

tions, and outstanding problems of the leading manufacturing industries of the United States. Lectures and quiz work supplemented by frequent observation trips. Prerequisites, Geography and Industry 1. Both terms. Three hours. Three units. Assistant Professor A. H. WILLIAMS.

GEOGRAPHY AND INDUSTRY 8. *Industrial Management*.—Management of industrial enterprises, with particular reference to factory organizations. The rise of modern management. The modern factory. Principles of organization and executive control. Standards in management. Time and motion study as aids to production. The production and planning departments. Wage systems. The attitude of management, labor and the public to modern management. Special lectures by organization and management experts. Prerequisites, Geography and Industry 1 and 7. Both terms. Three hours. Three units. Assistant Professor LANSBURGH.

GEOGRAPHY AND INDUSTRY 9. *Field Work in Industry*.—A study of management method by inspection of management problems in manufacturing establishments. Inspection trips through leading plants in the Philadelphia district, together with reports and class discussion based on these trips. Must be taken co-ordinately with Geography and Industry (1). Prerequisites, Geography and Industry 1, 7 and 8. Both terms. Two hours. Two units. Assistant Professor LANSBURGH.

GEOGRAPHY AND INDUSTRY 10. *Industrial Relations and Employment Management*.—The problems of the manager of an enterprise in his relation to his employees and to the labor movement. The rise of personnel administration in management. Special attention is given to a discussion of the best principles and practice in connection with selection, assignment, medical work, education and training, promotion, profit sharing, labor turnover, unemployment, collective bargaining, and relations with organized labor. Prerequisites, Geography and Industry 1 and 7. G. and I. 8 is also required for all men except those in the Manufacturing and Labor Management Groups. Both terms. Three hours. Three units. Professor WILLITS, Assistant Professor A. H. WILLIAMS.

GEOGRAPHY AND INDUSTRY 12. *Industrial Policy*.—A study of the formulation of industrial policy by the chief executive of an establishment. This course will consist of the presentation and discussion of a series of typical specific problems of the sort that present themselves to the General Manager of a manufacturing concern. These concrete problems will ordinarily be presented by the executives themselves. Prerequisites, Geography and Industry 1, 7 and 8; Senior standing. Both terms. Two hours. Professor WILLITS.