tised in the arts of defining, classifying and the detection of fallacies and inconsistencies.

The principle of causation is to be taught as a process occurring in nature, and applicable to material things, and not as a notion in the minds of philosophers.

Subject to these requirements, a wide discretion is to be allowed to the lecturer.

## COURSE ON SCIENCE AS APPLIED TO INDUSTRY

The Sheffeld Scientific School at Yale University announces a new general course, to be given during sophomore and senior years on "Science as Applied to Industry" to be given next fall for the first time. The official pamphlet says:

The object of this course is to give students a broad training, based upon a knowledge of certain of the fundamental sciences and of scientific methods, for executive and managerial positions in the business world. The course is not designed for students seeking preparation for a professional career in some particular branch of science, such as chemistry, geology, or metallurgy, where problems of production are likely to occupy their attention.

In accordance with the theory of the freshman year, this course may be chosen by any member of the first-year class. The best approach, however, is said to be by Group II. of that year, comprising English, history, mathematics, chemistry or physics, and French, German or Spanish. The electives come only in junior and senior years; and the student will find his work closely laid out for him until then. The sophomore will take calculus, physics, his chosen modern language, a course in contemparary English, qualitative analysis, and mineralogy and crystallography.

In junior year the student will take physical chemistry, physical and historical geology, elementary metallurgy, drawing, industrial mineralogy, business finance, elementary economics, and more of the same sort of English. He may also elect from elementary botany, biology, or modern language, sufficient hours to fulfill the required number. When he becomes a senior, he will take general chemistry, economic geology, statistics and reports, in-

dustrial management, principles of accounting, elementary petrology and applied structural geology, metals and alloys, industrial management, and cost analysis. For electives, he may choose from elementary organic chemistry, industrial chemistry, economic and regional geology, business law, insurance, metallurgy of iron and steel, transportation and economic problems. The total of recitation, lecture, laboratory work and preparation comes to forty-six hours in sophomore year, forty-five and one half hours in junior year, and forty-five hours in senior year.

The pamphlet explains that "while no attempt is made to cover the entire field of natural and physical science as a foundation for the more practical business studies which form in the last two years an integral part of the course, attention is centered upon three branches of science, those of chemistry, geology, and metallurgy, the work in these sciences being so arranged that the natural and logical order of development is followed, covering in some cases four years of work in a single field. The scientific studies are supplemented in each of the years by general or cultural studies in English or modern language, and in junior and senior years by the study of economics, and of selected subjects within the general field of business administration."

## STANDARDIZATION OF INDUSTRIAL LABORATORY APPARATUS

The Journal of Industrial and Engineering Chemistry states that through the efforts of certain apparatus manufacturers, there met informally at the Chemists' Club. New York City, representatives of the following companies to discuss the advisability of drawing up standard specifications for laboratory apparatus to be used in their industrial research and works control laboratories: Barrett Company, General Chemical Company, Atmospheric Nitrogen Corporation, Grasselli Chemical Company, National Aniline & Chemical Company, New Jersey Zinc Company, Solvay Process Company, Standard Oil Company of New Jersey, and E. I. du Pont de Nemours & Company.