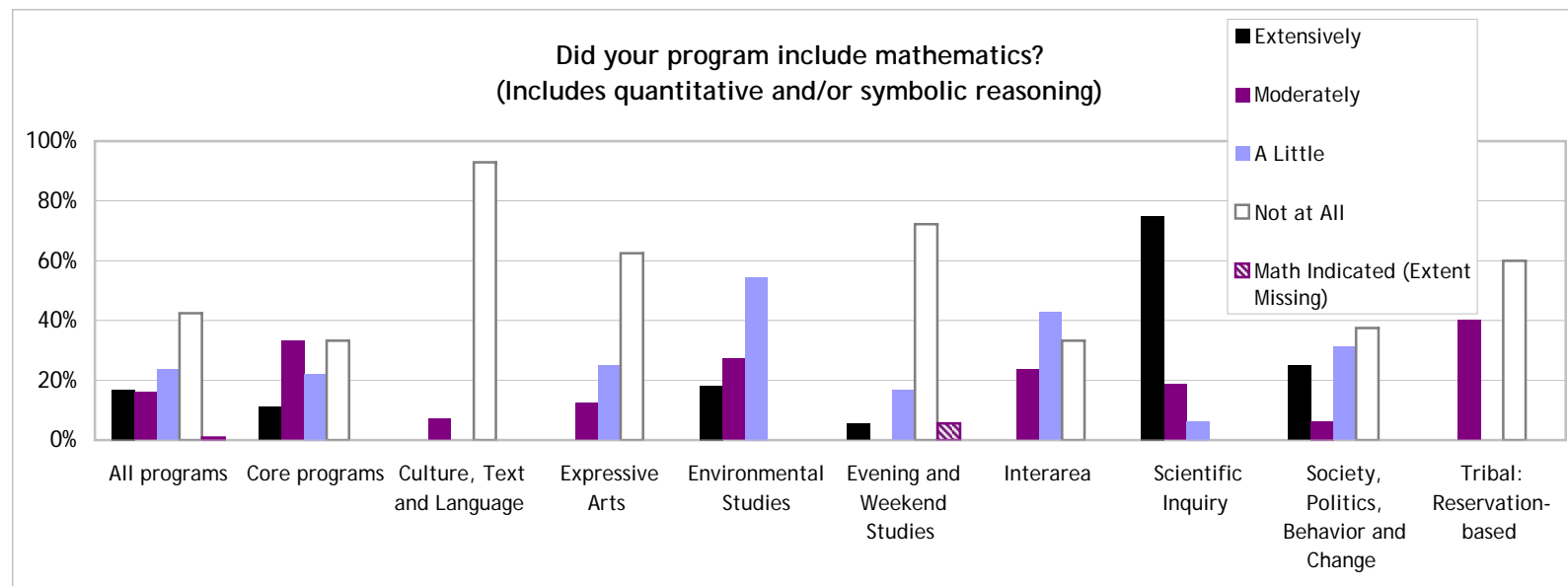


## End-of-Program Review 2006-07

### Mathematics in Programs



	Extensively	Moderately	A Little	Not at All	Math Indicated (Extent Missing)	Percent of Programs with any Math	Programs with any Math (N)	Programs Responded (N)
All programs	16.9%	16.1%	23.7%	42.4%	0.8%	58%	68	118
Core programs	11.1%	33.3%	22.2%	33.3%	0.0%	67%	6	9
Culture, Text and Language	0.0%	7.1%	0.0%	92.9%	0.0%	7%	1	14
Expressive Arts	0.0%	12.5%	25.0%	62.5%	0.0%	38%	3	8
Environmental Studies	18.2%	27.3%	54.5%	0.0%	0.0%	100%	11	11
Evening and Weekend Studies	5.6%	0.0%	16.7%	72.2%	5.6%	28%	5	18
Interarea	0.0%	23.8%	42.9%	33.3%	0.0%	67%	14	21
Scientific Inquiry	75.0%	18.8%	6.3%	0.0%	0.0%	100%	16	16
Society, Politics, Behavior and Change	25.0%	6.3%	31.3%	37.5%	0.0%	63%	10	16
Tribal: Reservation-based	0.0%	40.0%	0.0%	60.0%	0.0%	40%	2	5

*Note: Courses, contracts, internships, and Student Originated Studies (SOS) programs were not asked to participate in the End-of-Program Review.*

## End-of-Program Review 2006-07

### Mathematics in Programs

Level(s) at which mathematics were taught in programs that included it, N=68  
*Faculty could check all that apply; therefore, numbers do not add up to 100%*

	Percent of Programs with Sciences at level	Number of Programs
Introductory	72.1%	49
Intermediate	32.4%	22
Advanced	20.6%	14
Did not indicate any level	1.5%	1

Areas of Math Incorporated:	Number of Times Mentioned
Algebra	12
Algebra (Beginning and Intermediate)	1
Linear algebra, matrix mechanics (applied to quantum mechanics)	1
Algebraic manipulations	1
Analyzing patterns in nature	1
Applied Math -- differential equations, non-linear dynamics, linear algebra, vector calculus. partial differential equations.	1
Applied Mathematics for Advanced Biology and Chemistry, mostly within a laboratory setting	1
Basic Numeracy	1
Business math and Excel spreadsheets	1
Budgets for projects	1
Formulas, Budgeting, Marketing	1
Basic budgets in a brief unit on Business	1
Simple Budgeting and business planning	1
Calculation	1
Calculus	2
Vector Calculus (applied to electromagnetism)	1
Advanced Calculus, partial and total differential equations	1
Computer Architecture	1
Computer Programming	2
Computer Science	2
Content Analysis	1
Problems that involved conversions and calculations involving logs and exponents, e.g. pH.	1
Critique of research methods, articles	1
Data Analysis	2

Areas of Math Incorporated:	Number of Times Mentioned
Data Analysis (ratios/proportions, identification of trends/patterns, and interpreting graphical and tabular data	1
Mainly used to help students how to read charts of quantitative information, e.g., census data. (Data Analysis?)	1
[Data Interpretation] Data Supporting for example the chemical make-up of air pollutants and the absolute percentage of each kind in overall NAAQ or CAA standards for factory hog farms: how the courts/EPA allow point source air pollutants to rise above levels allowed	1
[Data Interpretation] Multiple workshops and lectures that involved reading and interpreting graphs/tables/charts	1
Discrete Mathematics	1
Economics	1
Some economic analysis	1
Exponential Growth Models	1
Finance	1
Goedel's Incompleteness Theorem	1
We studied geography and demographics of China by studying population growth/distribution and making a Chinese map.	1
Geometry	6
Geometry (Euclidean and non-Euclidean)	1
Geometry (Introductory)	1
History and Philosophy of Mathematics	2
Philosophy of Mathematics	1
Identification and Analysis of Trends	1
Interpreting graphs, tables, charts	2
Logic	6
Math to understand elements of Physics.	1
Measuring	1
Quantitative Methods for Business	1
Quantitative Reasoning	5
Quantitative and Symbolic reasoning-navigation	1
Quantitative Reasoning in the area of Architectural Design	1
Pattern Description	1
Perspective Drawing (four-week module)	1
Pre-Calculus	1
Probability and Algebra to Calculus levels of relatedness in family groups, and to calculate cost-benefit analyses associated with various behaviors.	1
Proportional Reasoning	1
Research	1
Research Methods. This included Quantitative, Qualitative and Mixed Methods.	1
Sampling	1

<b>Areas of Math Incorporated:</b>	<b>Number of Times Mentioned</b>
Scientific Mathematics	1
Set Theory	1
Spatial Analysis	1
Spread sheet Analysis, including pivot tables for analyzing very large data sets.	1
Spreadsheet use	1
Statistics	15
Statistics (Introductory)	2
Statistics (Introductory and Advanced)	1
Statistics (Introductory and Intermediate)	1
Statistical and Quantitative Methods in Ecology	1
Stella modeling software that uses rates of change and amounts as the basic tools for building models of environmental systems.	1
Some discussion of Statistical Thinking and Inference	1
Some Statistical Analysis on Women's issues	1
Strategic Reasoning	1
Study Design	1
Timelines and Timecharts	1
Trigonometry	1
Trigonometry (Introductory)	1
Unit Conversions	1
Use of public data	1
Vector Analysis	2

#### **Additional Comments**

Logic and Statistics to calculate (for example) appropriate ceilings or caps for carbon trading proposals as part of global warming legislation. (Note: Logic and Statistics are counted in the table above)