

Elliott Bergerson

Reading Quiz 0.2 part II, and 1.1 - INTD290

Dr. Jordan Hanson - Whittier College Dept. of Physics and Astronomy

January 24, 2021

1 How to Submit this Assignment

Once you answer the questions, take a picture of your work and convert it to a PDF. Submit the PDF to the assignment link on Moodle.

2 Nueva España

1. Discuss some examples of the book trade between France, Spain, and New Spain. What is the implication for the growth of Enlightenment knowledge in New Spain?

The Enlightenment for New Spain existence came to be due to social and economical elements around topics like mining, medicine, and modern science. Resulting in the trading of these kinds of books to suit the needs of the people.

3 Nueva Granada



Figure 1: A map of the Northern edge of South America and the Caribbean.

1. On Fig. 1, label the locations of the following cities:

- Quito - Ecuador
- Santa Fe (de Bogotá) - Colombia
- Caracas - Venezuela

2. List the universities in each of the above cities. Which ones were founded with Enlightenment ideals in mind, and at which ones were taught concepts from Newtonian (as opposed Scholastic) physics?

Universidad Javeriana - Enlightenment (Santa Fe)

Universidad de Caracas - Enlightenment

Universidad de Quito - Both

4 Comparisons of Adoption of Scientific Revolution

1. What do the contrasted examples of José Ignacio Bartolache and José Celestino Mutis say about the acceptance of the Scientific Revolution in the different *virreinos*? Give examples of the accomplishments of each person, and give context for the acceptance of the work of each in their respective *virreinato*.

Mutis was insistent on renovating the physical sciences while Bartolache complained of the persistence with Newtonian physics

Mutis (a botanist who held a chair in mathematics)

2. Discuss the educational roles of the Jesuits and the Dominicans in Nueva Granada¹. When did the Jesuits leave Nueva Granadan education, and why? How did the Dominicans operate educational institutions as they asserted control over various universities?

1730-1740, Jesuits switched from teaching education in New Granada

3. Eventually, the Spanish Crown took control of education. How did this happen, and more importantly, why would the Crown wish to do this? Now turn your attention to the time before the Spanish Crown took over education. **This one is worth a bonus point.** How did control of education grant political control? Why would the power to confer degrees give someone political power?

The Spanish Crown controlled the professors, students, and books that were circulating.

5 Advent of Newtonian Physics in Nueva Granada

1. Discuss the significance of the geodetic expedition of Charles de la Condamine in 1735. What was the goal? What were the cultural outcomes for Creole peoples, according to the writings of Alexander von Humboldt?

2. Which Catholic religious order first taught Newtonian physics in Nueva Granada?

- Carmelites
- Dominicans
- Franciscans
- Jesuits

Did this order always teach Newtonian physics?

Not always

¹It might be helpful to know: Dominican universities were sometimes named *San Tomás*, after Saint Thomas Aquinas (not Saint