... Science is divided into
1 Positive Science. Or the science of things.
2 Semiotic. Or the science of representations.
3 Formal Science. Or the science of forms.

1896 [c.] Logic of Mathematics: An attempt to develop my categories from within CP 1.444

The term “logic” is unscientifically by me employed in two distinct senses. In its narrower sense, it is the science of the necessary conditions of the attainment of truth. In its broader sense, it is the science of the necessary laws of thought, or, still better (thought always taking place by means of signs), it is general semiotic, treating not merely of truth, but also of the general conditions of signs being signs (which Duns Scotus called grammatica speculativa), also of the laws of the evolution of thought, which since it coincides with the study of the necessary conditions of the transmission of meaning by signs from mind to mind, and from one state of mind to another, ought, for the sake of taking advantage of an old association of terms, be called rhetorica speculativa, but which I content myself with inaccurately calling objective logic, because that conveys the correct idea that it is like Hegel’s logic.

1897 [c.] On Signs [R] CP 2.227

Logic, in its general sense, is, as I believe I have shown, only another name for semiotic (σημειωτική), the quasi-necessary, or formal, doctrine of signs. By describing the doctrine as “quasi-necessary,” or formal, I mean that we observe the characters of such signs as we know, and from such an observation, by a process which I will not object to naming Abstraction, we are led to statements, eminently fallible, and therefore in one sense by no means necessary, as to what must be the characters of all signs used by a “scientific” intelligence, that is to say, by an intelligence capable of learning by experience.
1902 | Minute Logic: Chapter I. Intended Characters of this Treatise | MS [R] 425:117

That our thoughts are signs is an old and familiar doctrine. I show that it is only in so far as thoughts are signs, and particularly [...] symbols, that they become subjects of logic; and further that the rules of logic are applicable to all symbols. Accordingly by regarding logic as a science of signs or formal semeiotic, and in the main as a science of symbols, or formal symbolic, we accurately cover its subject matter, and at the same time insure ourselves against all risk of being led astray into psychology. The word formal, in this connection, signifies that only the general conditions to which signs ought to conform are to be considered.

From an earlier/discarded draft

1904 | Reason's Conscience: A Practical Treatise on the Theory of Discovery; Wherein logic is conceived as Semeiotic | MS [R] 693:188-190

The study of languages ought to be based upon a study of the necessary conditions to which signs must conform in order to fulfill their functions as signs. I have gradually been led to conclude that it is best to identify logic with this study, notwithstanding its thus being made to include something which has no bearing upon the strength of arguments. For there is but little of this superfluous matter, - too little to make a separate science of, - and it is needed for its linguistic and rhetorical applications, as well as having a value simply as truth; and a simpler unity is thus given to logic. I might, therefore, very well call it speculative semeiotic.

Peirce did not date the manuscript "Reason's Conscience" (693). Nor does Richard Robin provide a date in his catalogue over Peirce's manuscripts. The dating is based on the year given by Carolyn Eisele in Historical Perspectives on Peirce's Logic of Science. MB

1904 | Ideas, Stray or Stolen, about scientific writing. No. 1 | EP 2:327

The speculative rhetoric that we are speaking of is a branch of the analytical study of the essential conditions to which all signs are subject, - a science named semeiotics, though identified by many thinkers with logic.


Logic is by P. made synonymous with semeiotic, the pure theory of signs, in general.

This quote has been taken from Kenneth Laine Ketner's 1983 reconstruction of Peirce's 'Autobiography'
The highest kind of symbol is one which signifies a growth, or self-development, of thought, and it is of that alone that a moving representation is possible; and accordingly, the central problem of logic is to say whether one given thought is truly, i.e., is adapted to be, a development of a given other or not. In other words, it is the critic of arguments. Accordingly, in my early papers I limited logic to the study of this problem. But since then, I have formed the opinion that the proper sphere of any science in a given stage of development of science is the study of such questions as one social group of men can properly devote their lives to answering; and it seems to me that in the present state of our knowledge of signs, the whole doctrine of the classification of signs and of what is essential to a given kind of sign, must be studied by one group of investigators. Therefore, I extend logic to embrace all the necessary principles of semiotic, and I recognize a logic of icons, and a logic of indices, as well as a logic of symbols; and in this last I recognize three divisions: Stecheotic (or stoicheiology), which I formerly called Speculative Grammar; Critic, which I formerly called Logic; and Methodeutic, which I formerly called Speculative Rhetoric.

...the science of the general constitution of signs, – the physiology of signs, cenoscopic semeiotics.

... when I said that those signs that have a logical interpretant are either general or closely connected with generals, this was not a scientific result, but only a strong impression due to a life-long study of the nature of signs. My excuse for not answering the question scientifically is that I am, as far as I know, a pioneer, or rather a backwoodsman, in the work of clearing and opening up what I call semiotic, that is, the doctrine of the essential nature and fundamental varieties of possible semiosis; and I find the field too vast, the labor too great, for a first-comer.

It seems to me that one of the first useful steps toward a science of semeiotic (sémeiotiké), or the cenoscopic science of signs, must be the accurate definition, or logical analysis, of the concepts of the science.

“Signics” sounds to me narrower than Semeotic, since signification is only one of the two chief functions of signs; as the elegant and correct John of Salisbury notices, in referring to “quod fere in omnium ore celebre est, aliud scilicet esse quod appellatiua significant, et aliud esse quod nominant.”
Nominantur singularia, sed uniuersalia significantur.” (Metalogicus II. xx. I copy from the ed. of 1620.) So significs appears to be limited to the study of the relations of Signs to their Interpretants; and I presume you do so limit it. On the other hand Logic is more interested in the Truth of Signs, i.e. in their relation to their Objects. But I am satisfied that in the present state of the subject, there is but one General science of the nature of Signs.

1909 | Preface | MS [R] 634:15

…it would seem proper that in the present state of knowledge logic should be regarded as coëxtensive with General Semeiotic, the a priori theory of signs.

nd | Miscellaneous Fragments [R] | MS [R] S104:23

Logic is [...] synonymous with semeiotic, the pure theory of signs in general.