For a conceptual discussion of "beauty", https://plato.stanford.edu/entries/beauty/#ObjSubmay be a helpful source.)

Prompt 2:

Connecting faith and discipline can be a new idea for students. Discuss how your pedagogy allows for personal reflections to be worked into one or more of your classes to either model this interaction for students or help students to build their own model for thinking about these issues in your discipline. This should be more than a list of connections. Your reflections should discuss a general pedagogical approach to this work.

Readings:

Chapter 2 from God of Hope and the End of the World, John Polkinghorne

A Mathematical Universe, Pages 45-47 of Searching for Truth, Lenten Meditations on Science & Faith, John Polkinghorne

Pages 74-134 from Perspectives on Science and Christian Faith, Volume 67 Number 2

• The Matter of Mathematics by Russell W. Howell

•A Pranalogical Approach to Faith-Integration with Students by Douglas C. Phillippy

•Integration of Faith and Mathematics from the Perspectives of Truth, Beauty, and Goodness by Jason Wilson

•*Cultivating Mathematical Affections: The Influence of Christian Faith on Mathematics Pedagogy* by Joshua B. Wilkerson

•Practical Applications of an Integrally Christian Approach to Teaching Mathematics by Valorie Zonnefeld