

“What are Poets and Polynomials For?”

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Extending Heidegger's 1946 question “What are poets for?” into the fields of mathematics and literature, this seminar would explore the ideology, pedagogy, and art ranging across the humanities and sciences. Often juxtaposed against one another as academic opposites, Math and English rarely intersect within institutionalized education. This classification has prevented both humanities and science students from examining two profoundly linked intellectual endeavors whose practitioners have long nourished one another. Wordsworth dedicated a passage of the *Prelude* to praising Isaac Newton for his lonesome and heroic pursuit of calculus. Charles Babbage, the first mathematician to envision mechanical computation, critiqued Tennyson. These minute examples only begin to suggest the fertility of an interdisciplinary analysis of mathematics and English.

Throughout the seminar's five sessions, we would explore primary literature and mathematics (translated into prose for the non-mathematician) as well as several philosophical treatises which could serve as touchstones throughout the semester. From these texts, the seminar would strive to integrate a series of general questions exploring the relationship of mathematics and literature with more narrowly focused inquiries regarding finite examples of this relationship. General questions could include: If an equation and a sonnet both describe a sunset, where do their descriptions converge and diverge? How do aesthetic criteria factor in both literature and mathematics? What makes a poem or equation beautiful, ugly, daunting, or ambitious? Lastly, hovering over the seminar is this question: are the sciences and humanities equal, contradictory, or concordant methods of truth derivation? More specified prompts could provoke discussion of specific mathematical and literary themes: What are the intellectual implications of the Fibonacci Sequence, the golden mean, iambic pentameter, and personification? Which realm does infinity inhabit? Pedagogically, why do we tend to associate mathematics and sciences with serious, modernist structures (Stokes, The Integrated Science Center) and the humanities with more pastoral venues (Woodside Cottage)?

To remain inclusive to students of all majors, this seminar would expand its focus into numerous disciplines. Mathematics implies the logical, empirical framework driving much of physics, computer science, economics, chemistry, and biology. The hermeneutical focus of English could easily accommodate those interested in the fine arts, history, linguistics, and foreign language.