ANTHROPOLOGY (ANTH)

ANTH 100 Introduction to Biological Anthropology (Units: 3)
Human beings in relation to the animal kingdom, geological time, and human evolution. Topics include fossil humans, human heredity, anthroscopy, criteria of race, and racial theories and problems.
Course Attributes:
  • B2: Life Science

ANTH 110 Introduction to Archaeology (Units: 3)
Old and New World prehistory; discovery and invention, domestication of plants and animals, science, technology, and other aspects of culture.
Course Attributes:
  • C2: Humanities
  • Global Perspectives

ANTH 120 Introduction to Social and Cultural Anthropology (Units: 3)
Principles and concepts of sociocultural anthropology. People and environment. Social relations: kinship, religion, social control, and racism. Social change and applied anthropology.
Course Attributes:
  • D1: Social Sciences
  • Social Justice

ANTH 130 Introduction to Visual Anthropology (Units: 3)
The role of film, photography, digital and multimedia in the examination of human diversity. The study of visual aspects of human behavior and the use of visual media in research and visual anthropology. (Plus-minus letter grade only)
Course Attributes:
  • D1: Social Sciences

ANTH 300 Foundations of Anthropology: History (Units: 3)
Prerequisites: ANTH 100, ANTH 110, ANTH 120, and ANTH 130.
Theoretical foundations of anthropology: major trends in anthropological thought and practice up to the present.

ANTH 301 Foundations of Archaeology (Units: 3)
Prerequisites: Upper-division standing; ANTH 110; or consent of the instructor.
Introduces and develops archaeological theory in its archaeological- anthropological paradigms with an emphasis on the role of material culture. (Plus-minus letter grade only)

ANTH 302 Foundations of Human Variation (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4; ANTH 100 or one course in college biology; or consent of the instructor.
Examines the nature and extent of heritable differences among human populations in an evolutionary perspective. The role of genetics and environment in the formation of these differences is considered, as well as the social and biological concept of race.
Course Attributes:
  • UD-B: Physical Life Science

ANTH 303 Foundations of Visual Anthropology (Units: 3)
Prerequisites: Restricted to upper-division standing; ANTH 130; or consent of the instructor.
Introduces and develops theory in visual anthropology. Explores major research paradigms in the field including kinesics (proxemics and dance), painting and related arts, photography, commercial, ethnographic and applied film, indigenous media, multimedia and multimodal anthropology, and museums and audience research. (Plus-minus letter grade only)

ANTH 305GW Writing Anthropology - GWAR (Units: 3)
Prerequisites: ANTH 120, ENG 214 or equivalent with a grade of C- or better.
Advanced development of writing skills in anthropology focusing on descriptive, interpretive, critical analyses, popular media, and scholarly research. Regional or topical theme varies. (ABC/NR grading only)
Course Attributes:
  • Graduation Writing Assessment

ANTH 315 Regional Ethnography (Units: 3)
Prerequisites: Upper-division standing, ENG 214.
Apply a cultural area study approach to people and cultures around the world; focus on the history and contemporary cultures of East Asia, Central America, and West Africa. Topic to be specified in Class Schedule. May be repeated when topics vary.

ANTH 316 Contemporary Culture of Greece (Units: 3)
Prerequisite: ENG 214 or equivalent.
The culture of contemporary Greece within the framework of the social sciences, particularly anthropology and folklore.
(This course is offered as MGS 316 and ANTH 316. Students may not repeat the course under an alternate prefix.)

ANTH 319 Cultures of the Middle East and North Africa (Units: 3)
Prerequisites: Upper-division standing; ENG 214.
An introduction to the variety of cultures and communities in the Middle East and North Africa. Differences in history, religion, social organization, language, politics, and power are highlighted in lectures, ethnographies, and film.

ANTH 320 Racism: Cross-Cultural Analysis (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
The cultural history of racism as related to colonialism and imperialism. Racism as an on-going intellectual and political movement. Anti-racism and educational-anthropological methods to defeat racism.
(This course is offered as ANTH 320 and CST 320. Students may not repeat the course under an alternate prefix.)

ANTH 321 Endangered Cultures (Units: 3)
Prerequisite: Upper-division standing, ENG 214 or equivalent.
The interaction between non-industrial and industrial societies with a focus on cultural degradation and extermination of non-industrial societies beginning 150 years ago.

ANTH 325 Class: Cross-Cultural Analysis (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
Exploration of the cultural production of class and status in a comparative perspective. Reading of theoretical texts and ethnographies, exploration of class markers, and the production of distinction in students’ own lives.
ANTH 326 Origins of Art and Visual Representation (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
Examination of the emergence and development of art and visual representation as a human social, political, cognitive, and aesthetic behavior. Geographic coverage is global, temporal coverage from early humans through (pre)history. (Plus-minus letter grade only)

ANTH 327 Anthropology and Film (Units: 3)
Prerequisite: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.
Social and cultural anthropology through films, ethnographies, and popular writings of anthropologists.
(This course is offered as ANTH 327 and CINE 327. Students may not repeat the course under an alternate prefix.)

Course Attributes:
- UD-D: Social Sciences
- Global Perspectives

ANTH 328 Anthropology and Photography (Units: 3)
Prerequisite: Restricted to upper-division standing or consent of the instructor.
Examination of the documentary, social, political, and aesthetic roles of photography (and the archive and photo-essay) in anthropology as a mode of representation and control, but also of resistance. (Plus-minus letter grade only)
(This course is offered as ANTH 328 and JOUR 328. Students may not repeat the course under an alternate prefix.)

ANTH 333 Primate Behavior (Units: 4)
Prerequisite: Upper-division standing or consent of the instructor.
Exploration of the social lives of all primates. Topics include social organization, cooperation/competition, reproduction, communication, and the interrelationship between behavior and ecology. Students will conduct behavioral observations of primates at the zoo. Lecture, 2 units; activity, 2 units.

ANTH 343 Women and Work (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
Position and roles of women in the productive activities of society: paid and unpaid. Patterns of household and workplace employment, discrimination in pay and working conditions, relevant laws, and explanations for the evolution of these patterns.
(This course is offered as LABR 343 and ANTH 343. Students may not repeat the course under an alternate prefix.)

ANTH 356 Archaeology of California (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
Prehistoric heritage of California’s Native American cultures studied in the comparative light of ethnohistoric and ethnographic data. Archaeological focus on culture-history, economy, settlement pattern, ecology, political organization, and processual adaptation.

ANTH 420 Indigenous Media and Social Change (Units: 4)
Prerequisites: Restricted to students with upper-division standing; completion of GE Areas A and B4 requirements.
Examination of contemporary visual culture, particularly commercial culture, for its impact on personal and collective identity. Technical aspects of creating and altering visual media. Lecture, 2 units; activity, 2 units.
(This course is offered as SOC 420 and ANTH 420. Students may not repeat the course under an alternate prefix.)

ANTH 460 Historical Archeology (Units: 3)
Prerequisite: ANTH 110 or consent of the instructor.
Introduction to historical archeology, key themes in historical archeology, critical examination of methods, development of historical archeology, key theoretical approaches, and case studies in historical archeology.
(Plus-minus letter grade only)

ANTH 470 Archaeology of Mexico and Central America (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
Overview of the prehistory and archaeology of what is now the nations of Mexico and Central America.

ANTH 471 The Ancient Maya (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
The civilization of the Maya Indians of Mexico and Guatemala. Recent findings in Maya archaeology and on interpretations of Maya history, politics, art, economy, and writing.

ANTH 490 Ancestors or Data? Culture, Conflict, and NAGPRA (Units: 3)
Prerequisite: Restricted to students with upper-division standing or consent of the instructor.
Political struggles surrounding the creation and implementation of the 1990 Native American Graves Protection and Repatriation Act (NAGPRA). Analysis of the law, impact of recent court decisions, and specific focus on cultural conflicts related to the concept of knowledge.
(This course is offered as AIS 490, ANTH 490 and SOC 491. Students may not repeat the course under an alternate prefix.)

ANTH 500 Language and Cultural Systems of North American Indians (Units: 3)
Prerequisite: AIS 100 or consent of the instructor.
The relationship between American Indian language and culture, including topics and skills related to language learning and the historical conditions of cultural retention and revitalization efforts.
(This course is offered as AIS 500 and ANTH 500. Students may not repeat the course under an alternate prefix.)

ANTH 501 Latin America: The National Period (Units: 3)
Prerequisites: Upper division standing or consent of instructor; ENG 214 or equivalent.
Latin America since independence (c. 1825). Histories of Latin American peoples: culture, race relations, women, political oppression and resistance, the economy, and development.
(This course is offered as HIST 501, ANTH 501, and LTNS 501. Students may not repeat the course under an alternate prefix.)
ANTH 525 Diversity in the Workplace (Units: 3)
Prerequisite: Upper-division standing.

An overview of workplace diversity and strategies to utilize it positively. Theoretical debates and issues related to race, ethnic origin, gender, sexual orientation, class, age, and disability. Ways in which individuals and organizations can maximize benefits through respecting and working with diversity. (This course is offered as LABR 525 and ANTH 525. Students may not repeat the course under an alternate prefix.)

ANTH 530 Human Osteology Practicum (Units: 4)
Prerequisite for ANTH 730: Graduate standing.
Prerequisite for ANTH 530: Upper-division standing; ANTH 100; GPA of 3.0 or higher; or consent of the instructor.

Human skeleton, bone dynamics, and anthropometric and morphological analysis of modern and fossil skeletal materials. Research on osteological and fossil materials. Lecture, 2 units; laboratory, 2 units. (ANTH 730/ANTH 530 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

ANTH 531 Fossil Humans Practicum (Units: 4)
Prerequisite for ANTH 731: Graduate standing or consent of the instructor.
Prerequisite for ANTH 531: Upper-division standing; GPA of 3.0 or higher; or consent of the instructor.

The fossil evidence for human evolution. Comparative primate anatomy and function including skeletal morphology of hominid fossils. Ecological and geological settings. Trends and processes in human evolution. Lecture, 2 units; activity, 2 units. (ANTH 731/ANTH 531 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

ANTH 535 Paleopathology (Units: 3)
Prerequisite for ANTH 735: ANTH 730; or consent of the instructor.
Prerequisites for ANTH 535: Upper-division standing; ANTH 530; GPA of 3.0 or higher; or consent of the instructor.

Bioarchaeology of disease and human health. Evolutionary, cultural, and biological factors of prehistoric epidemiology. (Plus-minus letter grade only) (ANTH 735/ANTH 535 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

ANTH 545 Bioarchaeology (Units: 3)
Prerequisite: ANTH 530 or consent of the instructor.

Reconstruction of past lifeways from the examination of the human skeleton. Patterns of subsistence, diet, disease, demography, and physical activity reconstructed from skeletal populations.

ANTH 551 Anthropology of the Body (Units: 3)
Prerequisite: Upper-division standing or ENG 214.

Comparative cross-cultural approach to the study of the individual in society as mediated through an anthropological inquiry of the body. Social construction of the body and self in everyday life and ways that cultural practices, social structures, and psychological tents are inscribed and reproduced through the body and bodies.

ANTH 555 Urban Anthropology (Units: 3)
Prerequisites: Upper-division standing; USP 400 or one course in cultural anthropology.

Impact of urban environments upon human behavior cross-culturally. Ethnographic fieldwork techniques, the history and theoretical roots of urban anthropology, and case studies from around the world. (This course is offered as ANTH 555 and USP 555. Students may not repeat the course under an alternate prefix.)

ANTH 557 Ethnography of the Inner City (Units: 4)
Prerequisite: ANTH 555.

Participant-observation fieldwork techniques with hands-on research projects in inner-city communities in the Bay Area. Lecture, 3 units; activity, 1 unit. (This course is offered as ANTH 557 and USP 557. Students may not repeat the course under an alternate prefix.)

ANTH 569 Cross-Cultural Aspects of Sex and Gender (Units: 3)
Prerequisites: Restricted to students with upper-division standing; successful completion of GE Areas A1, A2, A3, and B4; or consent of the instructor.

Cross-cultural aspects of sex, sexuality, and gender. The control of sexuality, cultural components of gender role and gender identity, and symbolic aspects of sex and gender. (This course is offered as ANTH 569 and SXS 567. Students may not repeat the course under an alternate prefix.)

Course Attributes:
• UD-C: Arts and/or Humanities
• Social Justice

ANTH 570 Anthropology of Religion (Units: 3)
Prerequisites: Upper-division standing or ENG 214. Students who have never completed a college level ANTH course need the consent of the instructor.

Dynamics and function of religion and magic in human societies, cosmological systems, and the comparative study of elements, forms, and symbolism of religion.

ANTH 581 Anthropology and Folklore (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.

Nature and form of folklore, its cultural setting, transmissions, and dynamics. Psychological, ethnic, and philosophical considerations of folklore and its relationship to drama, art, and music.

ANTH 585 Globalization and World Cultures (Units: 3)
Prerequisite: ANTH 120 or consent of the instructor.

Effects of globalization and multinational corporations on cultures. Examination of contemporary globalization from a combined political-economic and cultural anthropological perspective. (This course is offered as ANTH 585 and CST 585. Students may not repeat the course under an alternate prefix.)

ANTH 590 Anthropology of Women (Units: 3)
Prerequisite: ENG 114 or equivalent.

Ethnographic, physical, anthropological, and prehistorical materials on women. Theories on origins of the family, social structuring of sexuality, and changing sex and gender in modern societies. (This course is offered as ANTH 590, CST 590, and WGS 595. Students may not repeat the course under an alternate prefix.)
ANTH 592 Archaeological Methods (Units: 4)
Prerequisite: ANTH 110.
Archaeological theory and methods including field reconnaissance, research design, excavation and laboratory methods. Archaeological chronology, typology, cartography, photography, and other skills. Lecture, 2 units; activity, 2 units.

ANTH 594 Zooarcheology (Units: 4)
Prerequisites: Restricted to upper-division standing; ANTH 110; or consent of the instructor.
Introduction to zooarchaeological studies of animal remains including the development of zooarchaeology. Exploration of key themes, theoretical and methodological approaches in zooarchaeology, critical evaluation of analytical techniques, and practicums in zooarchaeology. Lecture, 2 units; activity, 2 units. (Plus-minus letter grade only)

ANTH 595 Anthropological Filmmaking I (Units: 6)
Prerequisites: Restricted to Anthropology and Cinema majors; ANTH 120 and ANTH 300; or consent of the instructor.
Introduction to ethnographic digital video production, including methods of ethnographic fieldwork, the creation of field notes and research design. The basics of digital video planning, production, and editing. Lecture 3 units; activity, 3 units. (CSL may be available) (This course is offered as ANTH 595 and CINE 635 [formerly CINE 595]. Students may not repeat the course under an alternate prefix.)

ANTH 596 Anthropological Filmmaking II (Units: 4)
Prerequisites: Restricted to Anthropology and Cinema majors; ANTH 595 or CINE 635; or consent of the instructor.
Advanced filmmaking-based applied anthropological fieldwork, collaboration, and digital post-production techniques. Students complete a video for which they conducted research during the previous semester. Lecture, 2 units; activity, 2 units. (CSL may be available) (This course is offered as ANTH 596 and CINE 636 [formerly CINE 596]. Students may not repeat the course under an alternate prefix.)

ANTH 609 Approaches to the African Past (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3 and B4; ENG 214; or consent of the instructor.
Explorations of different methodologies for studying the African past including archaeology, anthropology, oral traditions, and history. (This course is offered as HIST 609 and ANTH 609. Students may not repeat the course under an alternate prefix.)
Course Attributes:
• UD-D: Social Sciences
• Global Perspectives

ANTH 630 Medical Anthropology (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
The interplay of culture, genetics, population, and the environment. Cross-cultural medical education. Folk and urban medical systems as moral, social, and cognitive systems.

ANTH 631 Society, Technology, and Medicine (Units: 3)
Prerequisites: Restricted to upper-division standing; ANTH 300; or consent of the instructor.
Introduction to society, technology, and medicine. Key themes include disciplinary vantage points, historic background topics, and critical evaluation of policy controversies.
ANTH 695 Anthropology Internship (Units: 3)
Prerequisite: ANTH 300 or ANTH 301 or ANTH 302.
Internship in research, governmental and non-governmental agencies, museums, and other public and private institutions. Students must find an anthropology faculty to serve as the academic supervisor. May be repeated for a total of 6 units.

ANTH 699 Independent Study (Units: 1-3)
Prerequisites: Restricted to upper-division standing; consent of major adviser, department chair, and instructor.
Supervised, individual study of a particular problem in anthropology. The student must state the problem, method of data-gathering, and the method of data-analysis. May be repeated provided that the area of study is different. [CSL may be available]

ANTH 701 Sexual Cultures, Sexual Identities (Units: 3)
Prerequisite for ANTH 701: Graduate standing or consent of the instructor.
Prerequisite for SXS 701: Restricted to graduate students in Human Sexuality Studies or consent of the instructor.
Concepts of "sexual culture" and "sexual identity" in history and across cultures. (This course is offered as SXS 701 and ANTH 701. Students may not repeat the course under an alternate prefix.)

ANTH 710 Proseminar in Anthropological Theory and Method (Units: 3)
Prerequisite: Graduate standing in Anthropology or consent of the instructor. Must be taken before or concurrently with other graduate seminars.
Directed application of anthropological theory, methods, and research techniques. Cannot be repeated for credit.

ANTH 715 Research Skills: The Craft of Anthropological Writing (Unit: 1)
Prerequisites: Graduate standing; concurrent enrollment in ANTH 710; or consent of the instructor.
Strategies to enhance creative thinking. Advanced review of grammar and sentence construction. Planning of MA thesis argument and organization. Dominant writing styles in anthropology understood through the study of Author’s Guides to publishing in major journals. (Plus-minus letter grade only.)

ANTH 716 Research Skills: The Literature Review (Unit: 1)
Prerequisite: Graduate standing or consent of the instructor.
The importance of qualitative and quantitative literature reviews in academic research. Finding the problem and contending with information glut. Advanced online and offline search skills. Avoiding plagiarism, using evidence matrices, synthesizing data, and mastering the authorial tone. (Plus-minus letter grade only)

ANTH 717 Research Skills: The Research Proposal (Unit: 1)
Prerequisite: Graduate standing or consent of the instructor.
Developing the research question, originality, and timeliness. Defining the research context and specific qualities and antecedents. Selecting the appropriate research method, suitability, practicality, and availability. Contending with ethical constraints and necessary permissions. (Plus-minus letter grade only.)

ANTH 718 Research Skills: The Grant Proposal (Unit: 1)
Prerequisite: Graduate standing in Anthropology or consent of the instructor.
Topics in the foundations of proposal writing: good writing in a good proposal, software options, major granting agencies for anthropological research, proposal statement of need, goals and objectives, the budget, ethics and evaluation, and sustainability and capacity. (Plus-minus letter only)

ANTH 720 Foundations in Visual Anthropology (Units: 2)
Prerequisite: Graduate standing in Anthropology or consent of the instructor.
Classic and contemporary literature in visual anthropology: proxemics and kinesics, semiological studies, indigenous media, shared and sensory anthropological filmmaking, the archive as active, and three approaches to photography: colonialist, Photovoice, and photo elicitation. (Plus-minus letter only)

ANTH 721 Seminar in Archaeological Problems (Units: 2)
Prerequisite: Graduate standing in Anthropology or consent of the instructor.
Archaeological approaches and explanations of the past understood through key works in interpretive archaeology and examples of the major archaeological theories. May be repeated for a total of 4 units. [Formerly ANTH 740]

ANTH 722 Seminar in Biological Anthropology (Units: 2)
Prerequisite: Graduate standing in Anthropology or consent of the instructor.
Historical and contemporary primary literature in biological anthropology. The importance of evolutionary theory, primatology, the primate fossil record, human diversity, anthropological genetics, and NAGPRA to anthropology.

ANTH 723 Seminar in Problems in Cultural Anthropology (Units: 2)
Prerequisite: Graduate standing in Anthropology or consent of the instructor.
Advanced exploration of literature in contemporary schools in cultural anthropology. Topics include post-structuralism, cultural materialism, neo-evolutionism, and symbolic anthropology. May be repeated for a total of 4 units. [Formerly ANTH 770]

ANTH 730 Human Osteology Practicum (Units: 4)
Prerequisite for ANTH 730: Graduate standing.
Prerequisite for ANTH 530: Upper-division standing; ANTH 100; GPA of 3.0 or higher; or consent of the instructor.
Human skeleton, bone dynamics, and anthropometric and morphological analysis of modern and fossil skeletal materials. Research on osteological and fossil materials. Lecture, 2 units; laboratory, 2 units. (ANTH 730/ANTH 530 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)
ANTH 731 Fossil Humans Practicum (Units: 4)
Prerequisite for ANTH 731: Graduate standing or consent of the instructor.
Prerequisite for ANTH 531: Upper-division standing; GPA of 3.0 or higher; or consent of the instructor.


(ANTH 731/ANTH 531 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

ANTH 735 Paleopathology (Units: 3)
Prerequisite for ANTH 735: ANTH 730; or consent of the instructor.
Prerequisites for ANTH 535: Upper-division standing; ANTH 530; GPA of 3.0 or higher; or consent of the instructor.

Bioarchaeology of disease and human health. Evolutionary, cultural, and biological factors of prehistoric epidemiology. (Plus-minus letter grade only)

(ANTH 735/ANTH 535 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

ANTH 750 Seminar in Visual Anthropology: The Fixed Image (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.

Advanced examination of the fundamental theories, methods, histories, and works of the fixed image in visual anthropology. (Plus-minus letter grade only)

ANTH 755 History of Anthropological Film (Units: 3)
Prerequisite for ANTH 755: Graduate standing or consent of the instructor.
Prerequisite for ANTH 655: Upper-division standing; GPA of 3.0 or higher; or consent of the instructor.

Philosophical and historical overview of anthropology and filmmaking, from traditional styles to mass market anthropology, textual and reflexive turns, and applied visual anthropology.

(ANTH 755/ANTH 655 [Formerly ANTH 620] is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

ANTH 785 Teaching Anthropology (Units: 1-3)
Prerequisite: Graduate standing; a grade of B or better in course in which student will assist.

Training and assistance in the teaching of anthropology. (Plus-minus AB/NC grading only)

ANTH 894 Creative Work Project (Units: 3)
Prerequisites: Consent of the instructor, approval of Advancement to Candidacy (ATC) for the Master of Arts and Culminating Experience (CE) forms by Graduate Studies. ATC and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration.

(CR/NC/RP grading only)

ANTH 897 Directed Thesis Advising and Support (Units: 3)
Prerequisites: Consent of the instructor and chair of the thesis committee; approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies. ATC and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration.

(CR/NC/RP grading only)

ANTH 898 Master’s Thesis (Units: 3)
Prerequisites: Consent of the instructor and chair of the thesis committee; approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies. ATC and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration.

(CR/NC/RP grading only)

ANTH 899 Independent Study (Units: 1-3)
Prerequisites: ANTH 710; consent of the student’s graduate major adviser, department chair, and supervising faculty member.

Individual research into a problem in anthropology. The student must state the problem, method of data-gathering, and method of data analysis.