Math 100: Survey of Mathematics

Math 100 is a terminal course (i.e., not preparation for any other course)

Topics are instructor dependent (*i.e.*, material covered depends on teacher's choice)

Demonstrate utility of math...

Wide spectrum of useful applications –

meteorology (rainfall predictions), nutrition (RDA of vitamins, etc.), construction (3-4-5 rule for square/plumb walls, estimating paint or material for doghouse, etc.), nursing/health occupations (pharmacology dosages, blood alcohol content & causes of death), unit pricing (purchasing decisions), geography (latitude *vs* longitude & time zones), mixing concrete or gas/oil, sports (baseball & basketball stats), grade point average & grading on a curve, computer concepts, financial formulas (compound interest, amortization & annuities), etc.

Exotic phenomenon –

understanding solar eclipses, brain anatomy, navigation (flying direction/bearing), relative (%) error in estimations/measurements, historical glimpses (discovery of Earth's circumference, Tower of Pisa), automobile engine sizes, calculating π (3.1459...), metric system (*e.g.*, hectares), convert units (general strategy), trigonometry, millions *vs* billions...

Scale usage: age of universe, earth, life, etc. (billions & millions of years)
Earth's interior sections & features (Mt. Everest & Mariana Trench)
relative sizes/distances of Sun & planets; maps & models

Improved *appreciation for scientific calculator* (sin/cos/tan, stats & rad mode, DMS, etc.)
Improved *familiarity w/metric system* (useful when purchasing/traveling outside the U.S.)
Improved *grasp of fundamental mathematics* (useful when taking other college courses and/or helping your little brother/sister or children with their HomeWork!)...