STAT 110 – Chapter 1 Definitions

individuals – the objects described by a set of data

variable – any characteristic of an individual

observational study – observes individuals and measures variables of interest but does not attempt to influence the responses
⇒ the purpose of this type of study is to describe some group or situation

sample survey – a type of observational survey in which a sample is selected and asked to respond to questions

population – the entire group of individuals about which we want information

sample – a part of the population from which we actually collect information, used to draw conclusions about the whole
census – a sample survey that attempts to include the entire population in the sample

experiments – deliberately imposes some treatment on individuals in order to observe their responses → the purpose of an experiment is to study whether the treatment causes a change in the response

Chapter 2 Definitions

biased – systematically favors certain outcomes

convenience sampling – selection of whichever individuals are easiest to reach

voluntary response sample – chooses itself by responding to a general appeal

simple random sample of size $n$ – consists of $n$ individuals from the population chosen in such a way that every set of $n$ individuals has an equal chance to be the sample actually selected