

ANTHROPOLOGY (ANTH)

ANTH 1210 Ancient Peoples and Places 3 cr

An introduction to biological anthropology and archaeology. Topics include: biological evolution, evolution and comparative behaviour of primates, fossil evidence for human evolution, and the emergence of human culture. Through this study, students will learn to contextualize current human biological diversity, culture, and behaviour through the lens of our past. May not be held with ANTH 1211.

Equiv To: ANTH 1211

Attributes: Social Science, Recommended Intro Courses

ANTH 1220 Socio-Cultural Anthropology 3 cr

The comparative study of human societies and cultures, including language, economic and political organization, family and kinship, ritual and belief systems, cultural stability and change. May not be held with ANTH 1221 or the former ANTH 1520.

Equiv To: ANTH 1221, ANTH 1520

Attributes: Social Science, Recommended Intro Courses

ANTH 2000 Culture, Society, and Power 3 cr

An advanced introduction to cultural anthropology that focuses on anthropological approaches to the cross-cultural organization, dynamics, and tensions of social relationships at individual, group, and societal levels. May not be held with ANTH 2001 or the former ANTH 2390 or the former ANTH 2391.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Equiv To: ANTH 2001

Mutually Exclusive: ANTH 2390, ANTH 2391

Attributes: Social Science

ANTH 2020 Relatedness in a Globalizing World 3 cr

Anthropological approaches to diverse practices of human relatedness across cultures and over time, including 21st century reconfigurations of marriage, family, reproduction and kinship.

Attributes: Social Science, Written English Requirement

ANTH 2040 A Socio-Cultural Survey of North American Indigenous Peoples 3 cr

An ethnographic survey of North American Indigenous Peoples. May not be held with ANTH 2041.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Equiv To: ANTH 2041

Attributes: Social Science

ANTH 2060 European Archaeology 3 cr

This course will survey the archaeological record of Europe from the earliest human occupation through the rise of early cities and complex societies. Case studies will be used to examine the social, political, economic, and technological adaptations of early human societies in the region.

Attributes: Social Science

ANTH 2100 Introduction to Archaeology 3 cr

A general introduction to the principles of archaeology and the materials, analyses, and interpretations encountered in archaeological study.

Students may not hold credit for both ANTH 2100 and ANTH 2101.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

Equiv To: ANTH 2101

Attributes: Social Science

ANTH 2240 Plagues and People 3 cr

Examines selected plagues in evolutionary, ecological, and epidemiological context, and considers the complex biological, social, and economic repercussions for human populations. Foci include past, present, and emerging infectious disease epidemics.

Attributes: Social Science

ANTH 2300 Anthropology of Childhood 3 cr

Anthropological approaches to the study of children and childhood. Childhood is examined as a social and historical construction, and children are analyzed as active contributors to their social worlds. Cross-cultural ethnographic material relating to children and youth is critically read and discussed.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Attributes: Social Science

ANTH 2370 Language and Culture 3 cr

The investigation of the complex interaction of language and culture, including linguistic perspectives on prehistory, ethnosemantics, and sociocultural correlations of linguistic variation. May not be held with ANTH 2011.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Equiv To: ANTH 2011

Attributes: Social Science

ANTH 2430 Ecology, Technology and Society 3 cr

Ecological analysis of the interplay of socio-political and technological processes in different types of societies. Focus upon the ecological side-effects and selected technologies, economic mechanisms and political institutions. Students may not hold credit for both ANTH 2430 and ANTH 2500. May not be used for Major or Minor in Anthropology.

Mutually Exclusive: ANTH 2500, ENG 3020

Attributes: Social Science

ANTH 2470 Media Anthropology 3 cr

This course focuses on media production and dissemination and on images of the world created by media. Media practices and products are addressed in relation to the formation of social relations and identities, the shaping of peoples' sense of time and space, and media's role in the construction of communities and in processes of socio-economic and cultural change.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Attributes: Social Science

ANTH 2500 Culture, Environment, and Technology 3 cr

Study of ecological systems, focusing on processes of adaptation in societies differing in organization and in views of technology. Demographic and technological changes are examined in relation to cultural, political and ideological factors. May not be held with ANTH 2430.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Mutually Exclusive: ANTH 2430

Attributes: Social Science

ANTH 2510 Anthropology of Economic Systems 3 cr

A comparative study of factors bearing upon production, exchange, and consumption of goods, practices and ideas in varying social contexts. The course also examines the articulation of economic systems in the global political economy.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Attributes: Social Science

ANTH 2530 Anthropology of Political Systems 3 cr

Analysis of political institutions and their changing nature in diverse societies and forms of society, with attention to authority, leadership, decision-making, power and its disguises, and forms of resistance.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Attributes: Social Science

ANTH 2550 Culture and the Individual 3 cr

The study of the interrelations between life-cycle, psychological functioning and malfunctioning, and social and cultural institutions. Emphasis is placed on enculturation and life-cycle rituals. May not be held with ANTH 2551.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Equiv To: ANTH 2551

Attributes: Social Science

ANTH 2560 Anthropology of Illness 3 cr

Critical examination of illness, health, and disease from a biocultural perspective. Students will learn about cross-cultural variations in how health is understood and study links between health and evolutionary and environmental factors.

Attributes: Social Science

ANTH 2570 Urban Anthropology 3 cr

Comparison of the processes of urbanization and various forms of urbanism, with attention to archaeological evidence and the emergence of urbanism and urbanization in developing nations.

Attributes: Social Science

ANTH 2600 Old World Prehistory 3 cr

A survey of the archaeological evidence and cultural interpretations of Old World cultures from the beginning of the Pleistocene to the development of agriculture.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

Attributes: Social Science

ANTH 2610 Old World Civilizations 3 cr

Archaeological evidence and cultural interpretations of the origins of complex societies from the development of agriculture to the beginnings of written history in the Old World.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

Attributes: Social Science

ANTH 2620 Archaeology of Pre-Colonial Americas 3 cr

A survey of archaeological evidence and interpretations for peoples in the Americas prior to European contact. This course will explore the insights that are being gained through the application of an integrative approach to Indigenous Archaeology to an understanding of the cultural past of the Americas with particular focus on North America.

Attributes: Social Science

ANTH 2630 Archaeology of Agriculture and Urbanism in the Americas 3 cr

A survey of archaeological evidence and interpretations of cultures in the Americas from the origins of agriculture to the period of initial European contact. Emphasis will be placed on the rise of urbanism in Central and South America and encompassing population centres established in North America.

Attributes: Social Science

ANTH 2640 Manitoba Archaeology 3 cr

Archaeological evidence and interpretations for the history of what is now Manitoba up to the time of European contact.

Attributes: Social Science

ANTH 2650 Archaeology of the Ancient Near East 3 cr

This course is an overview of the prehistory and early historical periods of the ancient Near East. Considerable attention is given to the fundamental transitions that transform the human existence and create the foundations for later civilization, such as: (1) the colonization of the region by humans; (2) the emergence of food production (domestication of plants and animals), settled village life, and hierarchical social organization; (3) the rise of states, urban centers, and writing; and (4) the emergence of militaristic empires. The course examines both archaeological and historical evidence with a heavy emphasis on material culture, primary archaeological, and historical data, and the process of scholarly interpretation.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

Attributes: Social Science

ANTH 2800 Introduction to Biological Anthropology 3 cr

A general introduction to the field of biological anthropology. This course will capture the scope of areas covered by biological anthropology and provide a foundation for human osteology. Areas covered will include palaeoanthropology, bioarchaeology, forensic anthropology, primatology, and medical anthropology. Through this course, students will be exposed to and learn to work ethically with replica human skeletal remains.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: one of ANTH 1210, ANTH 1211, or written consent of instructor.

Attributes: Social Science

ANTH 2860 Evolution and Human Diversity 3 cr

An introduction to the interacting roles of genes, culture and environment in adaptive context. Explores the biological bases for variation within/between modern human populations. May not be held with ANTH 2861.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

Equiv To: ANTH 2861

Attributes: Social Science

ANTH 2880 Human Evolution 3 cr

Intensive study of fossil evidence for human biological evolution.

Consideration of the relationships of biological, cultural, and behavioural adaptations in human evolution.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor

Attributes: Social Science

ANTH 2890 Human Population Biology 3 cr

Intensive study of the evolutionary implications of genetic variation within/between human populations in relation to ecological and cultural variation.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 2860] or written consent of instructor.

Attributes: Social Science

ANTH 2910 Post-Col Archaeology 3 cr

An archaeological survey of the post-contact period in North America. Case studies will emphasize selected regions, time periods, and topics that may include the fur trade and settler colonialism.

Attributes: Social Science

ANTH 2930 Archaeology of a Selected Area 3 cr

Detailed examination of the archaeology of a geographical area that is of current interest to faculty and students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

Attributes: Social Science

ANTH 3200 Anthropology of Food 3 cr

Considers the diversity of ways that anthropologists have used food as a productive entry point for understanding culture, society, and relations with the environment. The course will survey highpoints in the history of the anthropology of food and address current topics such as food security and food movements.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Attributes: Social Science

ANTH 3320 Women in Cross-Cultural Perspective 3 cr

Critical perspectives on the role of women cross-culturally, with ethnographic reference to non-Western societies and cultures. May not be held with ANTH 3321.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Equiv To: ANTH 3321

Attributes: Social Science

ANTH 3380 Anthropology and Contemporary Social Issues 3 cr

Anthropological perspectives on poverty, social accountability, colonialism, racism, education, ecological degradation and violence. Students may not hold credit for both ANTH 3380 and ANTH 3381.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 2000 (or ANTH 2001) and 3 credit hours from the following: ANTH 2020 or ANTH 2530 or ANTH 2831] or [the former ANTH 2390 or the former ANTH 2391] or written consent of instructor.

Equiv To: ANTH 3381

Attributes: Social Science

ANTH 3470 History of Anthropology 3 cr

A temporal survey of the development of major paradigms and theoretical movements in anthropological thought and method. Students may not hold credit for both ANTH 3470 and ANTH 3471.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 2000 (or ANTH 2001) and 3 credit hours from the following: ANTH 2020 or ANTH 2530 or ANTH 2831] or [the former ANTH 2390 or the former ANTH 2391] or written consent of instructor.

Equiv To: ANTH 3471

Attributes: Social Science

ANTH 3500 Archaeology of Inuit Nunangat 3 cr

This course examines the history of people, animals, and places in what is now Inuit Nunangat through archaeology, ethnography, and oral histories. May not be held with ANTH 3501.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: ANTH 2100 or ANTH 2101 or written consent of instructor.

Equiv To: ANTH 3501

Attributes: Social Science

ANTH 3550 Canadian Subcultures 3 cr

An anthropological study of dimensions of community, ethnicity, and social class in Canadian society. Students may not hold credit for both ANTH 3550 and ANTH 3551.

Equiv To: ANTH 3551

Attributes: Social Science

ANTH 3600 Archaeological Theory 3 cr

The historical development and current application of theoretical frameworks for archaeological interpretation.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 2100 or ANTH 2101] or written consent of instructor.

Attributes: Social Science

ANTH 3700 Human Osteology 3 cr

(Lab required) An in depth examination of human skeletal biology.

Through this course, students will learn how to identify human skeletal remains and will gain foundational knowledge and experience with core methods used in archaeological, palaeoanthropological, and forensic contexts. Students in this course will be exposed to and learn to work ethically with both real and replica human skeletal remains. May not be held with the former ANTH 2820.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: ANTH 2800 or written consent of instructor.

Equiv To: ANTH 2820

Attributes: Social Science

ANTH 3720 Demography of Past Populations 3 cr

This course provides students with a basic understanding of, and skills associated with, demographic methods and techniques applied to the analysis of long-term changes in the structure of human populations.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

Attributes: Social Science

ANTH 3740 Human Growth and Variation 3 cr

An examination of variation in human growth and development viewed in an evolutionary perspective.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1210 or ANTH 1211] or written consent of instructor.

Attributes: Social Science

ANTH 3750 Anthropological Perspectives on Globalization and the World-System 3 cr

An anthropological perspective on the modern world-system and the expansion of capitalism into peripheral areas of the world; the transformation of indigenous societies and cultures; the rise of ethnic conflict, protest and resistance; and a comparative examination of selected global and transnational processes. May not be held with ANTH 3751.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [one of: ANTH 1220, ANTH 1221, the former ANTH 1520, ANTH 2000, ANTH 2001, the former ANTH 2390, or the former ANTH 2391] or written consent of instructor.

Equiv To: ANTH 3751

Attributes: Social Science

ANTH 3810 Anthropology of Belief Systems 3 cr

A comparative study of belief systems, rituals, and ceremonies in non-Western and Western societies and cultures. May not be held with ANTH 3811.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Equiv To: ANTH 3811

Attributes: Social Science

ANTH 3910 Archaeological Field Training 6 cr

Theory and practical field experience in the investigation of archaeological sites from the formulation of research designs through data analysis in the field.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [ANTH 2100 or ANTH 2101] and written consent of instructor.

Attributes: Social Science

ANTH 3930 Ethnographic Research Methods 3 cr

A survey of critical and engaged ethnographic research methods with an emphasis on qualitative approaches. May not be held with the former ANTH 3390.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: ANTH 2000 or written consent of instructor.

Equiv To: ANTH 3390

Attributes: Social Science

ANTH 3950 Archaeological Laboratory Methods 3 cr

Introduction to the analysis of materials recovered from archaeological contexts, such as stone and ceramic technologies, and animal and botanical remains through a combination of lectures, demonstrations and other laboratory exercises.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: ANTH 2100 or written consent of instructor.

Attributes: Social Science

ANTH 3960 Cultural Heritage Stewardship 3 cr

This course critically reviews the current state of cultural heritage stewardship in Canada. Particular focus is given to the archaeological cultural resource management industry and its colonial underpinnings. The roles of legislation, Indigenous communities and governments, public agencies, and private contractors are discussed.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: ANTH 2100 or written consent of instructor.

Attributes: Social Science

ANTH 3970 Ethnography of a Selected Region 3 cr

An ethnographic survey of a selected geographical area currently of interest to faculty and students. The areas to be studied may differ from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. May not be held with ANTH 3971.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 1220 or ANTH 1221 or the former ANTH 1520] or written consent of instructor.

Equiv To: ANTH 3971

Attributes: Social Science

ANTH 3980 Botanical Analysis in Archaeology 3 cr

Analytic and interpretive methods for treating archaeologically recovered plant remains and soils are addressed through lectures, demonstrations, and laboratory exercises.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 2100] or written consent of instructor.

Attributes: Social Science

ANTH 3990 Faunal Analysis in Archaeology 3 cr

Analytic and interpretive methods of treating archaeologically recovered faunal remains are addressed through lectures, demonstrations, and laboratory exercises.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 2100] or written consent of instructor.

Attributes: Social Science

ANTH 4080 Museums, Memory, and Witnessing 3 cr

The course brings scholarship, contemporary art, exhibitions, activism, and policy into creative and critical conversation on the state and idea of museums today. Discussing key issues in museology – such as collections and collecting, conservation, representation, repatriation, and restitution – we explore the museum as witness. Particularly examining how museums are entangled with violence, we attend to memory as our approach for delving into both museums' histories and their imagined futures. Includes visiting museums.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: written consent of instructor.

Attributes: Social Science

ANTH 4470 Scientific Methods and Applications in Archaeology and Biological Anthropology 3 cr

In this course, a range of scientific methods that can be applied to answer questions in archaeology and biological anthropology will be considered. These include microscopy, 3-D and virtual technologies, ancient DNA, and elemental analyses. Students will learn how many of the core techniques are transferable across fields and will learn the strengths and limitations of the different techniques. The class will be formatted as a seminar class, combined with practical and laboratory-based exercises. Field trips to facilities across the University will be scheduled in class time over the course of the term. May not be held with the former ANTH 4860 when titled "Advanced Practicum in Tools, Techniques & Interpretation for Biological Anthropology and Archaeology."

PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: one of ANTH 2100, ANTH 2101, ANTH 2860, ANTH 2861, ANTH 2890, or written consent of instructor.

Mutually Exclusive: ANTH 4860

Attributes: Social Science

ANTH 4700 Forensic Anthropology 3 cr

An in depth coverage of forensic anthropology, including introduction to core methods and techniques. Students will learn laboratory and field methods necessary for recovery and identification of human remains from forensic contexts. Students will gain an appreciation of the central role of human biological variation in reconstructing aspects such as age at death, sex, and population affinity. They will be encouraged to think about the practices they learn from decolonizing and diversifying standpoints. Through this course, students will work with both real and replica human skeletal remains. May not be held with the former ANTH 3730.

PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: one of ANTH 3700, the former ANTH 2820, or written consent of instructor.

Mutually Exclusive: ANTH 3730

Attributes: Social Science

ANTH 4710 Bringing the Past to Life Through Bioarchaeology and Palaeopathology 3 cr

An in-depth coverage of the areas of bioarchaeology and palaeopathology to learn about how we can gain insight into the lived experiences of past peoples from their biological remains. Students will become familiar with the sources of evidence used and will gain a breadth of knowledge into the different areas of inquiry. Students will also gain an appreciation for the complexities of the topic and for the ways in which the study of the past can connect to current understandings of adaptation and health. Students may directly interact with real or replica human remains in this course.

PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: one of ANTH 3700, the former ANTH 2820, or written consent of instructor.

Attributes: Social Science

ANTH 4760 Practicum in Archaeology 3 cr

This course is designed to provide advanced undergraduate students in archaeology with individualized practical experience in different aspects of archaeology by working with professional archaeologists.

PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: [ANTH 2100] and written consent of instructor.

Attributes: Social Science

ANTH 4780 Advanced Topics in Socio-Cultural Anthropology 3 cr

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: written consent of instructor or department head.

Attributes: Social Science

ANTH 4790 Selected Topics in Archaeology 3 cr

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: written consent of instructor or department head

Attributes: Social Science

ANTH 4800 Seminar in Applied Anthropology 6 cr

A review of the history of applied anthropology and investigation of major case studies, research methodologies, intervention strategies, and substantive areas of application.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: written consent of instructor or department head.

Attributes: Social Science

ANTH 4830 Advanced Reading and Research 3 cr

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: written consent of instructor and department head.

Attributes: Social Science

ANTH 4840 Advanced Independent Work 6 cr

The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: written consent of instructor and department head.

Attributes: Social Science

ANTH 4850 Advanced Seminar in Anthropological Theory 3 cr

An analysis of the process of theory formation in the social sciences in general and in cultural (social) anthropology in particular. The theoretical content of various contemporary "schools" in anthropology is critically analyzed.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ANTH 3470 or ANTH 3471] or written consent of instructor or department head.

Attributes: Social Science

ANTH 4860 Selected Topics in Biological Anthropology 3 cr

Topics in biological anthropology which will vary depending on the needs of students and the interest of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: written consent of instructor or department head.

Mutually Exclusive: ANTH 4470

Attributes: Social Science