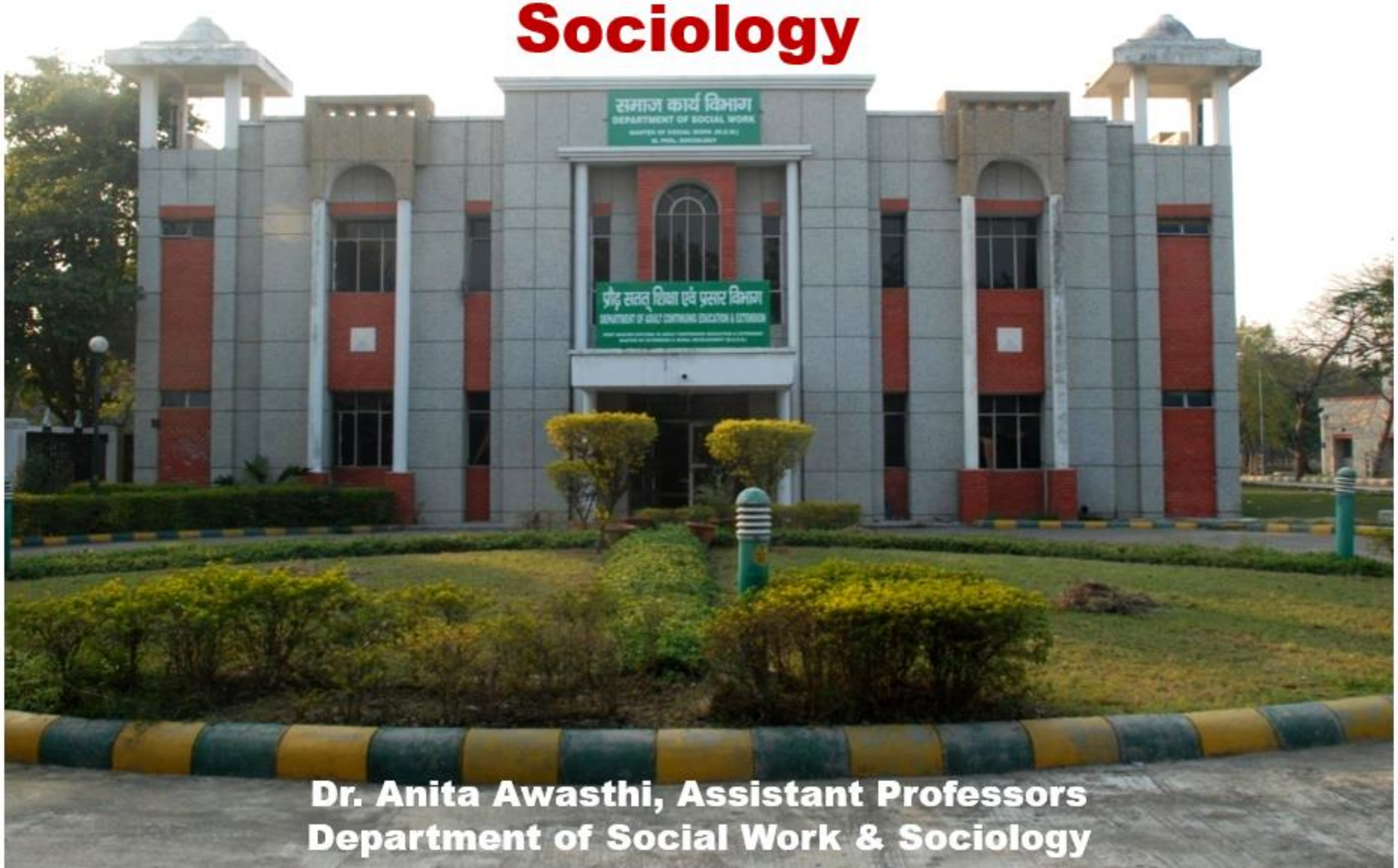
School of Arts, Humanities and Social Science

CSJMU Kanpur

Sociology



Dr. Anita Awasthi, Assistant Professors
Department of Social Work & Sociology

The Scientific Revolution and the Renaissance Period

fourteenth to sixteenth century A.D.

The impact of the scientific revolution was crucial not just in changing material life, **but also people's ideas about Nature and Society.**

History of science is a story of the interconnection between science and society, polity, economy and culture.

Science develops in response to human needs

It was a clear break from the past, a challenge to old authority. **Literature and science all flourished.**

Visual art Art, A scientific approach to Nature and the human body became prevalent. We can see this in the paintings of that period, which explored the smallest details of Nature and the human body.

Medicine. Doctors and physiologists directly observed how the human body was constructed. The fields of anatomy, physiology and pathology thus benefited greatly.

Chemistry A general theory of chemistry was developed. Chemical processes like oxidation, reduction, distillation, amalgamation etc. were studied.

Navigation and astronomy

The Scientific Revolution and the Renaissance Period

fourteenth to sixteenth century A.D.

Dutchman, Nicholas Copernicus

It was generally believed that the earth was fixed or stationary and the sun and other heavenly bodies moved around it. (This is known as a ‘geocentric’ theory.)

The Scientific Revolution and the Renaissance Period

fourteenth to sixteenth century A.D.

Dutchman, Nicholas Copernicus

It was generally believed that the earth was fixed or stationary and the sun and other heavenly bodies moved around it. (This is known as a 'geocentric' theory.)

The work of physicists and mathematicians like **Galileo** (1564-1642), **Johannes Kepler** (1571-1630) and subsequently, Sir Isaac Newton (1642- 1727) revolutionised science. It brought to the forefront the experimental method. Old ideas were challenged and alternatives were suggested. If these alternative ideas could be proved and repeatedly verified and checked out, they were accepted. If not, new solutions were sought.

The Scientific Revolution and the Renaissance Period

fourteenth to sixteenth century A.D.

Dutchman, Nicholas Copernicus

It was generally believed that the earth was fixed or stationary and the sun and other heavenly bodies moved around it. (This is known as a 'geocentric' theory.)

The work of physicists and mathematicians like **Galileo** (1564-1642), **Johannes Kepler** (1571-1630) and subsequently, Sir Isaac Newton (1642- 1727) revolutionised science. It brought to the forefront the experimental method. Old ideas were challenged and alternatives were suggested. If these alternative ideas could be proved and repeatedly verified and checked out, they were accepted. If not, new solutions were sought.

Biology and Evolution

Circulation of blood was discovered by **William Harvey** (1578-1657).

Charles Darwin (1809-1882) published the Origin of Species in 1859.

Herbert Spencer.

The Scientific Revolution and the Renaissance Period
fourteenth to sixteenth century A.D.

The impact of the scientific revolution was crucial not just in changing material life, **but also people's ideas about Nature and Society.**

History of science is a story of the interconnection between science and society, polity, economy and culture.

Science develops in response to human needs

It was a clear break from the past, a challenge to old authority. **Literature and science all flourished.**

Visual art Art, A scientific approach to Nature and the human body became prevalent. We can see this in the paintings of that period, which explored the smallest details of Nature and the human body.

Medicine. Doctors and physiologists directly observed how the human body was constructed. The fields of anatomy, physiology and pathology thus benefited greatly.

Chemistry A general theory of chemistry was developed. Chemical processes like oxidation, reduction, distillation, amalgamation etc. were studied.

Navigation and astronomy

Dutchman, Nicholas Copernicus
It was generally believed that the earth was fixed or stationary and the sun and other heavenly bodies moved around it. (This is known as a 'geocentric' theory.)

The work of physicists and mathematicians like Galileo Galilei (1564-1642), Johannes Kepler (1571-1630) and subsequently, Sir Isaac Newton (1642- 1727) revolutionised science. It brought to the forefront the experimental method. Old ideas were challenged and alternatives were suggested. If these alternative ideas could be proved and repeatedly verified and checked out, they were accepted. If not, new solutions were sought.

Biology and Evolution
Circulation of blood was discovered by William Harvey (1578-1657).
Charles Darwin (1809-1882) published the Origin of Species in 1859.
Herbert Spencer.

A.A.