

ASSIGNMENT

DATA ANALYSIS & JEAN DUHAMEL

Course: Materials Characterization for Soft and Polymeric Materials

University: University of Notre Dame

Faculty: Gabriel Burks

Details about the audience and course context

- How many students are in the class? *Approximately 20*
- What is the teaching modality (in person, virtual, hybrid)? *In person*
- What grade level/year are the majority of students? *A mix of graduate and undergraduate students*
- Where does this course fall in the curriculum? (Is it in the core or organized within a particular course of study?) *This is currently an elective course, but it will undergo review to be added to the Materials Science Engineering Ph.D. program curriculum.*
- What virtues are integrated into the course? *Moral courage, intellectual wonder (curiosity), and intellectual attentiveness (humility)*

Assignment: Data Analysis & Jean Duhamel

The course is divided into three blocks. For each block, students write responses to the “thought-provoking questions” in the associated online class discussion board and provide a thoughtful response to two of their peers.

Imagine sitting in a lab, looking at overlapping fluorescence decay curves—barely distinguishable, full of noise. You’re not satisfied with average values or smoothed data. You want to understand what happens within the noise. You ask: What is this spectrum not telling me directly?

Jean Duhamel made a career by listening deeply to polymer systems. He didn’t try to simplify reality too quickly. He developed new ways to interpret time-resolved data and polymer interactions that others had overlooked.

He wasn't distracted by hype.
He wasn't in a rush to publish.
He was attentive to the quiet signals.

Thought-provoking Questions

- When faced with complex or noisy data, do you look for shortcuts—or for understanding?
- How often do we miss something meaningful because we aren't fully paying attention?
- In today's experiment or analysis, what do you need to be attentive to—technically and intellectually?
- Are you training your eyes to see subtle truths, or only dramatic trends?