

Advising for Quantitative Coursework

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QUANTITATIVELY RICH REQUIREMENTS

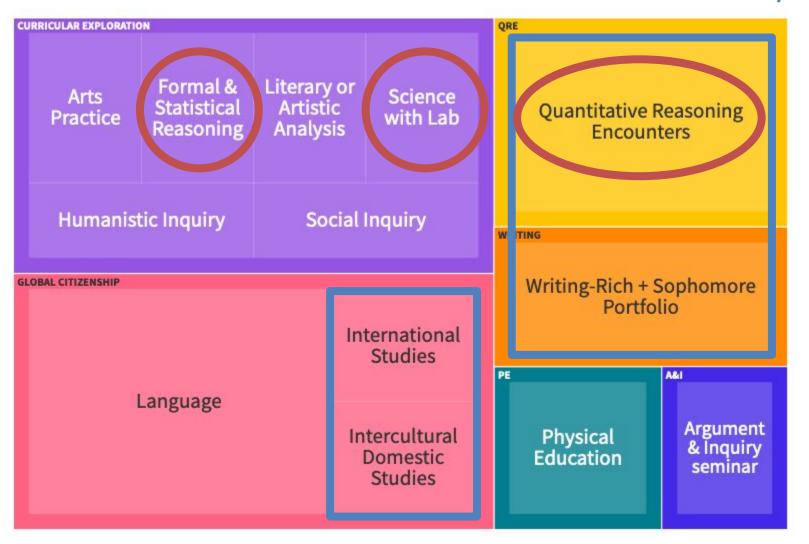
CHOOSING WHICH QUANT COURSE

SUCCEEDING IN QUANT COURSES



Liberal Arts Requirements

"overlays"





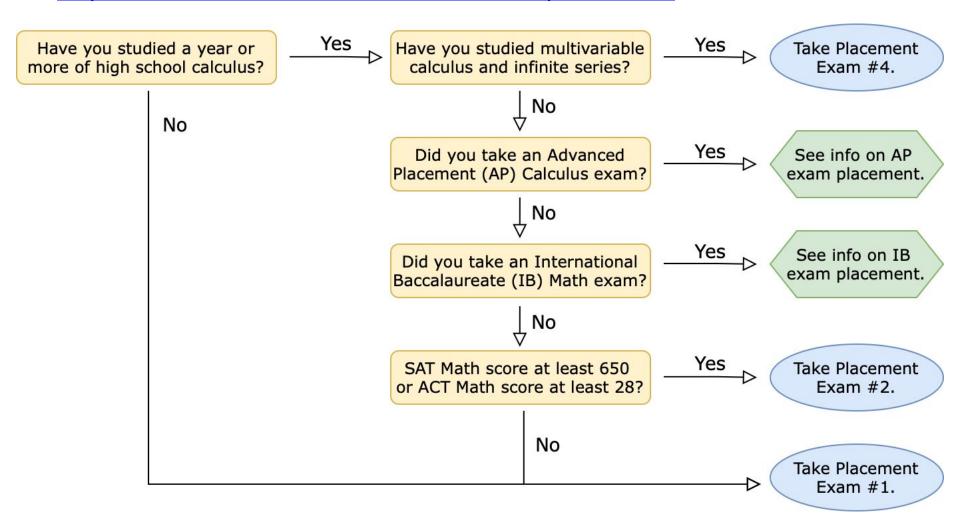
Registration and Policies

Requirements	Overlays	Special Interests
Argument & Inquiry Seminar	□ Writing Rich 1	☐ Academic Civic Engagement: Applied
Arts Practice	□ Writing Rich 2	☐ Academic Civic Engagement: Theoretical
 Formal or Statistical Reasoning 	Quantitative Reasoning	
Science with Lab Component	Intercultural Domestic Studies	
Literary/Artistic Analysis	International Studies	
☐ Humanistic Inquiry	You must take 6 credits of each of these,	
☐ Social Inquiry	except Quantitative Reasoning, which requires 3 courses	
You must take 6 credits of each of these.		

What is Calc, Chem, etc. "with Problem-Solving"? Should a first-year take Calculus and start their Language in the Fall?

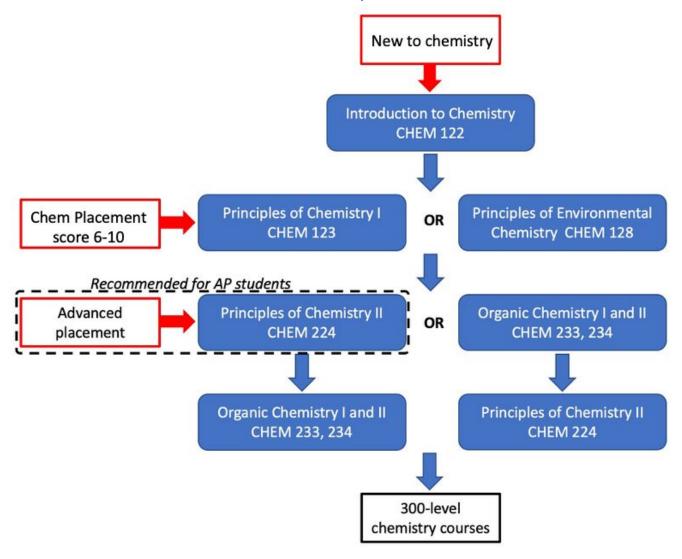
Does Intro Economics have a lot of math? What can a very math-averse student take?

https://www.carleton.edu/math/new-students/
https://www.carleton.edu/math/resources/placement/





https://www.carleton.edu/chemistry/new-students/





Supporting Success: Time Management

Quant courses often have

Cumulative curriculum

Less reading and writing

More problem sets and exams

Scaffolded projects

Emphasis on reasoning over

rightness

Resources

Intro classes: Prefects, TAs

Chem + Physics: Problem-

Solving Facilitators (PSFs)

Math: Math Skills Center

Stats: Stats Lab

QR + graphs + 1:1 skills support:

Quant Resource Center (QRC)

"Flipped"

Before class: watch videos, read content, low-stakes practice problems

During class: solve more complex problems in groups

Supporting Success: Start With Questions

"What are you learning about now?"

"What have you tried so far?"

"Have you covered this in class or been given other resources?"

"Do you have it with you, and we can take a look together?"

When preparing for exams, remind them to practice whatever they'll be asked to do on the exam.

e.g., It's not a note-reading exam, it's a problem-solving exam.

Supporting Success: Model a Growth Mindset

Your own experiences with and beliefs about math and numbers matter.

Like anything else, quantitative reasoning takes time, improves with practice, and benefits from mistakes and feedback.

And anyone can get better at it.



Questions?

"QR is sophisticated reasoning with elementary mathematics rather than elementary reasoning with sophisticated mathematics."

- Lynn Arthur Steen

"If you can't make a mistake, you can't make anything."

- Marva Collins

