Axioms

Differential Equations

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In mathematics, axioms are propositions that are assumed to be true. The mathematician Federico Ardila-Mantilla has written four axioms that guide the work he does in education and outreach. Federico's axioms resonate strongly with me. They are (slightly re-written to apply to physics as well as math):

1. Mathematical potential is distributed equally among different groups, irrespective of geographic, demographic, and economic boundaries.

2. Everyone can have joyful, meaningful, and empowering experiences.

3. Math is a powerful, malleable tool that can be shaped and used differently by various communities to serve their needs.

4. Every student deserves to be treated with dignity and respect.

Community Agreement

Taking the above axioms as a starting point, let's think about what type of community we want to create this term. Here is a community agreement based on one written by Federico Ardila-Mantilla.

> This course aims to offer a joyful, meaningful, and empowering experience to every participant; we will build that rich experience together by devoting our strongest available effort to the class. You will be challenged and supported. Please be prepared to take an active, critical, patient, creative, and generous role in your own learning and that of your classmates.

Discuss the axioms and community agreements. Are there any words or phrases that are particularly resonant? Is there anything missing?