

# QUANTITATIVE REASONING

Quantitative Reasoning (FC-QUANT) is a required Focus Capacity course in the IDEAs in Action curriculum (<http://catalog.unc.edu/undergraduate/ideas-in-action/>).

A single course may be used to fulfill only one Focus Capacity requirement (not including lab).

Code	Title	Hours
<b>Approved Courses</b>		
ANTH 520	 Linguistic Phonetics	3
ASTR 100	 Understanding the Universe	3
ASTR 101	 Introduction to Astronomy: The Solar System <sup>H</sup>	3
ASTR 102	 Introduction to Astronomy: Stars, Galaxies & Cosmology <sup>H</sup>	3
ASTR 103	 Alien Life in the Universe	3
BIOL 115	 Reasoning with Data: Navigating a Quantitative World	3
BIOL 222	 Introduction to Programming with Biological Data	3
BIOL 544L	 Laboratory in Diseases of the Cytoskeleton	3
COMP 110	 Introduction to Programming and Data Science <sup>H</sup>	3
COMP 283	 Discrete Structures <sup>H</sup>	3
COMP 550	 Algorithms and Analysis	3
ECON 400	 Introduction to Data Science and Econometrics <sup>H</sup>	4
ECON 470	 Econometrics <sup>H</sup>	3
ENEC 203	 Introduction to Environmental Science Problem Solving	3
ENEC 473	 Business and Finance Basics for Environmental Managers	3
ENGL 482	 Metadata, Mark-up, and Mapping: Understanding the Rhetoric of Digital Humanities	3
ENVR 135	 Environment-ECUIPP Lab: Connecting with communities through environmental research for Public Health	3
ENVR 335	 Adv Environ-ECUIPP Lab: Connecting with Communities Through Environmental Research for PH Protection	3
GEOG 215	 Introduction to Spatial Data Science	3
GEOG 370	 Introduction to Geographic Information	3
GEOG 410	 Modeling of Environmental Systems	3
GEOG 456	 Geovisualizing Change	3
GEOG 477	 Introduction to Remote Sensing of the Environment	3
GEOG 567	 Geospatial Data Analysis with Google Earth Engine	3
GEOG 577	 Advanced Remote Sensing	3
GEOG 591	 Applied Issues in Geographic Information Systems	3
GEOG 592	 Geographic Information Science Programming	3
LING 333	 Human Language and Animal Communication Systems	3
LING 401	 Language and Computers	3
LING 455	 Symbolic Logic	3
LING 520	 Linguistic Phonetics	3
MASC 57	 First-Year Seminar: From "The Sound of Music" to "The Perfect Storm" <sup>H</sup>	3
MATH 63	 First-Year Seminar: From "The Sound of Music" to "The Perfect Storm" <sup>H</sup>	3
MATH 115	 Reasoning with Data: Navigating a Quantitative World	3
MATH 116	 Intuitive Calculus	3
MATH 117	 Aspects of Finite Mathematics	3
MATH 118	 Aspects of Modern Mathematics	3
MATH 119	 Introduction to Mathematical Modeling	3
MATH 130	 Precalculus Mathematics	3
MATH 152	 Calculus for Business and Social Sciences	3
MATH 210	 Mathematical Tools for Data Science	3
MATH 231	 Calculus of Functions of One Variable I <sup>H</sup>	4
MATH 232	 Calculus of Functions of One Variable II <sup>H</sup>	4
MATH 233	 Calculus of Functions of Several Variables <sup>H</sup>	4
MEJO 379	 Advertising and Public Relations Research	3
MEJO 479	 Market Intelligence <sup>H</sup>	3
MEJO 570	 Data Driven Journalism	3
NAVS 301	 Naval Ships Engineering Systems	3
NAVS 302	 Naval Weapons Systems	3
PHIL 105	 How to Reason and Argue: An Introduction to Critical Thinking	3
PHIL 155	 Truth and Proof: Introduction to Mathematical Logic <sup>H</sup>	3
PHIL 251	 Inductive Logic and the Scientific Method	3
PHIL 357	 Induction, Probability, and Confirmation	3
PHIL 455	 Symbolic Logic	3
PHIL 456	 Advanced Symbolic Logic	3
PHYS 55	 First-Year Seminar: Introduction to Mechatronics	4
PHYS 101	 Basic Concepts of Physics	4
PHYS 106	 Inquiry into the Physical World	4
PHYS 114	 General Physics I: For Students of the Life Sciences	4
PHYS 115	 General Physics II: For Students of the Life Sciences	4

## 2 Quantitative Reasoning

PHYS 118	 Introductory Calculus-based Mechanics and Relativity	4
PHYS 119	 Introductory Calculus-based Electromagnetism and Quanta	4
PHYS 231	 Physical Computing	4
PLAN 363	 Personal Finance, Wealth Building, and Public Policy	3
PLCY 460	 Quantitative Analysis for Public Policy <sup>H</sup>	4
PLCY 505	 Data Science for Public Policy and Decision Making	4
POLI 281	 Data in Politics I: An Introduction	3
POLI 287	 Strategy and International Relations	3
POLI 288	 Strategy and Politics	3
POLI 439	 Analyzing European Public Opinion	3
PSYC 115	 Reasoning with Data: Navigating a Quantitative World	3
PSYC 210	 Statistical Principles of Psychological Research <sup>H</sup>	3
PSYC 215	 Applied Data Science in Psychology and Neuroscience	4
PWAD 287	 Strategy and International Relations	3
SOCI 251	 Research Methods	3
SOCI 252	 Data Analysis	3
STOR 113	 Decision Models for Business and Economics	3
STOR 115	 Reasoning with Data: Navigating a Quantitative World	3
STOR 120	 Foundations of Statistics and Data Science	4
STOR 151	 Introduction to Data Analysis	3
STOR 155	 Introduction to Data Models and Inference	3
STOR 215	 Foundations of Decision Sciences	3
STOR 305	 Introduction to Decision Analytics	3
STOR 320	 Introduction to Data Science	4

<sup>H</sup> Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.