

Nethery Hall, Room 123
 269-471-3152, FAX: 269-471-3108
bhsc-info@andrews.edu
www.andrews.edu/bhsc/

Duane C. McBride, *Chair*
 Karl G. Bailey
 Mioara Diaconu, *Director of Community and International Development Program (CIDP)*
 Herbert W. Helm
 Dana L. Kendall
 Øystein S. LaBianca, *Graduate Program Coordinator*
 Lionel N. A. Matthews
 Susan E. Murray
 Derrick L. Proctor
 Larry S. Ulery

Program	Credits
BS: Behavioral Sciences	39
Anthropology Emphasis	39
Anthropological Archaeology Emphasis	39
Public Health Emphasis	39
Student Development Emphasis	40
BS: Family Studies	39
BA: Psychology	31
BS: Psychology	
Behavioral Neuroscience	62–64
General Program	40
Health Psychology Emphasis	39
Pre-professional Program	40
BA: Sociology	30
BS: Sociology	
Community & International Development Emphasis (CID)	45
Emergency Preparedness Emphasis	49
Deviant Behavior Emphasis	38–39
Sociology of the Family Emphasis	39
Minor in Anthropology	20
Minor in Behavioral Sciences	20
Minor in Family Studies	20
Minor in Geography and International Development	21
Minor in Psychology	20
Minor in Sociology	20
MSA Community and International Development	
Regular Standing, Two-Year Program	44–50
Advanced Standing, One-Year Program	30

M
 The Department of Behavioral Sciences is concerned with the study of how human beings think and behave, both as individuals and in social, spiritual and cultural settings. By providing students with the discoveries and procedures accumulated from this versatile field of study, our goal is to empower students to utilize their knowledge to further the

mission of the Seventh-day Adventist Church and to restore men and women to the image of our Maker.

The Department of Behavioral Sciences is organized as a consortium where faculty share expertise and research endeavors in related disciplines. The behavioral sciences are concerned with the study of how human beings think and behave as individuals, and in sociocultural and ecological systems.

D a , A

This department aims (1) to introduce students to the salient discoveries and procedures accumulated from research in behavioral sciences disciplines and (2) to empower students to utilize this knowledge in furthering the mission of Seventh-day Adventists: restoring men and women to the image of their Maker. The department fulfills these aims by three principal means: (1) instruction by Christian professors; (2) course work which develops a strong liberal-arts foundation and interdisciplinary preparation leading to many different fields of Christian service; and (3) extracurricular participation by students in voluntary religious activities, community service, and research.

T a , C , a

Students seeking teacher certification on the secondary level may enroll in the Sociology minor. See the School of Education for full details.

M , C a , a , E ,

Majors should take advantage of the variety of undergraduate courses available atian a5f10(op(-5(s)-22(sho)-21Studentudentudbir]TJOT*Odentu

(27 credits must be selected from courses numbered 300 or above)

SOCI119, SOCI345 or SOCI315, SOCI420, 425, 432, 433, 434, 474

BHSC440, FMST350, 456, SOCI120, 430

BHSC220, PSYC101, RELT340

(The following courses are required choices in your general education or elective program)

ANTH200, BHSC230, ECON225, FMST310, 454, 460, PHIL224, PSYC420, 450

A reading knowledge of a foreign language for those planning on graduate work in Sociology.

Majors are required to take the Major Field Test in Sociology.

*It is expected that all majors will attend at least one professional conference before graduation.

M

All minors require that students earn at least 14 credits in courses numbered 300 and above.

M A (20)

ANTH124, 200, 455 or 496. Students interested in emphasizing archaeology should also select ANTH205 and 435. Recommended cognates for students interested in archaeology include BHSC235, SOCI360 and 432.

M B a a S (20)

Selected from at least three of the following five areas: anthropology, family studies, geography, psychology or sociology. Students choosing this minor should consult with the chair of the department.

M Fa S (20)

FDNT230, FMST115, 201, 310, 460. Additional credits chosen in consultation with program advisor.

M G a a l a a (21)

D
GEOG110, ANTH200 or GEOG260; GEOG240 or GEOG335; GEOG475 or GEOG455; SOCI360. Attend a 3-week session at an MSA IDP site (part of field experience or topics courses).

BHSC230, SOCI432, BHSC450, ECON225, SOCI415, SOCI470, FDNT230, RELT348, RELP325

M P (20)

PSYC101, at least one of PSYC364, 425, 449, 465, 471; and at least one of PSYC269, 450, 454, 460. Remaining 11 credits to be chosen from the other PSYC courses.

M S (20)

T a C a (20 21)

SOCI119, one of BHSC220, SOCI120, 425 or 430, one of SOCI315, 345 or 415, one of SOCI360, 420 or 470, SOCI474

—to equal 5 credits

Students wishing to use a sociology minor for Secondary Teaching Certification must take the requirements above, plus SOCI433 Research Methods III—Survey and Experimental Research. (This course requires SOCI434 as a co-requisite). The research courses may be used to fulfill the electives.

G a a P a

C a l a a D P a

United Nations organizations; government organizations; and other development and relief agencies. Graduates are not limited by their concentration to opportunities in the humanitarian industry as the MSA training make students viable candidates for a host of consultancy positions requiring persons with skills in grant writing, not-for-profit administration, education, and philanthropy.

A **a** **P** **a**

The MSA in Community and International Development Program is housed in the Department of Behavioral Sciences, which is a part of the College of Arts and Sciences. The program director reports to the faculty and chair of the department and, as needed, to the faculty and deans of the College of Arts and Sciences.

A **R**

To be admitted to regular standing in the Community and International Development Program for the MSA degree, students must:

- Qualify for general admission into graduate

and pastoralism. Rise of Egyptian and Mesopotamian civilization. Israel, Ammon, Moab, and Edom. Rome and Christianity. History of the Arabs and Islamic civilization. Ethnographical perspectives on women, families, tribes, and states. Islam and the modern world. Offered as credit on Summer Tours.

Anthropology, Archaeology, and History (3) **\$ (-)**
Introduction to Anthropology, Archaeology, and History

Anthropology, Archaeology, and History (3) **\$ (-)**
Service Learning in Anthropology, Archaeology, and History
 Students may apply to participate as trainees on research projects sponsored either by the Behavioral Sciences Department or the Institute of Archaeology.

Anthropology, Archaeology, and History (3) **\$ (-)**
Service Learning in Anthropology, Archaeology, and History
 The study of culture and cultural variation. The contemporary beliefs, values, institutions and material way of life of people in North America are contrasted with those of people living in other regions of the world today and in the past.

Behavioral Sciences (3) **\$ (-)**
Practical Application of Service Learning
 Provides a theoretical and practical basis for understanding and meeting needs of communities and individuals. Course materials include works from Christian and secular sources. Students develop an individualized practical plan to understand and meet needs. Does not apply to a major or minor.

Behavioral Sciences (3) **\$ (-)**
Introduction to Behavioral Sciences
 Issues may include drug abuse, the family, crime/violence and punishment, AIDS, poverty, and health care. Integrates foundational social science with a Christian perspective to help students understand the origins of current societal issues and strategies for addressing those issues.

Behavioral Sciences (3) **\$ (-)**
Introduction to Behavioral Sciences
 AU/GU course—see content above.

Behavioral Sciences (3) **\$ (-)**
Research Methods in Behavioral Sciences
 Probability concepts, frequency distributions, measures of central tendency, measures of variation, using frequency distributions, point-estimation and confidence intervals, sampling distribution, levels of significance in hypothesis testing, t and z tests, correlation, chi-square and ANOVA.

Behavioral Sciences (3) **\$ (-)**
Cross-Cultural Psychology
 Uses and integrates concepts from anthropology, geography and other sciences to help students understand how human culture and natural habitat create regional, ethnic, religious and other social groups. Examines origins of group conflict and considers avenues of responsible action for resolution.

Behavioral Sciences (3) **\$ (-)**
Cross-Cultural Psychology
 AU/GU course—see content above.

Behavioral Sciences (3) **\$ (-)**
Practical Application of Service Learning
 Provides an opportunity for the practical application of the theories, principles, and concepts learned in BHSC100. Prerequisite: BHSC100 or permission of Service Learning Coordinator. Does not apply to a major or minor.

Behavioral Sciences (3) **\$ (-)**
Service Learning in Anthropology, Archaeology, and History
 Travel to selected areas of anthropological, geographical, sociological and/or psychological interest combined with lectures, directed readings and assignments. The amount of credit and the geographic area are designated at the time a study tour is announced. A maximum of 6 credits may be applied to one of the majors in the Department of Behavioral Sciences.

Behavioral Sciences (3) **\$ (-)**
Workshop in Behavioral Sciences
 Provides an opportunity to study in a focused area within the Behavioral Sciences. A paper is required for more than one credit and may be required for one credit.

Behavioral Sciences (3) **\$ (-)**
Topics in Behavioral Sciences
 Examines emerging issues in the behavioral sciences. Repeatable in different specialized areas.

Behavioral Sciences (3) **\$ (-)**
Advanced Topics in Behavioral Sciences
 Examines in-depth emerging issues in the behavioral sciences. May be repeated in different specialized areas.

Behavioral Sciences (3) **\$ (-)**
Introduction to Behavioral Sciences
 Issues may include drug abuse, the family, crime/violence and punishment, AIDS, poverty, and health care. Integrates foundational social science with a Christian perspective to help students understand the origins of current societal issues and strategies for addressing those issues.

Behavioral Sciences (3) **\$ (-)**
Introduction to Behavioral Sciences
 AU/GU course—see content above.

Behavioral Sciences (3) **\$ (-)**
Research Methods in Behavioral Sciences
 Probability concepts, frequency distributions, measures of central tendency, measures of variation, using frequency distributions, point-estimation and confidence intervals, sampling distribution, levels of significance in hypothesis testing, t and z tests, correlation, chi-square and ANOVA.

Behavioral Sciences (3) **\$ (-)**
Cross-Cultural Psychology
 Uses and integrates concepts from anthropology, geography and other sciences to help students understand how human culture and natural habitat create regional, ethnic, religious and other social groups. Examines origins of group conflict and considers avenues of responsible action for resolution.

Behavioral Sciences (3) **\$ (-)**
Cross-Cultural Psychology
 AU/GU course—see content above.

<p>I <i>International Education</i> () To be arranged in cooperation with the student's advisor.</p>	<p>and regional. Applies toward General Education social science requirements. ()</p>
<p>W <i>World Geography</i> () Provides an opportunity to study in a focused area within the behavioral sciences.</p>	<p>P <i>Physical Geography</i> () The physical environment in which human societies exist; the earth's crust, its water systems, land systems, and climatic features. Normally offered even years. ()</p>
<p>I <i>Intermediate Survey/Reading/Research/Behavioral Science</i> () Fa <i>Survey</i></p>	<p>I <i>Intermediate Meteorology</i> () Emphasis on atmospheric processes and regional distribution and classification of the world's climate. ()</p>
<p>I <i>Intermediate Family Studies</i> () Study of the conceptual framework for the discipline and exploration of contemporary issues and trends in society as related to families. Normally offered odd years.</p>	<p>C <i>Cultural Geography</i> () The geographic viewpoint of the human occupancy of the earth in relation to the environment; including aspects of population, settlement, language, religion, and economy; a generalized survey of major world cultural areas to integrate course elements. ()</p>
<p>P <i>Personal Relationships</i> () The interdisciplinary study of personal relationships including intimate relationships, marriage and family living. The course will focus on the processes and skills necessary to build, maintain and enjoy important relationships across the lifespan.</p>	<p>C <i>Cultural Geography</i> () AU/GU course—see content above. ()</p>
<p>P <i>Parent-Child Relationships</i> () Study of the concepts, challenges, and changes in the parent/child relationship including contemporary strategies, parenting in diverse family types, and changing parenting roles throughout the life cycle. Offered odd years.</p>	<p>I <i>Intermediate Geographic Information Systems</i> () The study of the fundamentals of Geographic Information Systems (GIS). Emphasis on the foundations of these systems, their components and capabilities. ()</p>
<p>F <i>Family Psychology</i> () Study of the family as a social institution, its biological and cultural foundations, and its historic development and changing structure and function. Cross-cultural uniqueness is examined. Offered even years.</p>	<p>U <i>Urban Geography</i> () Examination of spatial patterns and processes associated with urbanization within the framework of economy, culture and politics. ()</p>
<p>F <i>Family Violence and Life</i> () Study of factors contributing to abuse in the family with emphasis on prevention of domestic violence. Offered odd years.</p>	<p>E <i>Environmental Disaster</i> () An integrated study of the causes and geography of natural and man-made disasters. Understanding of extreme event prediction, early warning, and disaster mitigation. Organizations involved in disaster response. ()</p>
<p>F <i>Resource Management</i> () Principles of sound management of resources including time, money, and energy as they relate to individuals and groups throughout the life span, with emphasis on the family. Offered odd years.</p>	<p>T <i>Topic</i> () Study of selected topics in geography. Topic and credit to be announced in advance. Repeatable with different topics to 9 credits (to 3 credits for graduate students). ()</p>
<p>F <i>Field Experience</i> () Supervised experience in observing, planning, directing, and/or assisting families in various home or organizational environments. Repeatable to 8 credits.</p>	<p>R <i>Regional Geography</i> () Regional study of physical, economic, and cultural characteristics of major regions of the world. Areas selected for analysis vary from semester to semester. Direct inquires to the department chair. Repeatable for different regions. ()</p>
<p>G <i>Geography</i> () S <i>Survey of Geography</i> () A survey of major geographic perspectives: physical, human,</p>	<p>G <i>Geography Field Experience</i> () Observation and evaluation of geographical phenomena in the U.S. or foreign countries. May be based upon individual research, organized tours, or expeditions. A formal report is expected. ()</p>

Independent Work ()
Independent work on a specified topic under the guidance of department advisor. Repeatable to 9 credits with the consent of the department chair.

Principles of Psychology ()
Principles of psychology including the study of growth, perception, learning, thinking, motivation, emotion, personality, and mental health.

Principles of Psychology ()
AU/GU course—see content above.

Developmental Psychology ()
An introduction to the brain and how it works, with an emphasis on processes used in everyday life: perception of our surroundings, memory and other facets of general cognition, and links to addictive behavior. The labs will give hands-on experience with these topics. Students will be exposed to research opportunities.

Personal, Social and Career Development ()
Application of psychological principles of behavior as they influence optimal personal, social and career development, with an emphasis on effective strategies for self-management and self-improvement.

Health Psychology \$ ()
Study of causes for the rise of health psychology; interrelationships between psychology and health-related disciplines; models of disease and health care; interrelationships between stressful life events, social support, and wellness; illness behavior; psychology of addictive behavior; and behavioral health. Prerequisite: PSYC101.

Theories of Adolescent, Young Adult, and Aging ()
Current psychological theories relating to psychological development, maturity, and decline as evidenced during the adolescent, youth, middle age, and retirement years. Prerequisite: PSYC101.

Theories of Adolescent, Young Adult, and Aging ()
AU/GU course—see content above.

History of Psychology ()
A study of significant schools, individuals and theories in the field of psychology, together with their contributions to present knowledge of behavior. Prerequisite: PSYC101.

History of Psychology ()
AU/GU course—see content above.

Human Development: Lifespan ()
Lifespan is an integrative approach to psychological development which emphasizes the inter-dependency of physical, cognitive, emotional and social development. The interrelatedness of theory, research, and application are seen throughout the entire sequence of human development from conception to death. Prerequisite or corequisite: PSYC101 or written permission of the teacher.

Organizational Psychology ()
AU/GU course. A discussion of human beings at work and how work interfaces with the community. The meaning of work, formal organization, informal group activity, occupational status and mobility, the structure and function of labor unions, and industry-community relationships are examined.

processes and its neural correlates will also be discussed. Integrated lab activities and projects will introduce common experimental methodologies in psycholinguistics. Prerequisite: PSYC101 or 180.

Research Method II: Introduction \$ ()

Asking researchable questions. Reviewing the literature. Hypothesis formulation. Research methodology emphasizes qualitative approaches but includes discussion of instrumentation, subject selection, and data collection procedures. Andrews' human subject research review process. Informed consent. Writing assignments include theoretical essay, pilot study, second pilot study, research journal. Lab schedule will be arranged. No lab fee. Prerequisite or corequisite: BHSC230 or STAT285.

Research Method III: Advanced Research Design \$ ()
Experimental Design

The principles of designing, administering, interpreting, and writing experimental research, questionnaires and interview schedules. Survey also focuses on coding procedures and scale construction. Structured around research, ques
ag1.29-10

ntll ntg gatle hesCvulnogie0(atand blodsC OpopulaJ /T dsC Orit)10cT* [hi/301v (eth0 T(o spe1itlJ -210)-(tio(sidogie0(atJ /Tn31or)-will2(P)5
hesCservic[hlaes]TJ n@tiopJ /Tality3106 Tastntgi* [hta T* [dtJ /T,rrand erhesCdisogi* [der3.72-tntg gand ,

approved in advance by the department chair. A minimum of 45 hours of fieldwork activity is required for each credit. Consult staff before registering. Open only to departmental majors. Repeatable to 8 credits.

PSYC 301: Psychological Assessment (3)

Theory and practice in individual and group testing in the areas of intelligence, aptitude, achievement, personality, and interest. Evaluation of tests and other instruments for measurement with a focus on their worth and limitations. A lab fee may be required. Prerequisite: PSYC101, BHSC230 or STAT285.

PSYC 302: Psychological Research Methods (3)

definitions, epidemiology, consequences and drugs of abuse within an American cultural and historical framework. Normally offered odd years.

Medical Sociology ()
 Analysis of the relationship between social characteristics and the incidence and prevalence of disease, as well as geographical determinants of health and medical systems. Normally offered even years.

Racial and Ethnic Relations ()
 A study of the distinctive racial and cultural minorities in American society with an emphasis on problems and adjustments within the larger society.

Racial and Ethnic Relations ()
 AU/GU course—see content above.

Gender and Race Issues ()
 Significant issues related primarily to the concerns of women as members of American society, but also in cross-cultural perspective. Includes such topics as socialization in sex roles, women in the professions, women in minority groups, the feminization of poverty, and women and substance abuse and crime.

Research Methods II: Introduction ()
 Asking researchable questions. Reviewing the literature. Hypothesis formulation. Research methodology emphasizes qualitative approaches but includes discussion of instrumentation, subject selection and data collection procedures. Andrews' human-subject-research review process. Informed consent. Writing assignments include theoretical essay, pilot study, second pilot study, research journal. Lab schedule will be arranged. No lab fee. Prerequisite or Corequisite: BHSC230 or STAT285.

Research Methods III: Advanced Research Design - Experimental Design ()
 The principles of designing, administering, interpreting, and writing experimental research, questionnaires and interview schedules. Survey also focuses on coding procedures and scale construction. Structured around a research project, and the interpretation of scientific reports and professional journals. Lab schedule will be arranged. No lab fee. Corequisite: PSYC434. Prerequisites: BHSC230 or STAT285 and PSYC432.

Research Methods IV: Advanced Statistical Analysis & SPSS ()
 A study on advanced parametric and non-parametric techniques such as two-way ANOVA, regression and power. The utilization of SPSS in the analysis and interpretation of statistical data. An analysis of professional journals and reports with an emphasis on the statistical reasoning. Corequisite: PSYC/SOCI433. Prerequisites: BHSC230 or STAT285 and PSYC/SOCI432.

Sociology of Family ()
 This course focuses on theoretical understandings of family

relationships in diverse settings and the various contexts that shape and sustain such relationships.

Emergency Planning ()
 Principles of emergency planning used in any type of disaster. Includes working with volunteers, handling special events, evacuation, mass fatalities, planning for schools, and homeland security planning. Includes satisfactory completion of FEMA-provided modules in Professional Development Series. Prerequisite: SOCI/SOWK 408.

Disaster Response and Recovery ()
 Study of the phases of disaster response and recovery with attention to local, state and national roles and expectations. Models of emergency management operations including communication, coordination, and chief executive decision making under conditions of disaster response will be emphasized. Attention will be given to the problems and concerns of recovery of victims and communities and the implications of disaster recovery efforts. Prerequisites: BSAD426/526; Evidence of Satisfactory completion of PDS modules, IS244 Developing and Managing Volunteers, and IS700 National Incident Management System.

Death and Dying: Cultural Perspectives ()
 The study of cultural and societal perspectives on death and personal and interpersonal dynamics of death and dying.

Demography ()
 Overview of the world's population; spatial dimensions of human populations; fertility concepts, measurements, trends, levels, and explanations; mortality and migration; population structures, life chances; population growth, economic development, and the environment.

Social Thought ()
 The roots of self-conscious social thought and the rise of sociology and anthropology as scientific disciplines in the 19th century. Major theoretical orientations in their fields, proponents, and impact on present-day sociology and anthropology are reviewed. Normally offered odd years.

Preparedness and Hazard Mitigation ()
 Study of preparedness as related to hazards in the local community with attention to means of mitigation as well as planning measures. Includes IS modules IS 271 Anticipating Hazardous Weather & Community Risk and IS 240 Hazardous Materials Prevention. Prerequisites: BIOL208 and evidence of satisfactory completion of SOCI/SOWK408.

Field Experience ()
 Supervised field placement in a human services setting is approved in advance by the department chair. A minimum of 45 hours of fieldwork is required for each credit. Open only to departmental majors. Repeatable to 8 credits.

(DG) and/or incomplete (I) courses with advisor approvals only. Registration for this title indicates full-time status.

Participation \$ ()

Students may register for this non-credit continuation course to maintain active status. For additional information on active status, please refer to p. 51 in the bulletin. Registration does not indicate full-time status.

Teaching \$ ()

Student may register for this title while clearing deferred grade (DG) and/or incomplete (I) courses with advisor approvals only. Registration for this title indicates full-time status.

Peer Review \$ ()

Advisor approval required. Registration for this title indicates full-time status

Concentration ()

Concentration ()

Field Practicum ()

Students integrate course content and theory into practice during a 300-hour field practicum coordinated with each student's research project and/or concentration that is the concluding requirement for the concentration. 260 hours may be done with the student's primary employer, but all students must complete one week (40 hours) in an external organization. Students must submit a practicum proposal indicating approval from a sponsoring organization and learning objectives. Upon completion, the student submits a practicum portfolio. Prerequisite: 2 courses in concentration.

Senior ()

Independent Study ()

Research Project ()

A research project is carried out by a master's degree candidate in which the student's mastery of the research process is demonstrated. A typical end product might be a community assessment study, a program evaluation study, a best practice benchmarking study, or a problem-solving study.

Master's Thesis ()

BEHAVIORAL NEUROSCIENCE

Price Hall, Room 216, Nethery Hall, Room 123
269-471-3243, 269-471-3261, 269-471-3152
stout@andrews.edu, biology@andrews.edu, bhsc@andrews.edu

Faculty
John Stout, *Director*
Karl Bailey, *Program Coordinator*, Psychology
Gordon Atkins, *Advisor*, Biology
Herbert Helm, *Advisor*, Psychology
Shandelle Henson, *Advisor*, Mathematics
David Mbungu, *Advisor*, Biology
Duane McBride, *Advisor*, Behavioral Science
James Hayward, *Biology*
Derrick Proctor, *Psychology*
David Steen, *Biology*

Area of Emphasis	Hours
BS: Biology	
Neuroscience emphasis	64-66
Behavior/Mathematics emphasis	66-68
BS: Psychology	
Behavioral Neuroscience emphasis	67

Behavioral Neuroscience is a new interdisciplinary program at Andrews University that is based in Behavioral Science, Biology and Mathematics. It has been established with the support of an approximately one-half million dollar grant from the National Science Foundation. Its purpose is to provide new opportunities for undergraduates to prepare for exciting careers in the fascinating, rapidly growing scientific fields which involve the study of the brain and its control of behavior. Students will be involved in hands-on, laboratory experiences, using the latest equipment as well as class work which will emphasize neuronal function, processing by the brain and the latest understanding of topics such as perception, memory, cognition, sensory input, the basis for mental and emotional disorders, drug addiction and other topics. Research with a faculty mentor is an integral part of the program and is supported by student scholarships provided by the National Science Foundation grant. Students who enter this Behavioral Neuroscience program will complete a common core of classes and choose one of three emphases outlined below to complete a BS degree in either Biology or Psychology.

Undergraduate Program

General Education: PSYC180-3
BIOL165, 166, ZOOL475, CHEM131, 132
CHEM231, 232, 241, 242, PHYS141, 142, PHYS241, 242, 271, 272, PSYC364, 445, 449/BIOL450

BS: B

BIOL371, 372, 449, 495 (2 cr), ZOOL468, 484, three upper division electives from Biology, Psychology or BCHM422