1. Introduction

1.1. Formal deductive logic

1.1.0. Overview

The topic of this course is the study of reasoning; but we will study only certain aspects of reasoning and study them only from one perspective. The special character of our study is indicated by the label ***formal deductive logic***, and our first task will be to see what this label means. The terms *formal* and *logic* specify the way in which we will study reasoning while the term *deductive* specifies the sort of reasoning we will study. In the course of the subsections listed below, we will look at each of these three terms in a little more detail.

1.1.1. Logic

  Logic is concerned with features that make reasoning good in certain respects.

1.1.2. Inference and arguments

  The key form of reasoning that we will consider is inference; the premises and conclusion of an inference make up an ***argument***.

1.1.3. Deductive inference

  An inference is ***deductive*** when its conclusion extracts information already present in its premises.

1.1.4. Entailment

  Entailment is the relation between the premises and conclusion of a deductive inference.

1.1.5. Formal logic

  Many cases of entailment can be captured by generalizations concerning certain linguistic forms.

Several features of the page you are looking at will be reflected throughout the text. A special font (*this one*) is used to mark language that is being displayed rather than used; the text will frequently use this sort of alternative to quotation marks. Another font (***this one***) is used for special terminology that is being introduced; the index to the text lists these terms and provides links to the points where they are explained. In the list of subsections that appears above, headings have a special formatting

(like this) that will be used for links. These are links to the subsections themselves, and cross-references in the text with similar formatting will also function as links.

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