SCIE258 (Topics in History of Science): The history of science, technology and culture through the lens of London and the United Kingdom

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The United Kingdom, with London as its focal point, is the site of many of the great advances in the history of science, technology and culture, including: prehistoric monuments, the birth of calculus, the law of gravitation, steam power, the Industrial Revolution, the theory of evolution, revolutionary theories of geology, the development of epidemiology, the emergence of capital markets, world-changing economic theories including those of Marx and Keynes, spectacular examples of architecture and engineering, computation and cryptography during World War II, psychoanalysis, the splitting of the atom, and the discovery of the structure of DNA. In this course we study many of these achievements, placing them in the context of their time, place and intellectual milieu by visiting the places where they happened and examining the artifacts and documents that are part of the story.

Likely texts include Sobel's *Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time*, Johnson's *The Ghost Map: The Story of London's Most Terrifying Epidemic – and How it Changed Science, Cities, and the Modern World*, and Gribbin's *Science: A History*. A major component of the course will be a project in which each student chooses a document or artifact held in the collection of the Royal Society or one of the other London institutions and conducts research on the chosen document or artifact. Another major component comprises visits to and research at sites of scientific interest, including some or all of the following: the Royal Society, the Ritblat Gallery at the British Library, the Museum of London, the Royal Institution, the University of Oxford (including the Museum of the History of Science), Bletchley Park (for WW2 codebreaking), the National Museum of Computing, Greenwich Observatory, Down House (Charles Darwin's residence), the Jenner Museum, Avebury, Stonehenge, the Herschel Museum of Astronomy, the Fleming Museum, and the Linnean Society.

The course is open to students of all majors and disciplines; there are no prerequisites. The content of the course will be adjusted to match the interests of the students involved. Core areas in the history of science will be supplemented with ideas from economics, business, history, literature, and other fields to reflect the majors of students participating in the course.