

Mathematics for Natural Philosophy: Physical Science

Dr. Ralph "Rafe" E. Spraker, Jr.

RSpraker.ScholeAcademy@gmail.com



Greetings Introductory Physical Science Family,

I look forward to working with your family in Physical Science for the 2022-2023 Schole Academy school year. From my 25-year experience in teaching Physical Science, Physics, Chemistry, and Biology I discovered students do not struggle as much with the Physical Science Concepts as they do with is the underlying Applied Mathematics. In my previous on-ground contexts, I would spend two or more weeks teaching what I now call "Mathematics for Natural Philosophy for Physical Science." In our online context, I believe addressing Applied Mathematics with them this Summer in a non-graded club would best replicate this with your student.

If possible, please schedule a **Picktime** session with me over the next two weeks [using this link: https://www.picktime.com/CogNatE] so we can discuss together next year and our summer club.

In the Lamb,

Dr. Ralph "Rafe" E. Spraker, Jr

Mathematics for Natural Philosophy: Physical Science

Tuesday/Thursday 11:00-12:00

JULY 5, 7, 9, 12, 14, 19, 21, 26, 28; AUGUST 2, 4

This Club will focus on the five top topics suggested by the Mathematical Association of America for Physical Science students: Formula and unit conversions; significant figures; Ratios, Proportions; Expressions involving exponents, and Force Diagrams. Ideal preparation for upcoming Schole Academy's Physical Science.

My Goal for Natural Philosophy Clubs: All would grow in "ORDO AMORIS" (i.e., "Love for God's Orderliness) and beauty found in His "OPERA DIGITORUM" (i.e., "The Work of Your Fingers," *Psalm* 8: 3) as they gain understanding and confidence in Natural Philosophy (i.e., "Love of Wisdom").

ABOUT THE INSTRUCTOR:





Greetings Summer 2022 Natural Philosophy: Physical Science attendees from glacially formed Lake Louise in Banff National Park, Alberta, Canada (left above). Notice all three states (ice, mist, and liquid) of water are in the picture.

I'm **Dr. Ralph "Rafe" E. Spraker, Jr.** and I look forward to interacting with each of you. I maintain a two-mile segment of the <u>Mountains to the Sea Trail</u> from the "Raven Rock" [BRP Milepost 290 see above right] to the "Aho Gap" [BRP Milepost 288, Elevation 3722] which parallels the <u>Blue Ridge Parkway</u> near my home in Boone, NC.

I earned: my Ph.D. from the University of South Carolina (2010); 3 Master's degrees including an MSSE from Montana State University, Bozeman (2011); and my Bachelor's degree from BIOLA University (1983). I currently teach for SCHOLE ACADEMY: Algebra, Chemistry, Physics, and:

Information Technology & Statistics*	Northcentral University
Algebra, GeoLogia, & Physics	Ohio Christian University
Algebra	Pacific Islands University
Biology, Chemistry, & Physics	Southern New Hampshire University

^{*}Graduate level

I enjoy **Confessional Lutheran** and **Patristic** theology (SOLUS CHRISTUS) and use the **1928 Anglican Prayer Book's** <u>Coverdale *Psalter*</u> "Morning and Evening." In the Lamb,

Dr. Rafe Spraker

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GRATIA ET VERITAS PER IESUM CHRISTUM FACTA EST
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