Peirce's first(?) classification of sciences (1889)
from Century Dictionary (p. 5397)
Classification "in reference to their degree of specialization":

Science

(A) Mathematics
- study of the relations of the parts of hypothetical constructions
- (no observation of facts but only of the creations of our minds
  - (1) Pure mathematics
    - suppositions are arbitrary
  - (2) Applied Mathematics
    - hypotheses are simplifications of real facts
    - (a) mathematical philosophy
      - theory of probabilities, etc.
    - (b) mathematical physics
      - analytical mechanics, etc.
    - (c) mathematical psychics
      - political economics, etc.

(B) Philosophy
- the examination and logical analysis of the general body of fact
- precedes successful dealing with special elements of universe both in reason and in history
  - (1) Logic
  - (2) Metaphysics
    - Formal grammar
    - Logic proper (philosophical trivium, 1867)
    - Formal rhetoric

(C) Nomology
- science of the most general laws or uniformities
  - (1) Psychology
  - (2) General physics

(D) Chemistry
- the determination of physical constants
- the study of different kinds of matter in which these constants differ

(E) Biology
- study of peculiar class of substances, the protoplasms
- and the kinds of organisms into which they grow

(F) Sciences of organizations of organisms
  - (1) Physiology
  - (2) Sociology
    - science of psychical unions, especially modes of human society
    - including ethics, linguistics, politics, etc.

(G) Descriptions and explanations of individual objects or collections
  - (1) Cosmology
    - astronomy, geognosy, etc.
  - (2) Accounts of human matters
    - statistics, history, biography, etc.
Peirce's classification of theoretical sciences and arts (1898, EP2.35-37)
Classification according to "the abstractness of their objects".

1. Mathematics
   (negative science, 1896)
   - it inquires just hypotheses, not actual facts
   - it draws upon experience merely for suggestions

2. Philosophy
   - search of real truth (reality of actual existence and of potential being)
   - it draws upon experience for premises (positive science, 1896)
   - it uses as its premises, not the special facts, but universal facts contained in any experience

   2.1. Logic
   - science of thought in general,
     its general laws and kinds

   2.2. Metaphysics
   - science of being in general,
     its laws and types

3. Special sciences
   - search of real truth (only about existents)
   - their premises are special facts of experience
   (positive science, 1896)

   3.1. Psychics
   - search of real truth (only about existents)
   - their premises are special facts of experience

   3.1.1. Nomological -
     Sciences of Psychical Laws
     e.g. psychology

   3.1.2. Classificatory -
     Sciences of Psychical Kinds
     e.g. linguistics, anthropology

   3.1.3. Descriptive -
     Sciences of Individual Psychical Objects
     e.g. history

   3.2. Physics
   - search of real truth (only about existents)
   - their premises are special facts of experience

   3.2.1. Nomological -
     Sciences of Physical Laws
     e.g. dynamics

   3.2.2. Classificatory -
     Sciences of Physical Kinds
     e.g. chemistry

   3.2.3. Descriptive -
     Sciences of Individual Physical Objects
     e.g. geology, astronomy, meteorology,...

4. Applied sciences - Arts
   - e.g. ethics, religion, law,
     gold beating, cooking,...

A) Science of Discovery
Science of Research
Heuristic Science

- (AII) Mathematics
  - (AIIa) Phenomenology (1903,1909) - Categories (1902) - Phaneroscopy (1905)
  - (AIIb) Normative Sciences
    - (AIIb) Esthetics - Axiagastics (1905)
    - (AIIb) Ethics - Anthetics/Practics (1906)
    - (AIIb) Logic - Science of general laws of Signs - Formal Semiotic (Semeiotic)
      - (AIIb1) Stechiology - Philosophical/Universal/Speculative Grammar
      - (AIIb2) Logical Critic, Critical Logic, Logic proper
      - (AIIb3) Methodute - Philosophical/Universal/Speculative Rhetoric - Objective logic

- (AII) Cenoscopy - Philosophia prima
  - (AIIc) General Metaphysics - Ontology
  - (AIIc) Physical Metaphysics

- (AII) Idioscopy - Special sciences
  - (AIIa) Physical Sciences - Physiognosy
  - (AIIb) Psychical (or Human) Sciences - Psychognosy

- (AIIIa) Classificatory Physics - Sciences of Physical Kinds
  - Molar Physics
  - Molecular Physics
  - Etheral Physics
  - Descriptive Physics - Sciences of Individual Physical Objects
    - (1) Geognosy ('Earth')
    - (2) Chrystallography
    - Chemistry
    - Biology
      - (1) Physiology
      - (2) Anatomy

- (AIIIb) Descriptive Physics - Sciences of Individual Psychical Objects
  - (1) Word Linguistics;
  - (2) Grammar;
  - (3) History proper

- (AIII) Idioscopy - Special sciences
  - (1) History proper
  - (2) Art Criticism (Criticism of Military Operations, Criticism of Architecture, etc.)

B) Science of Review - Retrospective Science
Science of Science - philosophia ultima - synthetic philosophy

C) Practical Science - Arts
- e.g. engineering, medical sciences, science of morality (i.e. ethics in common sense)