This course consists of three graduate lectures on Calorimetry. In the first lecture, I discuss the physics that plays a role when high-energy particles are absorbed in dense matter, with emphasis on issues that are important for the properties of calorimeters. In the second lecture, I discuss all aspects of the calorimeter response function: Mean value, shape, width, and the factors that determine these characteristics. In the first part of the third lecture, I will talk about calibration and simulation issues. The second part of that lecture will be dedicated to recent results from a new R and D project: DREAM. In this project, we are testing a novel type of instrument, in which the complementary information from dE/dx and Cerenkov light production is exploited to obtain excellent jet measurements.