CLSC463 (was MTCH462)

Clinical Microscopy Practicum

Professional health-care laboratory practicum. Emphasis in patient-care applications of body fluids. Prerequisite: CLSC452 and permission of Program Director.

CLSC490 (was MTCH440)

Topics in

An in-depth study of selected topics in the clinical laboratory sciences. Repeatable in different specialized areas. Prerequisite: Permission of Program Director.

CLSC495

Independent Study/Readings/Research/Project Topics may be from areas relevant to clinical laboratory practice and must be approved by the Program Director. Repeatable in a different subject area. Independent readings earn S/U grades. Prerequisite: Permission of Program Director.

CLSC496 **(1)** (was MTCH496)

Extended Clinical Practicum

A twelve-week professional health-care laboratory practicum. Emphasis in patient-care applications. Subject areas are to be coordinated with the Clinical Site Education Coordinator and the Program Director. Graded S/U. Prerequisite: successful completion of the twenty-week clinical practica of the Clinical-Year Program and permission of Program Director.

CLSC501, 502 **(1)** (was MTCH521, 522, 523)

Seminar in Clinical Laboratory Science

Cooperative research into topics of current interest in the literature. Each quarter the student prepares a written and oral presentation based on current readings. Faculty and guest lectures also contribute to the seminar series. Admission by permission of Graduate Program Coordinator.

CLSC561

Laboratory Management Issues and Strategies The health care environment is rapidly changing, and will continue to change for the foreseeable future. In the clinical laboratory, ever changing government regulations and reimbursement policies require a laboratory manager to be flexible and adopt new skills. Issues faced by the manager and styles and strategies used to deal with these issues will be explored. Prerequisite: permission of Graduate Program Coordinator.

CLSC562 **(3)**

Issues in Clinical Laboratory Regulations and Practice

Clinical laboratories are increasingly regulated by state, federal and other agencies. Applicable regulations will be examined and their impact on laboratory operations evaluated. A selected number of laboratory quality assurance procedures, as specified by CLIA '88 regulations, will be performed in the laboratory. Prerequisite: statistics and permission of Graduate Program Coordinator.

CLSC585 (5) (was MTCH525) Advanced Studies in Clinical Laboratory Science

Designed in consultation with and coordinated by (1) the area specialty advisor. Cumulative report, presentation, and defense required. Prerequisite: Certification and/or licensure as a clinical laboratory scientist and permission of the Graduate Program Coordinator. Clinical placement depends on clinical site availability.

CLSC595 (1-4) (was MTCH595)

Independent Study/Readings/Research Project

Topics may be from immunology, immunohematology, clinical chemistry, hematology, microbiology and other areas of patient-care science, clinical laboratory science education, management, or applications specially relevant to clinical laboratories. Repeatable in a different subject area for a total of four (4) credits. Independent readings earn S/U grades. Prerequisite: permission of Graduate Program Coordinator.

ART, ART HISTORY, AND **DESIGN**

Art Center, Room 308 (616) 471-3279 http://www.andrews.edu/academic/cas/art_design. html

Faculty

Gregory J. Constantine, Chair gregcons@andrews.edu Steven L. Hansen slhansen@andrews.edu Robert N. Mason rmason@andrews.edu Rhonda Root rroot@andrews.edu Charles Zuill czuill@andrews.edu

Academic Programs	Credits
BFA: Graphic Design	
Digital Media	89
Photography	80
BFA: Visual Art	
Ceramics	80
Painting	80
Pre-Art Therapy	80
Printmaking	80
BA: Art	
Art History	40
Pre-Art Therapy	40
Visual Art	40
BS: Art Education	53
Minor in Art History	20
Minor in Graphic Design	23
Minor in Visual Art	24

It is the mission of the Department of Art, Art History, and Design to develop our God-given creative gifts in order to integrate our personal, spiritual, and professional lives.

Undergraduate Programs

Bachelor of Fine Arts (BFA)

The Bachelor of Fine Arts degree is recommended for students planning to enter one of the visual art professions and/or to do graduate work in visual art or art therapy. The studio-oriented BFA program requires 80 or 89 hours of visual art and art history courses plus the General Education courses. Central to the BFA curriculum is 27 hours of advanced design or visual art in a single emphasis. The process for entering a BFA program is two-fold. First, students are accepted into the BA degree program of the Department of Art. Art History, and Design. Upon completion of the introductory-level courses and successful BFA review (no later than the end of their sophomore year), students

can be accepted into the BFA program. The BFA requirement includes the successful completion of a senior exhibition and a portfolio of the student's work given to the Art Department.

Each of the BFA degree emphases has a 3-part curriculum: (1) Art History; (2) Visual Art Foundation; and (3) Advanced Visual Art. Additional cognates along with the General Education requirements complete the specifications for graduation for the BFA degees.

BFA 9-hour Complementary Area Requirement:

BFA students must take courses beyond the introductory level in an area(s) which complement(s) their chosen media emphasis. For example, if the 27 hour emphasis is ceramics (3-dimensional), then the complementary area may be painting and/or printmaking (2-dimensional); and conversely, if the 27 hour emphasis is painting (2-D), then the complementary area may be sculpture and/or ceramics (3-D). The photography emphasis may allow 8 hours of graphic design (ART214 and 414) to be substituted to meet the complementary area requirement. The Graphic Design complementary area is shaped with the student's adviser and may include such areas as computer graphics, photographic arts, marketing, and communication.

BFA: Graphic Design Digital Media Emphasis (2-D)—89

The digital art and design emphasis is recommended for those wishing to combine the study of art and design with the opportunity to explore more extensively computer graphics environments as a medium for visual communication and/or personal artistic expression.

The degree prepares students to enter one of the computer-based visual communication-oriented professions educated as an artist or designer/visual communicator, or to enter graduate studies in electronic visualization.

Art History—9 ARTH235, 236, 440

Visual Art Foundation—22

ART104, 116, 117, 118, 207, 304; PHTO115.

Digital Media Foundation—8 DGME175, 375.

Advanced Graphic Design—27

ART214, 310, 414 (16 hours), 495 Senior Exhibition and Slide Portfolio, 4 hours. Electives, 23 hours chosen in consultation with adviser from the following areas; DGME, ART, ARTH, PHTO, COMM, MKTG, JOUR.

Photography Emphasis (2-D)—80

Recommended for those preparing for professions that require people with well-developed perceptual skills who are comfortable working with complex equipment and changing technologies. Photography students are expected to develop a creative, experimental, and artistic approach to their work, regular and productive work habits, and eventually a personal focus that leads to a senior exhibition and portfolio. The BFA requires the following course work, including 9 hours of advanced work in a complementary 2-D or 3-D studio art medium (available in ceramics, painting, and printmaking).

Art History/Theory—14

ARTH235, 236, 420, 440 and electives from PHTO210, or 300.

Visual Art and Photography Foundation—25 ART104, 107,116, 117, 118, 207; PHTO115. Advanced Visual Art and Photography—41

ART304, 495 Senior Exhibition and Slide Portfolio 1 hour, and complementary visual art courses up to 9 hours; 28 hours advanced PHTO courses in consultation with adviser.

Cognate: JOUR375 Photojournalism.

BFA: Visual Art

The following three course groups are common to all BFA Visual Art and Pre-Art Therapy Emphases.

Art History Foundation—14

ARTH235, 236, 420, 440, plus one elective in art history (3 hours)

Visual Art Foundation—25

2-D courses: ART104, 116, 117, 207 and PHTO115:

3-D courses: ART107, 118.

Advanced Visual Art—41

ART304, 495 Senior Exhibition and Slide Portfolio, 1 hour; advanced work in one 2-D or 3-D emphasis (28 hours in one: ceramics, painting, or printmaking); complementary 2-D or 3-D emphasis (total of 9 hours).

Ceramics Emphasis (3-D)—80

Recommended for those pursuing studio pottery as a profession and who are comfortable working with ideas of aesthetic form, personal experimentation, technical production, and utilitarian purpose. Students work with a variety of traditional and state-of-the-art equipment and methods to gain a broad understanding of clay forming, glazing, and firing techniques necessary for the development of a personal focus. Early emphasis is placed on the mastery of ceramic craft and the development of regular and productive studio habits. Later, emphasis is placed on the development of a personal direction, senior exhibition, and portfolio. For the BFA degree in ceramics, students register for 28 hours of ART307 and 9 hours of complementary 2-D course work

Painting Emphasis (2-D)—80

Recommended primarily for those planning to enter graduate school. Emphasis is on developing perceptions of form and color, a strong sense of 2-D design, awareness of the visual world as subject matter for aesthetic and intellectual response, the work habits necessary to turn feelings and ideas into satisfying compositions, and an eventual personal focus for purposes of a senior exhibition and portfolio. For their advanced work, students register for 28 hours of ART305 and 9 hours of complementary 3-D course work.

Pre-Art Therapy Emphasis—80

Recommended for those planning to do graduate work in art therapy and to enter that profession. May require credits beyond the normal college load. In addition to fulfilling the BFA degree requirements, students should also take PSYC101, 251, 252, 454, 460.

Printmaking Emphasis (2-D)—80

Recommended for those planning for professions that require people who are comfortable working with ideas of aesthetic form, personal experimentation, technological production, and utilitarian purpose. Students work with traditional and contemporary graphics/printmaking processes that result in the production of multiple works which are personal, aesthetic, and/or functional in purpose. Emphasizes the student's development of regular and productive studio work habits and a personal focus which leads to a senior exhibition and portfolio. For their advanced work, students register for 28 hours of ART 306 Printmaking and 9 hours of complementary 3-D course work.

BA: Art—40

The BA: Art is a liberal arts degree that relates broad intellectual knowledge to material, spiritual, and emotional awareness. The degree requires 40 hours in visual-art and art-history courses, a minor in a non-art second area, and the General Education requirements including a foreign language. Each of the BA emphases listed below require the following art history courses:

Art History Foundation—9 ARTH220, 235, 236, 440.

Art History Emphasis—40

Recommended for those planning to do graduate work in the humanities or enter professions that require a broad overview of visual culture. Students study art history as a field of inquiry into the stylistic, sociological and symbolic intentions of chiefly public works of art from a variety of cultures. In addition to the 9 hours of art history foundation courses listed above, the following courses are also required: ARTH420; Electives in Art History (17 hours) 6 hours chosen from ARTH328, 329, 450, and ART380; 6 hours chosen from ARCH315, 316, or 434; and 5 chosen from PHTO210, 300, or HORT350; 2-D Visual Art (3 hours); 3-D Visual Art (3 hours).

Required cognate: HIST400

Pre-Art Therapy Emphasis—40

Pre-art therapy students take the visual-arts foundation and advanced visual-art component from the visual-art emphasis listed below (40 hours) and 3 hours of ART 380 Topics is required—topics which relate to the study or practice of art therapy. A minor in Behavioral Sciences is required, including PSYC101, 251, 252, 454, 460.

Visual Art Emphasis—40

Recommended for those planning to enter professions that require skilled eye-hand coordination, sensitive workmanship, and well-developed perceptual and conceptual skills. In addition to the 9 hours of art history listed above, the following 31 hours of visual art (25 hours foundation and 6 hours advanced):

Visual Art Foundation—25

2-D Courses: ART104, 116, 117, 207; PHTO115.

3-D Courses: ART107, 118.

Advanced Visual Art—6

Selected in consultation with the adviser from advanced drawing, painting, printmaking, and ceramics courses.

BS: Art Education—53

This degree, offered in cooperation with the Department of Teaching, Learning, and Administration, prepares students to teach art on the elementary and secondary levels. Majors desiring teacher certification or who are planning to teach art must complete the requirements for denominational and/or state teacher certification through the School of Education. The BS in art education requirement includes the successful completion of a senior exhibition and a portfolio of the student's work given to the Art Department. Art History—9

ARTH235, 236, 440.

ARTH235, 236, 440 Art Methods—3

ART457, or ART459

Visual Art Foundation—25 ART104, 107, 116, 117, 118, 207; PHTO115.

Advanced Visual Art Requirements—12

In consultation with the adviser, do advanced

work in one or a combination of the following media: ceramics, painting, printmaking, or photography.

Minor in Art History—20

Recommended for students of literature, history, and sociology as a complementary area of study. Art history examines the images created by various cultures and social groups and provides an alternative way for students to understand the conventions, concepts, attitudes, and values that produced them.

Required courses: ARTH220, 235, 236, 420, 440, and 6 elective hours in Art History chosen from, ARTH328, 329, 380, and ARCH315, 316.

Minor in Graphic Design—23

Recommended for students of communication, graphic arts, marketing, and architectural and landscape studies. Graphic Design is concerned with producing effective visual communication. Required courses: ART104, 207, 214, 310,

414: ARTH220

Required cognate: DGME180.

Minor in Visual Art—24

Recommended but not limited to students of education, technology, the humanities, and the design areas.

Required courses: ART104, 107, 116, 117, 118, 207; ARTH220.

Courses (Credits)

See inside front cover for symbol code.

ART HISTORY, THEORY, AND ISSUES

ARTH220

Language of Art

Presents the elements of visual language and studies them in relationship to images of famous paintings, sculptures, and contemporary advertisements. Does not duplicate an art history course.

Prehistoric to Medieval Art

Examines the ancient images of non-Western and Western cultures as they are manifested in famous works of art and architecture.

ARTH236

Renaissance to Modern Art

A survey of selected Western and non-Western artists, techniques, and cultural eras from 1300 to 1945.

ARTH328

Artists of the Renaissance

A chronology and analysis of Italian masters from Giotto to Raphael, and northern masters from VanEyck to Rembrandt. A study of the importance of social and cultural influences impacting these artists and the contributions made through their art.

ARTH329

Nineteenth Century and Impressionism A chronological study of the major artists influencing culture, primarily in France, from David to Cezanne in the movements of Neo-classicism, romanticism, realism, impressionism, and post-impressionism.

ARTH420

Seminar in Contemporary Trends

A team taught seminar course investigating current trends in contemporary trends in contemporary art and ART207 art criticism. Recommended prerequisites: ARTH235,

ARTH440 ? (3)

Art since 1945

A study of selected artists associated with post-war Western culture, the critical schools they are associated with, and the major influences upon their work.

ARTH450 ? (1-6)

Art Study Tour

A pursuit of general cultural and artistic interests to be found abroad.

IDSC200

Christ in Music and Art

Investigates religious themes in art and music inspired by the life of Christ. Principles for understanding and evaluating art and music from the Christian perspective are discussed. Credit not applicable toward a major or minor in Music or Art.

VISUAL ART

The department reserves the right to hold some student work until the termination of the Spring student show. Students leaving the campus at the end of the quarter must take their work with them. Because of minimal storage space, work and supplies remaining in the department after the close of the Spring quarter are removed and discarded.

ART104

Introduction to Drawing

Drawing the human figure, still-life objects, and architecture to facilitate the development of observational and expressive skills. Basic drawing approaches, methods, tools, media, and systems of perspective are explored.

ART107

Introduction to Ceramics

Emphasis on pottery and vessel creation. Explores aspects of clay preparation, hand forming, wheel techniques, and glaze application, with raku and stoneware firing techniques.

(3) ART116

(merges ART105, most of ART300) Introduction to Painting and Color

An introduction to solving picture problems such as composition, color relationships and appropriate subject matter. A hands on study of the phenomenon of color relationships and color mixing.

(merges ART106, part of ART314)

Introduction to Printmaking and Illustration Explores methods such as woodcut, linoleum cut, etching and engraving, lithography, and screenprinting. Emphasis on a personalized style of illustration using these same various techniques.

ART118 Alt \$ (4)

(merges ART108, most of ART208) Introduction to Sculpture and 3-D Design

An introduction to the principles of three dimensional design and sculpture media.

? (2) Introduces students to a variety of tools and materials which help to develop 3-D expression.

\$ (3)

Basic Design I

A study of the elements and organizational principles of 2-dimensional design.

ART214 \$(3)

Introduction to Graphic Design

A transition from design theory to design application as it relates to visual communication. A series of projects develops basic skills and familiarity with design process and the graphic design profession. Prerequisite: ART207.

ART304 (2-6)

Drawing

Students use many media and concentrate on individual methods of expression through drawing. Repeatable. Prerequisite: ART 104.

ART305 (2-6)

Painting

Supervised independent study leading toward an artistic style with exploration in a selected area chosen from landscape, figure study, portraiture, abstract, and the newer innovations in the field of painting. Repeatable. Prerequisite: ART116.

ART307 \$ (2-6)

Ceramics

An exploration of an area of ceramic practice. Topics may include production pottery, electric kiln ceramics, clay and glazes, woodfiring, raku, creating large pots, throwing and altering. Repeatable. Prerequisite: ART107.

ART308 (2-6)

Sculpture

The expressive use of a range of materials through the skills of modeling, carving, and construction. Usually one medium is studied during the semester. Repeatable. Prerequisite: ART118.

ART 310 \$ (4)

Typography

An exploration of typographic structures terminology, methods and visual problem solving. This studio course addresses typographic design as a practical form of visual communication.

ART380 (3)

Topics in Art

Courses cover specific topic areas in Art and Art History such as: African Arts, Asian Arts, Rendering, Post-Modernism and Modernism.

ART414 \$ (2-6)

Design for Visual Communications

A series dealing with Interactive Screen Design, Publication Design, Advertising and Packaging Design and Corporate Identity, and Environmental Graphics. Gives students practical experience in graphic design and computer applications. Prerequisites: ART207, 214. Fall, Spring

ART457 ? (3)

Art Methods: Elementary

Covers the process of teaching creativity and artistic expression to students at the elementary level. The focus is on understanding the developmental levels of creativity in children. Art is also integrated in the rest of the curriculum. Art projects are part of this course.

ART459

Art Methods: Secondary

Deals with teaching creativity and artistic expression to students at the secondary level. It covers the developmental levels of students and gives practical ideas for developing individual creativity. Project ideas are part of the course.

ART495

? (1-4)

Independent Reading/Project

Independent study or senior exhibition and portfolio creation. Repeatable. Requirements vary.

PHOTOGRAPHY

See course descriptions under Photographic Imaging on p. 150.

BEHAVIORAL SCIENCES

Nethery Hall, Room 123 (616) 471-3152, FAX: (616) 471-3108 bhsc-info@andrews.edu http://www.andrews.edu/BHSC

Faculty

Duane C. McBride, *Chair* John M. Berecz Sharon A. Gillespie Herbert W. Helm James H. Hopkins Øystein S. LaBianca Lionel N. A. Matthews Sue E. Murray Derrick L. Proctor Larry S. Ulery Kristopher P. Zygowiec

Academic Programs	Credits
BS: Behavioral Sciences	39
Anthropology	40
Anthropological Archaeology	39
Emphasis	
Public Health	40
Student Development	40
BS: Family Studies	39
Family Studies: Life Management	
Education Emphasis	33
BS: Psychology	
Pre-professional Program	40
General Program	40
Health Psychology	38-39
BS: Sociology	38-39
International Community	
Development	38-39
Deviant Behavior	38-39
Sociology of the Family	39
Minor in Anthropology	20
Minor in Behavior Sciences	20
Minor in Behavior Sciences	
(with teacher certification)	24
Minor in Family Studies	20
Minor in Geography	20
Minor in Psychology	20
Minor in Sociology	20
MSA - Post Graduate Degree	
International and Community	
Development	34
International Development	
(off-campus)	34

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.

DEPARTMENT AIMS

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.

TEACHER CERTIFICATION

Students seeking teacher certification on the secondary level may enroll in the BS in Behavioral Sciences (Student Development Emphasis), the Behavioral Sciences minor in teacher certification, or the Sociology minor. Elementary certification is available only for the Behavioral Sciences minor in teacher certification. See the School of Education for full details.

MINORS, COGNATES, AND ELECTIVES

Majors should take advantage of the variety of undergraduate courses available at Andrews to acquire a broad education. Combining behavioral science courses with other areas such as business, health, and language provides avenues for reaching individual professional goals.

Students should counsel with advisers in selecting cognates and electives. Volunteer work is most beneficial and majors are urged to seek opportunities through the Community Service Assistantship Program (CSAP). Those planning to pursue graduate studies should seek opportunities in research.

RESEARCH SEQUENCE

It is strongly recommended that all BS majors take the Research Methods Sequence during their junior year.

Undergraduate Programs

BS: Behavioral Sciences—39

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

Core Courses—18

ANTH200 or SOCI119, BHSC220; PSYC210, 450;. PSYC/SOCI432; PSYC 469 or SOCI474.

Required General Education

PSYCIO

The remaining credits are to be selected from at least two of the areas offered in the department or as specified in an area of emphasis below. Majors are required to take the major field test in either psychology or sociology. Those with specific vocational goals may wish to consider one of the following areas of emphasis:

Anthropology Emphasis—40

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

Core Courses—21

ANTH200; BHSC230, PSYC210, PSYC/SOCI432; PSYC/SOCI433; PSYC/SOCI434; PSYC450; PSYC469 or SOCI474

Emphasis Courses—18

ANTH124, 205, 415, 417, 420, 496

Required General Education—6 BHSC235; PSYC101

Required Cognates

BIOL449, COMM436; ENGL440;