

1163-AH-1241 **Donghui Yan***, 285 Old Westport Road, Dartmouth, MA 02747. *A first course in Data Science.* Data science is a discipline that provides principles, methodology, and guidelines for the analysis of data for tools, values, or insights. Driven by a huge workforce demand, many academic institutions have started to offer degrees in data science, with many at the graduate, and a few at the undergraduate level. Quite a few articles have been published that deal with graduate data science courses, much less so dealing with undergraduate ones. Our discussion will focus on undergraduate course structure and function, and specifically, a first course in data science. Our design of this course centers around a concept called the data science life cycle. That is, we view tasks or steps in the practice of data science as forming a process, consisting of states that indicate how it comes into life, how different tasks in data science depend on or interact with others until the birth of a data product or a conclusion. Naturally, different pieces of the data science life cycle then form individual parts of the course. Details of each piece are filled up by concepts, techniques, or skills that are popular in industry. Consequently, the design of our course is both “principled” and practical. (Received September 15, 2020)