CHAPTER VII

ACADEMIC DEPARTMENTS AND PROGRAMS

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COURSE LISTINGS: AN EXPLANATION

Courses in this catalog are listed first by the discipline code, three letters that indicate the academic discipline (HST for history, for example), followed by three digits. The first of these digits refers to the level of the course; the next two indicate the specific course. Thus ENL 165 is an English course designed for the lower-division student, and the 65 indicates the specific course offering, which is International Short Story. These numbers are followed by the actual course title, and this in turn is followed by letters within parentheses that tell whether the course is liberal arts (A) or professional (B) in nature, and whether it may be used to fulfill one or more of the General Education requirements. A legend for the letters and numbers used in course listings is given below. An example of a course listing follows:

**Explanation**

WMS 101 (A,S,W,D) Introduction to Women’s Studies Complete Listing

**Course Codes**

Women’s Studies discipline code WMS

First digit indicates course level 1

Second two digits indicate specific course 01

Official course title Introduction to Women’s Studies

Liberal Arts credit code A

Social Sciences Knowledge Area S

Perspectives on Women General Education code W

Diversity General Education code D

Following the course description is further information regarding course credits and semesters when the course will be offered. An explanation of these abbreviations follows:

<table>
<thead>
<tr>
<th>Key to Course Listings in this Publication</th>
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</thead>
<tbody>
<tr>
<td>Cr.</td>
</tr>
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<td>Fall</td>
</tr>
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<td>Spring</td>
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<tr>
<td>Summer</td>
</tr>
<tr>
<td>No Semester Indicated</td>
</tr>
</tbody>
</table>

**Course Level Numbers**

| 0–99 | Non-credit course |
| 100–199 | Lower-division undergraduate course; no prerequisites |
| 200–299 | Lower-division undergraduate credit course; may have prerequisites |
| 300–499 | Upper-division credit course; normally requires junior status or above |
| 500–599 | Introductory-level graduate courses that may be available to undergraduates as 400–499 listings |
COURSE DESIGNATION CODES

A  Liberal Arts courses
B  Non-liberal Arts

GENERAL EDUCATION CODES:

C  Comparative Perspective courses
D  Diversity
E  Science and Technology
F  Fine Arts without performance
G  Western Civilization
H  Humanities
I  Contemporary Issues
J  Contemporary Issues
L  Natural Science with lab
N  Natural Science without lab
O  World Civilizations (Non-Western)
P  Fine Arts with performance
S  Social Sciences
T  Computer Literacy
U  Upper-level Writing
V  American History
W  Perspectives on Women

Changes in the General Education program for fall 2003 have eliminated the “E” Science and Technology and the “U” Upper-level Writing course designations.
DEPARTMENT OF AFRICAN AND AFRO-AMERICAN STUDIES

112 Faculty Office Building
(585) 395-2470

Chairperson and Associate Professor: John K. Marah; Professor: F. Nwabueze Okoye; Assistant Professor: Stanley Rose; Professor Emeritus: Ena L. Farley.

The Department of African and Afro-American Studies (AAS) articulates, in intellectual terms, the actual life experiences of Africans and people of African descent in North and South America and the Caribbean. Thus, students may utilize studies in AAS for any purpose in order to satisfy personal, educational and professional goals. The AAS major or minor offers students the sensitivity to minority issues and concerns that will stand the graduate in good stead when seeking private- or public-sector employment. Indeed, students who take AAS courses can capitalize on the increasing interest of private-sector employers in recruiting personnel who are aware of minority issues and concerns.

AAS majors go into graduate school; into appointments at federal, state and local levels; into the various United Nations agencies; and into fields as diverse as banking, business, counseling, teaching, international studies, journalism, and labor relations.

Major Program

Basic components of the program, consisting of the core area as well as the supplementary fields within the major, are organized around the liberal arts disciplines. The core area subjects are selected from topics on Africa, on African-Americans in the United States, on the Caribbean and on other parts of the Third World.

Majors must complete 36 credits. These 36 credits must include 12 credits from the basic core and 24 credits from upper-division work offered by the department. After successfully completing 12 credits of introductory work, students are encouraged to select a liberal arts discipline in which to specialize. At least 12 of the 24 credits of required upper-division work must be in the chosen area of specialization.

Required Basic Core (12 credits):

Complete four of the following five courses:

AAS 104 Institutional Racism
AAS 113 Introduction to Afro-American History
AAS 204 African Politics and Society
AAS 235 Introduction to Afro-American Literature
AAS 278 Afro-American Music and Culture

Required Upper-division Courses (24 credits):

1. In the area of specialization, at least 12 credits.

2. Electives, by advisement, to complete 24 credits. These remaining 12 credits are selected from the Department of African and Afro-American Studies or, where necessary, from other departments by advisement from the Department of African and Afro-American Studies.

Minor Program

Minors must complete 18 credits in courses offered by the department. These must include six credits of basic core courses and 12 additional upper-division credits of department courses.
African and Afro-American Studies

African and Afro-American Courses

AAS 104 Institutional Racism (A,D). Pursues three major goals designed to enhance students' intellectual understanding of racism. Familiarizes students with the history and development of racist institutions in America. Engages students in an examination of the structure or "anatomy" of contemporary race relations in its interconnections with racial stereotypes and prejudice. Explores the psychological dimensions of racism, that is, how racism manifests itself in individual and group contexts. 3 Cr. Every Semester.

AAS 113 Introduction to Afro-American History (A,D). Cross-listed as HST 113. Examines the historical experience and conditions of persons of African descent within the American historical milieu. 3 Cr. Every Semester.

AAS 203 Africa: Ancient and Precolonial (A). Explores the diversity of people and cultures in Africa from the earliest period of human history; Africa's historical foundation and historical development. 3 Cr.

AAS 204 African Politics and Society (A). Introduces students to the basic problems confronting Africa as a continent in the contemporary world. 3 Cr. Spring.

AAS 213 African Legacy (A). Provides a detailed examination of the nature of Africa's past, with specific attention to the manner in which song, dance, storytelling and history become interwoven into one aspect of life. 3 Cr.

AAS 232 African Music and Drumming for Dance (A,P). Cross-listed as DNS 232. Provides a study of selected traditional musical instruments for dance accompaniment and the development of performance skills and techniques through studio and live performance applications. Explores traditional styles and their social and artistic needs for formal religious and recreational application, as well as modern educational and cultural usages in African schools and colleges. 3 Cr. Every Semester.

AAS 235 Introduction to Afro-American Literature (A,H). Cross-listed as ENL 235. Provides an introductory survey of the literature of people of African ancestry in the Americas. Acquaints students with major literary figures and significant historical periods through a discussion of issues regarding the relationship between the writers and socio-political and cultural movements, and of questions concerning the sociocultural function that the black writer serves for his/her community. 3 Cr. Every Semester.

AAS 278 Afro-American Music and Culture (A). Cross-listed as FA 278. Provides a basic history of black American music and related aspects of theatre, dance and literature from the 17th century to today. 3 Cr.

AAS 301 Brockport Career Exploration Course (BCEC) (A). Encourages sophomores, juniors and seniors to investigate a specific career area through a placement in an area of human service agency, governmental office or classroom. Allows students to work under the guidance of an immediate supervisor and College faculty sponsor, and participate in workshops through the Office of Career Services. 3 Cr. Every Semester.

AAS 302 History of South Africa (A). Examines several milestones in South African history, including the Mfecane, the Union Act, the formation of the African National Congress, the rise of the National Party, the Sharpeville massacre, the black consciousness movement, and the Soweto and Sebokeng uprisings. 3 Cr.

AAS 307 Writing About the Black Experience (A). Explores the black experience through writing with a detailed examination of African peoples' social, cultural, and literary responses to the modern zeitgeist. Aims to increase students' response repertoire and writing abilities about African peoples' social, cultural and literary traditions. 3 Cr.

AAS 310 Urban Black Politics (A). Provides a study of the historical processes leading to larger urban black populations: forces permitting and restraining the exercise of political power in the urban black context; position of various black leaders and groups and their relationship with urban government; and the need for alternative strategies for the exercise of power. 3 Cr.

AAS 313 Slavery in the Ante-bellum South (A,U,D). Cross-listed as HST 313. Provides a study of some of the dynamics of slavery in the South between 1800 and 1860. Examines firsthand accounts of observers and the political, economic and racial implications of this system. Compares US plantation slavery to other slave systems in the Americas. Encourages students to borrow from the disciplines of anthropology, sociology, literature, economics, as well as from political and intellectual history. 3 Cr.

AAS 314 The Black Family (A). Cross-listed as SOC 314. Provides a study of the socio-cultural, political and economic conditions that afflict black family life. Confronts the pejorative tradition as the primary modality for examining black family life; and explores the African antecedents and continuities that have influenced the black family in the US. 3 Cr. Fall.

AAS 315 Contemporary Black Women (A,I,W,D). Cross-listed as WMS 315. Eclectically explores the various positions and roles played by black women in contemporary times against their
historical backdrop. Focuses on the roles of black women in traditional and contemporary contexts in Africa; black women in rural and urban areas and in the Caribbean; and professional black women and their characteristics. 3 Cr. Every Semester.

AAS 317 Prejudice, Personality and Culture (A). Cross-listed as SOC 317. Explores the historical and social conditions in which prejudice arises; social functions of prejudice and its psycho-social manifestations; the impact of prejudice and discrimination upon social and race relations in mass societies; and theories of prejudice. 3 Cr. Every Semester.


AAS 330 African Dance II (A). Cross-listed as DNS 330. Prerequisite: AAS 232 or DNS 200. Provides for a study of rhythm through movement games; use of the materials of dance as an introduction to formal dances; African dance in the service of specific social needs; and the background of the dances. Requires performances. 3 Cr.

AAS 332 Urban Economic Problems (A). Cross-listed as ECN 332. Examines important urban economic issues, such as the location of economic activity, the ghetto and poverty, land use, suburbanization, housing, urban renewal, transportation, education, crime, public finance, growth and planning. Evaluates local and national policies. 3 Cr. Fall.

AAS 339 Writings by Afro-American Women (A,U,W,D). Cross-listed as ENL 339 and WMS 339. Explores literary representations of women in Afro-American fiction from the Harlem Renaissance to today. Examines the degree to which sexism, cultural stereotypes and racism influence the portrayals and functions of women in black American literature. To what extent is the author concerned with women's issues? How has the emergence of the feminist movement influenced contemporary authors? 3 Cr.

AAS 359 Black Church (A). Cross-listed as SOC 359. Provides for an extended definition of the soul (essence) of the black church, and a critical analysis of the works of exponents of the theology of liberation in the light of the historical experience of black people. 3 Cr.

AAS 360 Africa Today (A,J,W,D). Seeks to deepen students' understanding of contemporary Africa. Gives attention to issues which have profoundly affected the lives of multitudes on the second largest continent. Includes issues such as slavery, racism, colonialism and neocolonialism, desertification, hunger and malnutrition, civil wars, the problem of refugees, development and underdevelopment, and the reality of winds of change in Mozambique, Angola, Zimbabwe, Namibia and South Africa. 3 Cr. Every Semester.

AAS 367 African Novel (A). Cross-listed as ENL 367. Examines major authors and movements in the development of the novel in Africa. Primary emphasis is on the texts themselves, but with attention to their social and historical contexts. 3 Cr.

AAS 404 Cultures of Sub-Saharan Africa (A). Cross-listed as ANT 404/504. Explores the rich African heritage by means of a critical review of selected African ethnographic studies with particular focus on topics such as: subsistence agriculture, trade, kinship, political systems, urban life, and religion. Serves a broad spectrum of students to contribute to the need to understand the increasing global interdependence and cultural diversity of the present age. 3 Cr.

AAS 408 Pan-Africanism (A). Historians of this global movement have tended to represent it as a 20th-century phenomenon. This is an erroneous view since the essentials of the ideology of Pan-Africanism existed years before the word entered dictionaries in 1900. Seeks to grapple with Pan-Africanism ideologically and practically. 3 Cr. Fall.

AAS 410 Apartheid (A,J,D). Attempts to use certain realities of post-1948 South Africa to cast light on a racial conflict that has raged for more than 500 years over the broad issues of hegemony and economic resources. Grapples with issues such as human rights, the role of international capitalism in development and underdevelopment, Balkanization, Pax Africana and human survival. 3 Cr. Spring.

AAS 416 20th-century Afro-American Issues (A,J,D). Deals with the continuing problem of what place black Americans should have in the socio-political scheme, a problem of dramatic contemporary importance because compromise solutions during this century have been short-lived, and because American policies have global implications which could influence foreign policy outcomes in Africa. Requires students to use scholarly articles, monographs and contemporary newspapers as the bases for discussion. 3 Cr. Spring.

AAS 417 Cultural Heritage and the African-American Child (A). Explores African-American creativity, as well as the despair African-Americans have and continue to exhibit in response to discrimination and opportunity. Contrasts children's game songs with the black English controversy.
Examines the influence of social and educational policies on the behavior of African-Americans. 3 Cr. Spring.

AAS 419 The Civil War Era (A). Cross-listed as HST 419. Surveys the breakdown of the American institutions that led to the Civil War, followed by an examination of the War itself and its controversial aftermath in the Reconstruction era. 3 Cr.

AAS 420 Overseas Seminar in Africa (A). Consists of lectures, discussions, on-site field trips and opportunities to interact with Africans. Introduces students to various aspects of life in Africa as seen in the history, economy, culture, arts, social change and political development of the country visited. 6 Cr.

AAS 428 Racial and Ethnic Relations (A,D,W). Cross-listed as SOC 428. Studies the role of race and ethnicity in social relations. Examines major theoretical orientations toward racial and ethnic stratification, as well as the consequences of inequality for both majority and minority groups. 3 Cr.

AAS 429 The Civil Rights Years (A). Explores the theme that the Civil Rights Movement (WW II to today) is one of the most significant in our history, one that made America a more democratic society, gave rise to other movements which transformed the face of American culture, changed those who participated in it, and influenced and created a new generation of American leadership. Entails telecourse instruction with print, video and audio materials. 3 Cr.

AAS 433 African Dance III (A). Cross-listed as DNS 433. Prerequisite: AAS 330 or instructor’s permission. Covers advanced dance for recreation and ceremonial dance, including festival, war, court and ritual forms. Enables students to develop a mental, emotional and aesthetic awareness of the performance of an African dance. Examines the role of the African dance in the service of society in campus and off-campus performances. 3 Cr.

AAS 435 Legal Rights of the Disadvantaged (A,I,W,D). Cross-listed as PLS 435 and WMS 435. An issue-oriented course. Provides an understanding of how the US legal system can improve the status of underprivileged persons, such as blacks, Hispanics, women, prisoners, the poor, students, American Indians, homosexuals, and those with mental and physical disabilities. 3 Cr. Fall.

AAS 460 Modern Africa (A,J). Cross-listed as HST 460. Prerequisite HST 102. As a course in 20th-century African history, surveys major patterns of pre-colonial Africa and examines the colonial experience and African struggles for independence. Also explores the problem of “development” in post-colonial African states. 3 Cr.

AAS 476 Harlem Renaissance (A). Cross-listed as ARH 476. Surveys painting, sculpture, photography and ceramics from the Harlem Renaissance of the 1920s. Provides an overview of the period including literature, music and dance. 3 Cr.

AAS 485 The Jamaica Seminars (A). Focuses on Caribbean society, and the area’s cultural, sociological, economic, and political aspects. Entails field study in Jamaica. 3 Cr.

AAS 494 African Dance Ensemble (A). Cross-listed as DNS 494. Prerequisites: AAS 232 and 433. Provides a study of advanced techniques in solo, duet and ensemble experience to explore special areas of drumming and dance; costuming and relationships to dances; and acquaintance with another dance culture and production methods. Entails class studies for lectures, demonstrations and performances. Includes video studies for discussion and examples of performance. 3 Cr.

AAS 499 Independent Study in AAS (A). Arranged in consultation with the instructor-sponsor and in accordance with procedures of the Office of Academic Advisement prior to registration. 3 Cr.
Anthropology is the systematic study of humans. Its primary concerns are to:

• understand the origins of human behavior and culture over 60 million years of primate evolution and six million years of human evolution;
• explain the diversity of adaptive strategies, ways of life and value systems developed by humans as they confront the world’s diverse natural, social and artificial environments; and
• put this understanding to practical use in analyzing and solving modern societal problems.

Career Options:
The anthropology major and minor provide excellent preparation for postgraduate training and/or careers in applied anthropology, museum work, public and contractual archaeology, education, forensic science, law, health/medicine, international business, marketing, human services, tourism and other fields that require an understanding of human diversity and human adaptability.

Programs and Courses:
The program in anthropology at SUNY Brockport is geared toward a core of motivated majors and minors. It stresses interaction between students and faculty; hands-on laboratory, field and career experience; training in research methodology; and mastery of analytical and communication skills. The anthropology major offers two options, one with 37 credits and the other with 43 credits. The department also offers an 18-credit Personalized Applied Minor in Anthropology (PAMA) and a general minor. Courses cover four areas:

1. Physical (biological) anthropology: reconstructing human and primate evolution, and understanding contemporary human adaptation;
2. Archaeology: studying culture through material remains with the aim of ordering and describing the events of the past and explaining the meaning of those events;
3. Cultural anthropology: understanding cultural diversity and contemporary sociocultural processes; and
4. Applied anthropology: putting these perspectives to work in identifying, analyzing and solving contemporary human societal problems in fields such as medicine, international development, preservation of cultural and environmental resources, and human services.

Major in Anthropology
The Department of Anthropology offers a major that gives students an opportunity to choose between two options depending on their curricula and career needs. Details of the two options are described below.

Major requirements:

Option I. Liberal Arts Anthropology Option (37 credits):
A traditional “stand-alone” major for students who are interested in anthropology but who will probably not enter anthropology as a career, per sé. Such students might include those with another major outside of anthropology or students in pre-professional programs such as pre-law, pre-medical, elementary and secondary education certification. Option I provides students with a broad perspective on anthropology by including within it courses in each of three sub-disciplines (Socio/Cultural Anthropology, Physical/Biological Anthropology and Archaeology).
Option I Major Requirements: (37 credits)

A. Introductory courses:

- AN 100 Introduction to Cultural Anthropology 3
- AN 110 Introduction to Archaeology 3
- AN 120 Introduction to Human Evolution 3

B. Intermediate core courses:

- AN 200 Ethnographic Experience 3
- AN 370 Anthropological Theory 3
- AN 395 Anthropology and Careers 1

C. Three sub discipline upper-division courses: (9 credits)

- AN 3/400 Physical Anthropology Course 3
- AN 3/400 Archaeology Course 3
- AN 3/400 Cultural Anthropology Course 3

D. Anthropological methods: (3 credits)

- AN 394 Research Methods in Cultural Anthropology 3

E. Additional courses:

Chosen in consultation with advisor to complete total credits 9

Total: 37

Option II. Anthropology as a Profession/Pre-graduate School Option (43 credits)

An expanded major for students who will probably (1) enter the work force directly as practitioner/applied anthropologists, Cultural Resources Management (CRM) staff, CRM archaeologists, museum staff, Peace Corps volunteers, etc. and/or (2) attend graduate programs in anthropology. This option is founded on the assumption that potential employers and graduate schools seek superior students with a work ethic, research and communication skills, and practical experience that they can translate immediately into the job or graduate school. Option II differs from Option I in requiring that students complete an additional collateral course and a senior thesis project or practicum. In addition, this option requires that students have a cumulative GPA of 3.25 in anthropology courses in order to register for the Senior Thesis.

Option II Major Requirements: (43 credits)

A. Introductory courses:

- AN 100 Introduction to Cultural Anthropology 3
- AN 110 Introduction to Archaeology 3
- AN 120 Introduction to Human Evolution 3

B. Intermediate core courses:

- AN 200 Ethnographic Experience 3
- AN 370 Anthropological Literature 3
- AN 395 Anthropology and Careers 1

C. Three sub-discipline upper-division courses: (9 credits)

- AN 3/400 Physical Anthropology Course 3
- AN 3/400 Archaeology Course 3
- AN 3/400 Cultural Anthropology Course 3

D. Anthropological methods: (3 credits)

- AN 394 Research Methods in Cultural Anthropology 3

E. Senior Thesis:

- AN 496 Senior Thesis Project 3

F. Required collateral course:

SOC 200 Social Statistics, PSH 202 Introduction to Statistics for Psychology, or equivalent course in computer applications 3
G. Additional courses:
  Chosen in consultation with advisor to complete total credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ANT 461 or 462 or BCE 322</td>
<td>The semester-abroad program, internship or co-op</td>
</tr>
</tbody>
</table>

Total: 43

Strongly recommended for Options I and II:
Courses in foreign language (four semesters), statistics, computer applications, advanced writing, semester-abroad program, internship or co-op (ANT 461 or 462 or BCE 322). For students in Option II, courses ancillary to anthropology may be suggested by advisor if these are relevant to career or graduate school goals. For example, anthropology majors intending to pursue careers and/or graduate work in areas such as museum work, physical anthropology, paleontology, archaeology, conservancy/conservation, medicine, and law will be advised to take additional courses in disciplinary areas relevant to their career goals. Majors may increase chances for a successful career by:

- combining anthropology with a professional or pre-professional program such as teacher certification, pre-law, or pre-medical;
- minoring in a field that complements anthropology (art, communications, psychology, etc.);
- developing skills in areas outside of, but relevant to, anthropology, such as computer science, foreign languages, technical writing or advanced composition;
- completing an internship, field project or service in an area relevant to anthropology; and/or
- experiencing another culture through a credit-bearing semester abroad.

Minor Programs in Anthropology
The Personalized Applied Minor in Anthropology (PAMA) is a contractual program that allows students to relate anthropology to their major or career interests outside of anthropology. PAMA students are assigned a faculty sponsor in anthropology with interests and training relevant to the concerns of the student’s major field. The student and faculty member then develop a contractual minor of 18 credits which must include an integrative ANT 499 Independent Study course taken in the senior year.

The department also offers a general minor for students who have not chosen a career concentration or major, or who simply want a broad exposure to anthropology. The general minor consists of 18 credits in anthropology distributed as follows:

1. ANT 100;
2. One of the following: ANT 110 or 120; and
3. Four electives selected in consultation with the departmental advisor. (Up to two courses relevant to anthropology, but offered by other departments [for example, art history, biology, history, African and Afro-American Studies, etc.], may be included in the minor.

Anthropology Courses

ANT 100 Introduction to Cultural Anthropology (A,S,C).
  Introduces basic concepts of cultural anthropology by relating them to pressing local and worldwide problems. Includes topics such as the relationships between people and their environments; the impact of technological modernization on traditional cultures; and the practical applications of anthropology in cross-cultural communication, health, economic development and ecology. 3 Cr. Every Semester.

ANT 110 Introduction to Archeology (A,S,C).
  Prerequisite: ANT 100. Provides an introduction to the study of cultures through selected case studies, or ethnographies. Also provides an in-depth view of specific cultures and the anthropological analysis of them; introduces students to theories and methodologies that frame
ANT 256 Introduction to Forensic Anthropology (A,E,N). When skeletalized victims of crime, human rights abuses or mass disasters are found, forensic anthropologists help identify victims, reconstruct events surrounding death, and provide legal evidence. Uses case studies from a variety of sources – from the Battle of the Little Big Horn and the Kennedy assassination to the fate of MIAs and the World Trade Center disaster – to examine the biological principles behind forensic anthropology. 3 Cr.

ANT 261 Cross-cultural Sexuality (A,D,O). Examines human sexuality from a cross-cultural perspective. Reviews the evolution of sex, history of sex research, marriage, incest, sexual practices, gender issues, gender diversity, homosexuality, sexually transmitted diseases, sex industry work, and concepts of physical attractiveness and modesty for Africa, the Middle East, South Asia, East Asia, Oceania, Latin America, the Caribbean, North America, and Europe. 3 Cr.

ANT 262 Female: Myth and Reality (A). Cross-listed as WMS 262. Explores the roles and status of females from a cross-cultural perspective; how females perceive themselves and how they are perceived by others in different societies; and biological differences between males and females as these are used to arrive at socially significant distinctions. 3 Cr.

ANT 301 Native Americans (A,I,C,D). Explores the major issues facing Native Americans (Indians and Eskimos) in the United States today. Emphasizes understanding the varied perspectives of the major parties involved in each issue with particular attention to the Native American position. 3 Cr. Fall Semester.

ANT 307 Gender and the Past (A,J,W). Explores the relationship between past and present in the context of interpreting gender roles, with a focus on gender in the present versus gender in the past. Teaches students how to evaluate claims or interpretations based on historic or archaeological data. Introduces students to a wide range of historically conditioned gender roles. By examining this diversity, allows students to realize that gender is not a simple or natural construct. 3 Cr.

ANT 312 Culture and Health (A,J,WE). Explores the implications of cultural and ethnic diversity for understanding and dealing with health problems in America and around the globe. Emphasizes the importance of cross-cultural understanding and communication for health care, nutrition, education and cultural change. 3 Cr. Spring.

ANT 313 Culture and Disability (A,J,W). Examines “disability” as a cultural construct whose meaning is changing in light of greater public awareness of disability, activism on the part of people labeled as “disabled,” and technological changes. Looks at disability as a reflection of cultural diversity in America, and assesses ways to understand how this diversity can help us maximize all our potentials in a multicultural society. 3 Cr. Fall.

ANT 314 Cross-cultural Perspectives on Aging (A,J,O). Examines cultural factors underlying diverse ways of growing old and living as an aged person; myths and stereotypes about the elderly; theories relevant to age and aging; the impact of gender, class and ethnicity on aging; and issues in the US relevant to aging. 3 Cr.

ANT 315 The Migration Experience (A,J,W). Economic change, war and political upheaval have created an increasing number of voluntary and involuntary migrants in the contemporary world. Using the holistic approach and cultural insight of anthropology, looks at the migration experience and the role of gender within it, from the decision to leave through adaptation and the resettlement. Considers reproductive, household and extradomestic roles and shifting power relations. 3 Cr. Spring.

ANT 316 Food and Culture (A,J,W). Because the consumption of food serves our most basic need, explores how food is one of the most culturally elaborated areas of human experience. Also explores the production, preparation and consumption of food as guided by cultural rules and taboos that define social relations, ethnic identity, gender, and class. Examines contemporary issues that center on food, among them food policy, hunger, obesity, sustainable agriculture and the genetic modification of foodstuffs. 3 Cr.

ANT 317 Culture and AIDS (A, D, E, J). Explores the cultural, epidemiologic, political, psychological, philosophical, economic, public health, and public policy dimensions of HIV/AIDS on a global level, especially in the United States and sub-Saharan Africa. Focuses upon women and children with AIDS, men who have sex with men and other at-risk populations, HIV prevention strategies, theoretical issues, social stigma and discrimination, and the influence of the pandemic on the other aspects of society and culture, and the meaning and importance of HIV/AIDS. 3 Cr.

ANT 321 Culture Change (A,J,WE). Studies modern world cultures and societies in conflict. Gives particular attention to how the economic, political and social interests of major international powers produce conflict and change throughout the developing world. 3 Cr. Spring.
ANT 322 Culture and Power (A). Explores how powerlessness is experienced by many people in society today. Requires students to study cases from different cultures, develop conceptual frameworks for analyzing them, and then apply principles derived from the case studies to situations where the exercise of power becomes a problem for them as individuals or as members of groups to which they belong. 3 Cr.

BCE 322 Brockport Career Exploration Course. Encourages sophomores, juniors, and seniors to investigate a specific career area through a placement in an area human service agency, govern mental office, or classroom. Allows students to work under the guidance of an immediate supervisor and College faculty sponsor and participate in workshops through the Office of Career Services. 3 Cr. Every Semester.

ANT 330 World Poverty and Economic Underdevelopment (A,J,C). Investigates the systemic nature of underdevelopment as a process; and its causes and its implications for people in all of the world’s sociocultural systems. Uses a number of issues to examine the systemic nature of underdevelopment. 3 Cr. Fall.

ANT 332 China in Transition (A,J,C). Explores the social, cultural, political and economic changes that have taken place in China in the 20th century. Examines how these changes have affected traditional Chinese society and discusses their continuing impact on social life, cultural values and social behavior in contemporary China. 3 Cr. Fall.

ANT 342 North American Archaeology (A). Provides an overview of the history of humans in North America from the earliest settlement to the recent historical period. Explores recent research on issues such as peopling of the New World, the development of agriculture, the nature of Chiefdoms, the rise of the state, and modern political aspects of the archaeology of indigenous peoples in North America. 3 Cr.

ANT 350 Primate Behavior and Adaptation (A). Explores the evolution, behavior, and adaptations of living non-human primates, with particular emphasis on (1) field studies of free ranging primates; (2) social and protocultural behavior in primates; and (3) relevance of primates for understanding the roots of animal behavior in general and human behavior in specific. 3 Cr.

ANT 356 Forensic Anthropology with Laboratory (A). Explores how forensic anthropology applies skeletal analysis in a variety of settings from criminal investigation to reconstructing what really happened at the Battle of the Little Bighorn. Uses case studies, laboratory exercises and field simulations to explore the roles and techniques of forensic anthropology. Complements interests in anthropology, criminal justice, pre-law, pre-medical, psychology and biology. 4 Cr.

ANT 363 Witchcraft and Magic (A). Examines anthropological perspectives on the witchcraft phenomenon. Studies witchcraft beliefs and practices in England, Europe and Colonial America in the 16th and 17th centuries from an ethnohistorical perspective and magic practices among non-Western cultures in Asia, Africa, Oceania, and Latin America. Provides a cross-cultural comparison of witchcraft beliefs and practices in past and present societies. 3 Cr. Fall.

ANT 370 Anthropological Theory (A). Prerequisite: ANT 100. Gives students a broad understanding of the major American, British, and French theoretical schools and anthropology theorists, including cultural materialism, structural-functionalism, structuralism, postmodernism, gender theory, personality and cultural evaluationary theory, diffusionism, cultural ecology, maladaptation, cultural relativism, and globalization. 3 Cr. Spring.

Note regarding Topics Courses (ANT 380, 381, 382, 480, 481 and 482): Topics courses are intended to provide breadth in the anthropology program through courses that are not offered on a regular basis, but which meet certain needs and interests. These include special courses offered at the request of anthropology majors, one-time courses offered by regular or visiting faculty, etc.

Topics courses are offered in each of the three subfields of anthropology: Cultural Anthropology, Physical Anthropology and Archaeology. Students may take more than one topics course for credit. When topics courses are offered they will carry a descriptive title (Eg: ANT 482/582 Controversies in Human Evolution or ANT 380 The Food and Culture, etc.). Descriptions of topics courses offered in a particular semester can be obtained from the Department of Anthropology Web page during academic advisement and registration.

ANT 380 Intermediate Topics in Cultural Anthropology. May or may not have prerequisites. Topic will vary from semester to semester and cover such areas as nutrition, art, religion, the ethnography of specific regions or ethnic groups, etc. 1–6 Cr.

ANT 381 Intermediate Topics in Archaeology. May or may not have prerequisites. Topic will vary from semester to semester and may cover such areas as museum studies, the archaeology of specific geographical regions, etc. 1–6 Cr.

ANT 382 Intermediate Topics in Physical Anthropology. May or may not have prerequisites. Topic will vary from semester to semester and
might include such areas as the human adaptation, primatology, the paleontology of specific geographic regions, etc. 1–6 Cr.

ANT 394 Research Methods in Cultural Anthropology (A). Prerequisite: ANT 100. Provides an introduction to the art and science of field research in cultural anthropology. Provides hands-on experience with selected research techniques and analysis of data. 3 Cr. Spring.

ANT 395 Anthropology and Careers (A). Explores career selection directly relevant to the major as well as the application of anthropological training to a broad range of careers. Students explore career possibilities through use of the Career Services Center and other local resources, personal contacts with alumni and others, and guest lectures by practicing anthropologists. Develops skills in curriculum planning, resume writing, job searching. 1 Cr. Fall.

ANT 401 Native-American Art and Culture (A). Prerequisite: ANT 100 or ARH 201 or permission of instructor. Native-American visual arts (North of Mexico) viewed within the context of Native American cultures and the framework of anthropology. Explores Native-American arts by culture areas—their roots, traditional expressions, changes with European contact, and contemporary expressions. 3 Cr. Spring.

ANT 405 Applied Anthropology (A). Prerequisite: ANT 100. As a subfield using anthropological perspectives to analyze and provide solutions for societal problems in the US and globally, uses case studies and hands-on projects. Explores the theoretical, practical and ethical implications of applied anthropology. Intended primarily for students who will ultimately address a variety of applied problems in multicultural or non-Western settings. 3 Cr.

ANT 440 Historical Archaeology (A). Surveys the field of American historical archaeology. Examines the methods and theories for the archaeological investigation of the recent past. Explores the insights gained on particular social issues, such as class, gender, ethnicity, and slavery, where archaeology has played a role. 6 Cr. Every Year.

ANT 441 Archaeological Analysis (A). Prerequisite: ANT 110 or 442 or instructor's permission. Presents contemporary laboratory methods used to identify patterns in artifacts and field data recovered from archaeological site surveys and excavations. Students learn to analyze, interpret, manage, and conserve artifacts and field data. 3 Cr. Spring.

ANT 442 Field Methods in Archaeology (A). As a field-based course, introduces students to the methods used by archaeologists to collect data in the field. Allows students to participate in an archaeological dig at an actual site, and perform all the duties involved in that work, with activities including survey mapping, testing, and excavation, documenting and recording finds, and processing artifacts in the lab. 6 Cr.

ANT 461 Anthropology Practicum (A). Prerequisite: Prior departmental approval. Allows qualified anthropology majors or minors to earn credit through internships, cooperative education programs, etc. that involve applying anthropological perspectives in work settings (see also BCE 322 listed above). 3–6 Cr. TBA.

ANT 462 Anthropology Internship (B). Prerequisite: Prior departmental approval. Allows students to conduct an internship in an outside work setting, nonprofit organization, health or social services setting, museum or zoo. Includes the department’s Cultural Anthropology Intern Program in which students maintain a field journal, meet periodically with a faculty advisor, and write a final report. 3-6 cr. Every Semester. See note on topics courses, above.

ANT 480 Advanced Topics in Cultural Anthropology. Similar to ANT 380, except usually has prerequisites or requires instructor’s permission to enroll. 1–6 Cr.

ANT 481 Advanced Topics in Archaeology. Similar to ANT 381 except usually has prerequisites or requires instructor’s permission to enroll. 1–6 Cr.

ANT 482 Advanced Topics in Physical Anthropology. Similar to ANT 382 except that ANT 482/582 usually has prerequisites or requires instructor’s permission to enroll. 1–6 Cr.

ANT 496 Senior Thesis Project (A). Requires students to design, carry out, write and defend a field, laboratory or library research project in collaboration with or under the supervision of an anthropology faculty member. 3 Cr.

ANT 499 Independent Study in Anthropology (A). Established in consultation between student and instructor-sponsor. 1–6 Cr. Every Semester.
Art has been defined as many things: ability, process and product. The Department of Art at SUNY Brockport offers courses and programs which integrate the formal, technical, conceptual, and historical aspects of the visual arts.

Programs: The Department of Art offers a Bachelor of Fine Arts (BFA) in Studio Art, a Bachelor of Arts (BA) or a Bachelor of Science (BS) in Studio Art, and a minor in art history. In addition, the School of Arts and Performance offers an Interdisciplinary Arts for Children Program, in which studio art is one of the specialties. Once a student declares a major, a faculty member in the appropriate area will be assigned as academic advisor.

The Department of Art reserves the right to retain students’ work for a limited period and reproduce work for official purposes such as exhibitions, catalogs, teaching aids, and slide lectures. Students are expected to assume the costs of materials they use in their courses. Many studio courses have an additional studio fee for materials used in class.

Resources and Facilities: The Department of Art, located in the Tower Fine Arts Center, has well-equipped studios, two galleries, and a Visual Resource Center, which houses over 112,000 slides and videotapes. An active Art Students’ Association organizes critiques, visiting artist programs, field trips, and exhibitions. SUNY Brockport students benefit from an affiliation with the internationally known Visual Studies Workshop in Rochester, which offers a variety of courses in photography, video, film, and book arts. Visual Studies Workshop also offers many exciting seminars and workshops that may be taken for college credit during its Summer Institute. Students at SUNY Brockport have an opportunity to study abroad in the summer program in Faenza, Italy. In addition, students have the opportunity to study the visual arts from a non-Western perspective at the University of Science and Technology, Kumasi, Ghana.

Transfer students: A maximum of 18 transfer credits in art will be accepted by the department toward the studio art major; and a maximum of 39 transfer credits in art will be accepted toward the BFA. Other credits may be used as electives. Credits that correspond to the required courses within the major program may be accepted, as may certain related transfer courses not included in our curriculum. All transfer grades must be “C” or higher to be used to fulfill major requirements.

Studio Art Major (BA/BS)
The studio art major is designed to provide a well-rounded art experience, encompassing two-dimensional and three-dimensional media, art history courses, and a specialty (three levels) in one area. Students majoring in art are encouraged to expand their understanding of art as it relates to other disciplines, cultures, and global concerns.

Studio Art Major Requirements:
In addition to meeting all general SUNY Brockport requirements, studio art majors must complete a total of 36 credits in art and art history as listed below. No more than 54 credits in studio art (or any other single discipline) can be used to satisfy the 120-credit requirement for the BA or BS. A minimum grade of “C” must be attained in all courses in the major.
### Required Courses (18 credits)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARH 201</td>
<td>Survey of World Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARH 202</td>
<td>Survey of World Art II</td>
<td>3</td>
</tr>
<tr>
<td>ART 210</td>
<td>2-D Design or ART 212 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 221</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ARH 420</td>
<td>20th-century Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 401</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

### Any two-dimensional courses from the following: (6 credits)

- Painting
- Photography
- Printmaking
- Visual Studies (book arts, film/video, or digital art)
- Drawing (excluding ART 221)
- 2-Dimensional Design (if not taken in the above required courses)

### Any two three-dimensional courses from the following: (6 credits)

- Ceramics
- Sculpture
- Metal/Jewelry
- 3-Dimensional Design (if not taken in the above required courses)

### A three-course sequence (specialty) in one of the following areas: (6 credits)

- Ceramics
- Sculpture
- Metal/Jewelry
- Painting
- Photography
- Printmaking
- Book Arts
- Film/video
- Electronic Imaging

### Total: 36

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**The Bachelor of Fine Arts (BFA) in Studio Art**

The BFA is an intensive degree program in studio art, intended for students who plan to pursue a professional career in art or to prepare for graduate study. Offering concentrations in 10 different areas, the BFA also allows students to pursue their interests in installation art, performance art, public art, Web page design, and other nontraditional art forms. BFA students work closely with a professor/mentor in their area of concentration, as well as interact with the entire art faculty through the required courses and semester BFA Reviews. BFA students are encouraged to be active in the Art Students’ Association, which runs Rainbow Gallery, where BFA senior exhibitions take place. BFA students are also encouraged to take DCE 323 Career Explorations in Art, in which they may receive credit for apprenticeships or internships in artists’ studios, galleries, or alternative spaces.

Students are admitted to the program by a portfolio review. Those who do not have a portfolio may enroll in the BA or BS program in studio art, and begin work on foundation courses to assemble a portfolio. BFA candidates are reviewed each semester and are expected to maintain a 2.5 minimum overall cumulative SUNY Brockport GPA and a 3.0 GPA in art. If advised to discontinue the program, a student may continue as a studio art major in the BA or BS program. A minimum grade of “C” must be attained in all courses in the major.

**BFA Requirements**

Candidates for the BFA must meet all general SUNY Brockport requirements and complete a total of 81 credits in art and art history as indicated below.
## Required ART Courses (39 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART 210</td>
<td>2-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 212</td>
<td>3-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 221</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 322</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 331</td>
<td>Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 341</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>ART 351</td>
<td>Printmaking I</td>
<td>3</td>
</tr>
<tr>
<td>ART 361</td>
<td>Sculpture I</td>
<td>3</td>
</tr>
<tr>
<td>ART 371</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 381</td>
<td>Metal/Jewelry I</td>
<td>3</td>
</tr>
<tr>
<td>ART XXX</td>
<td>Visual Studies (book arts, film/video, or electronic imaging)</td>
<td>3</td>
</tr>
<tr>
<td>ART 401</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ART 402</td>
<td>BFA Senior Exhibition</td>
<td>3</td>
</tr>
</tbody>
</table>

## Required ARH Courses (12 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARH 201</td>
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<td>3</td>
</tr>
<tr>
<td>ARH 202</td>
<td>Survey of World Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARH 420</td>
<td>20th-century Art</td>
<td>3</td>
</tr>
<tr>
<td>ARH XXX</td>
<td>Art history elective</td>
<td>3</td>
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</tbody>
</table>

## Electives in ART, ARH, or related discipline (9 credits)

The following courses are approved electives in the BFA:

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANT 401</td>
<td>Native American Art and Culture</td>
<td>3</td>
</tr>
<tr>
<td>DNS 115</td>
<td>Introduction to Dance</td>
<td>3</td>
</tr>
<tr>
<td>PSH 352</td>
<td>Sensation /Perception</td>
<td>3</td>
</tr>
<tr>
<td>MUS 276</td>
<td>Arts and Humanity</td>
<td>3</td>
</tr>
<tr>
<td>MUS 278</td>
<td>African-American Music and Culture</td>
<td>3</td>
</tr>
<tr>
<td>PHL 308</td>
<td>The Arts in Society</td>
<td>3</td>
</tr>
<tr>
<td>PHL 428</td>
<td>Philosophy of Art</td>
<td>3</td>
</tr>
<tr>
<td>THE 202</td>
<td>Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THE 235</td>
<td>Stage Lighting I</td>
<td>3</td>
</tr>
<tr>
<td>THE 244</td>
<td>Costume Construction</td>
<td>3</td>
</tr>
</tbody>
</table>

## Concentration in one of the following (21 credits)

- Ceramics
- Painting/Drawing
- Metal/Jewelry
- Sculpture
- Visual Studies (photography, electronic imaging, film/video book arts)
- 2-Dimensional Studies (photography, painting, printmaking, drawing, electronic imaging, visual books)
- Time-based Arts (film/video, photography, sculpture, book arts)
- Printmaking/Drawing
- Dimensional Arts (sculpture, ceramics, metal/jewelry and selected courses from the Department of Theatre)
- Interactive (studio, dance, theatre, literature)

Total: 81

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### Interdisciplinary Arts for Children: Art Specialty

Students seeking an interdisciplinary major in Arts for Children with a specialty in art are required to complete a 48-credit program consisting of: (1) two interdisciplinary courses, IAC 280 Introduction to Related Arts for Children, and IAC 491 Seminar in Arts for Children; (2) an art specialty of 21 credits; and (3) a 21-credit block consisting of two courses in each of the other three arts and one approved elective. Students wishing to major in Arts for Children...
with an art specialty must present a portfolio of their artwork for review by the art specialty advisor. They are also urged to take additional studio art courses and ART 419 Practices of Teaching Art on the Elementary Level (prerequisite ART 417). A minimum grade of “C” must be maintained in all required courses.

For detailed information and a comprehensive listing of courses required in this specialty area, refer to the section Arts for Children-Interdisciplinary Major in this catalog.

Minors in Studio Art

Studio Art: 18 credits, including the following:

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<thead>
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<td>3</td>
</tr>
<tr>
<td>ART 221</td>
<td>Drawing I</td>
<td>3</td>
</tr>
</tbody>
</table>

Nine additional credits of art studio electives

Minor Total: 18

STUDIO AND THEORY COURSES

Please note: Students are expected to spend at least three hours a week in the studio for every credit taken. Arrangements for the use of studios at unscheduled times must be made with appropriate instructor. There is a mandatory materials fee charged in most studio art courses to help cover the expense of supplies for students.

ART 101 Visual Art Experience (A, P). An introductory course for students with little or no art experience, designed to broaden their visual vocabulary. Explores the basic elements and principles of art through a sequence of problems to be solved by the execution of original works in various media. 3 Cr. Every Semester.

ART 110 Art and Artists (A,F). Students may select ART 110 or ARH 215 as credit towards the Fine Arts requirement (F), but may not receive credit for both. Explores the basic forms of artistic production and the study of aesthetic principles of visual art, and how those principles reveal cultural meaning through lectures, slides and films, sketchbook design projects, gallery visits, student-teacher dialogues, written assignments and tests. 3 Cr.

ART 210 2-Dimensional Design (A,P). Explores concepts of creating 2-dimensional images through various methods including line, shape, color, composition, texture, etc. Includes lectures, written assignments, projects, demonstrations, and critiques. Assigns problems involving the production of 2-dimensional images using various media. 3 Cr.

ART 212 3-Dimensional Design (A,P). Examines the theory and application of 3-dimensional design. Explores design concepts such as volume, positive and negative space, texture, color, etc. through the manipulation of a variety of materials. 3 Cr. Spring.

ART 221 Drawing I (A,P). Provides an introduction to the basic elements of drawing and two dimensional imagery; including drawing from natural forms; aesthetic elements, such as line, value, composition, space, perspective, and mark making; and a basic understanding of the development of content in a work of art. 3 Cr.

ART 311 Video I (A). (Taught at Visual Studies Workshop, lab hours weekdays at VSW.) Provides an introduction to the use of video as a medium for individual expression and creativity. Develops basic video skills (i.e., the operation of the video camera and editing deck) and fundamental procedures in planning and producing a videotape are presented through demonstrations, lectures, and practice sessions. Uses screenings and artists’ presentations to illustrate contemporary work in video. 3 Cr.

ART 330 Digital Art I (A). Introduces students to the use of the computer as a tool of art making. Uses multimedia software to create digital art. Encourages students to explore and combine computer-based techniques with traditional studio art techniques. Requires short readings to accompany the assignments to help students contextualize their work within the historical, social and political arena that surrounds the production of computer-based art. 3 Cr.

ART 322 Drawing II (A). Prerequisite: ART 221. Provides studio experience using a variety of drawing materials to teach drawing skills and allow students to acquire the necessary background for further study. 3 Cr.
ART 331 Introduction to Photography (A). (Two sections: SUNY Brockport campus and Visual Studies Workshop.) Explores photography’s creative potential for personal expression. Covers 35mm camera operation, processing and developing film, and printing black and white photographs in the darkroom. During the first half of this class focus is on technical skills. During the second half focus is on the use of the students’ newly found skills and their creative potential. Requires students to have access to an adjustable 35mm camera. 3 Cr.

ART 332 Photography II (A). (Taught at Visual Studies Workshop.) Expands on the basic darkroom skills covered in introductory photography courses, with an emphasis on the conceptual aspects of image making. Prompts students to experiment with infrared film and to try hand-applied photo emulsions, such as Liquid Light and Luminos. Teaches students how to test equipment accuracy to ensure proper exposures. Employs a variety of assignments using technical tools learned as applied to conceptual themes. Entails lectures and field trips to supplement the studio aspect. 3 Cr.

ART 333 Introduction to Color Photography (A). Prerequisite: ART 331. (Taught at Visual Studies Workshop.) Provides an introduction to color photography. Addresses technical and aesthetic concerns with an emphasis placed on developing a personal color vocabulary. Upon completion, allows the student to be able to expose, process, and print both color negatives and slides properly; have an understanding of color theory and history; and see the possibilities for expression in color photography. 3 Cr.

ART 341 Painting I (A). Prerequisite: ART 221. Provides an introduction to painting and design theory. Emphasizes such design elements as form, texture, line, tone, and the spatial and structural aspects of color through the application of various painting techniques. Uses principally oil and acrylics. 3 Cr.

ART 342 Painting II (A). Prerequisite: ART 341. Provides a continuation of ART 341 with emphasis on composition, structure of space, and the human figure. Uses principally oil and acrylic paints. 3 Cr.

ART 351 Printmaking I (A). Prerequisite: ART 221. Entails an introduction to printmaking processes including monotype, intaglio and relief. Stresses conceptual development, technical skills and compositional elements throughout the semester. 3 Cr.

ART 352 Printmaking II (A). Prerequisite: ART 351. Provides advanced skills and techniques from ART 351 and includes bookmaking, papermaking and alternative methods in printmaking. 3 Cr.

ART 358 Making Visual Books (A). (Taught at Visual Studies Workshop.) Introduces bookworks, which combines text, images, unexpected materials and unusual bindings, through examples, discussions and demonstrations, including access to outstanding collections. Requires students to work on individual projects, including one-of-a-kind books, and small editions. Emphasizes developing books that integrate word, image, and structure. 3 Cr.

ART 361 Sculpture I (A). Familiarizes students with the conceptual, technical, and visual vocabulary of sculpture well enough to create dimensional works of artistic merit and personal expression. EXPECTS students to gain basic skills with materials as well as understanding of sculptural concepts. Designs problems to distinguish between technique and idea in sculpture, and how materials are used to express concepts. 3 Cr.

ART 362 Sculpture II (A). Expands student’s knowledge of sculptural materials and techniques, with an emphasis on metal-working through both direct and indirect methods. In addition, allows students to further explore sculptural concepts and 3-dimensional spatial organization as they apply to the completion of class projects. 3 Cr.

ART 371 Ceramics I (A). Introduces students to basic hand-building techniques that are used to create objects out of clay. Asks students to address projects in a problem-solving approach, which utilize and develop technical knowledge, skill and creative thinking capabilities using clay as an expressive material. Also covers basic glazing theories and application techniques. 3 Cr.

ART 372 Ceramics II (A). Prerequisite: ART 371. Provides further exploration of clay as an expressive material while focusing on production methods utilizing the potter’s wheel. Introduces glaze calculation, oxidation, reduction firing, and formulation of clay bodies. 3 Cr.

ART 381 Metalwork and Jewelry I (A). Introduces 3-dimensional design concepts using basic jewelry disciplines. Emphasizes the study of design form through metal-working techniques, using and integrating various materials, metal, wood, plastic, glass, stone and synthetic materials. 3 Cr.

ART 382 Metalwork and Jewelry II (A). Prerequisite: ART 381. Provides a continuation of ART 381. Focuses on intermediate design and studio procedure. 3 Cr.

ART 383 Metalwork and Jewelry III (A). Prerequisite: ART 382. Covers advanced design theory and studio procedures in metal-working techniques. 3 Cr.

ART 399 Independent Study in Art (A or B). Prerequisite: Instructor’s permission. Arranged in
consultation with the instructor-sponsor and in accordance with the procedures of the Office of Academic Advisement prior to registration. May be repeated for credit. 1–6 Cr.

ART 401 Senior Seminar (A,U). Prerequisites: ARH 201 and 202, and ART 221. Class to be taken in the senior year. Requires readings, portfolio development, exhibition preparation, advanced studio problems and a discussion of the theory and criticism of art. 3 Cr.

ART 402 Senior Exhibition (A). Entails a Senior Exhibition required of all BFA students prior to graduation. Allows students to work with the professor in their area of specialization to produce an exhibition of quality that represents their accomplishments in the program. Covers exhibition design, installation, and advertising as well as other pertinent responsibilities and information relative to a successful exhibition. 3 Cr. Every Semester.

ART 412 Video II: Advanced Video Production (A). (Taught at Visual Studies Workshop, lab hours weekdays during Media Center hours.) Designed for people with prior experience in video, presents advanced techniques for those who wish to further explore the ideas and meaning behind their work in video. Allows students to combine the elements of performance, scripting, sound, computer graphics, and special effects within individual projects. Uses class time to study film, computer, and video techniques, as well as have in-group discussions about the tapes created during the course. 3 Cr.

ART 414 Advanced Problems in Visual Studies (A). Provides for reading, advanced projects, and discussion of theory and criticism applied to electronic imaging, visual books or film/video. 3 Cr. May be repeated for credit.

ART 415 16 mm Film I (A). (Taught at Visual Studies Workshop, lab hours weekdays during Media Center hours.) Provides an introduction to independent 16 mm film production. Focuses on individual expression through script writing, film production and post-production. Includes sessions covering topics such as the history of film, camera operation, the use of light meters, lighting, composition, directing actors, and the principles and techniques of editing. Expects students to demonstrate competence with equipment as a prerequisite for working on individual projects. 3 Cr.

ART 416 Introduction to 16 mm Film II (A). Prerequisite: ART 315 or instructor’s permission. (Taught at Visual Studies Workshop.) Provides a follow-up to basic filmmaking, with a more in-depth analysis of sound production including sync recording mixing of complex tracks, working with ensemble acting and dialogue. Highlights animation techniques, titling, and counterpoint in editing. Requires students to ready film projects for final post-production and distribution. 3 Cr.

ART 417 Methods of Teaching Art on the Elementary Level (A). Prerequisite: An introductory art course or instructor’s permission. Explores the philosophical and psychological basis for teaching art. Investigates problems of artistic and creative development. Examines methods of teaching art through practice and observation. Includes teaching of art to children. 3 Cr.

ART 418 Documentary Film/Video (A). (Taught at Visual Studies Workshop, lab hours weekdays during Media Center hours.) Provides insight into the practice of documentary film/video making. Introduces and discusses basic tools and the principles of film narration and montage, as they apply to documentary film/video making. In hands-on exercises, allows participants to explore the creative process of interpreting “the world out there” by means of the moving image. 3 Cr.

ART 419 Practices of Teaching Art on the Elementary Level (A). Prerequisite 417. Explores important concepts related to art history, art aesthetics, and art criticism. Examines advanced methods of teaching art and classroom management techniques. Familiarizes with national and New York state standards of art curriculum in grades K–6. Allows students to work with a classroom teacher in developing syllabus and teaching art. 3 Cr.

ART 423 Drawing III (A). Prerequisite: ART 322. Provides a continuation of ART 322. Allows for in-depth studio experience, concentrating on drawing the humane, the nature of space, individual exploration of imagery and further experimentation with a variety of media. 3 Cr.

ART 424 Advanced Problems in Drawing (A). Prerequisite: ART 423. Provides for intensive drawing, research on concepts, readings, advanced projects, and discussion of theory and criticism as applied to creative drawing. May be repeated for credit. 3 Cr.

ART 430 Digital Art II (A). Further develops skills and principles relating to the exploration of the computer as a tool for creating art. Encourages students to do a more advanced exploration and combine computer-based techniques with traditional studio art techniques. 3 Cr.

ART 433 Photography III (A). (Taught at Visual Studies Workshop.) Explores independent creative projects throughout the semester, emphasizing a continued development of a project. Focuses on paper quality, issues of presentation and sequencing, as demonstrated in the work of other photographers and through class discussion. Teaches advanced darkroom skills. 3 Cr.
ART 434 Advanced Problems in Photography (A). (Taught at Visual Studies Workshop.) Structured for students to gain independence in their working methods. Expects students to locate an area of interest and create a substantial project that reflects a thoughtful and developed investigation. Requires conceptual and technical readings to supplement their work. 3 Cr.

ART 443 Painting III (A). Prerequisite: ART 342. Covers advanced painting, painting from life, and the human figure. Emphasizes creative forms of self expression. Intensive painting and research on imagery begins in the second half of the semester. 3 Cr.

ART 444 Advanced Problems in Painting (A). Prerequisite: ART 443. Emphasizes personal solutions related to content in the work as well as technical issues in painting, advanced projects, and discussion of theory and criticism applied to creative painting. May be repeated for credit. 3 Cr.

ART 453 Printmaking III (A). Prerequisite: ART 352. Allows advanced students to design their individual projects for the semester. Requires a minimum of four projects exploring advanced technical and conceptual development. 3 Cr.

ART 454 Advanced Problems in Printmaking (A). Prerequisite: ART 453. Allows for a continuation of personal development of ideas, skills and varied technical approaches to the art of printmaking at the advanced level. 3 Cr.

ART 463 Sculpture III (A). Prerequisite: ART 362. Allows students to expand their knowledge of materials and techniques used in the production of sculpture. Assignments address contemporary concerns in working three-dimensionally, such as permanence, process and site-specificity. Allows students to gain knowledge and experience with public art, installation art, and performance art. Entails readings to supplement class demonstrations, critiques, slide lectures, and videos on contemporary sculpture. 3 Cr. Every Semester.

ART 464 Advanced Problems in Sculpture (A). Prerequisite: ART 463. Allows students to expand their knowledge of sculptural materials and techniques while working toward the development of their own vision. Encourages individual explorations into various approaches to art-making. Gives information and guidance on documentation and presentation of sculpture for portfolios. May be repeated for credit. 3 Cr. Every Semester.

ART 473 Ceramics III (A). Prerequisite: ART 372. Provides students the opportunity to expand their technical knowledge and skills in either hand construction or wheel-thrown techniques. Emphasizes continued development of creative thinking and problem solving as students address assigned problems and investigate individual areas of interest. 3 Cr.

ART 474 Advanced Problems in Ceramics (A). Prerequisite: ART 473. Provides for reading, advanced projects, and discussion of theory and criticism applied to the art of ceramics. May be repeated for credit. 3 Cr.

ART 484 Advanced Problems in Metal/Jewelry (A). Prerequisite: ART 483. Provides for reading, advanced projects, and discussion of theory and criticism applied to the metalwork and jewelry arts. May be repeated for credit. 3 Cr.

ART 491 Topics in Art-Studio (A). Provides an upper-division art studio experience. Allows students to earn credit for a special offering not normally a part of regular department curriculum. 1–3 Cr.

ART 499 Independent Study in Art (A or B). Prerequisite: Instructor’s permission. Arranged in consultation with the instructor-sponsor and in accordance with the procedures of the Office of Academic Advisement prior to registration. May be repeated for credit. 1–6 Cr.

ART HISTORY

Art History Minor
Art history minors must complete a total of 18 credits in the courses listed below. A minimum grade of “C” must be attained in all courses taken for the minor.

Required Courses (6 credits)
ARH 201      Survey of World Art I
ARH 202      Survey of World Art II

Electives (12 Credits)
Twelve credits of art history electives are required. It is recommended that art history minors take at least one non-western art course.
ARH 201 Survey of World Art I: Ancient to Renaissance (A,G,O). Provides an integrated chronological study of world art from prehistory to the 14th century. Covers western art along with the ancient arts of Asia, Islamic arts, and pre-Columbian arts. Teaches students to identify cross-cultural influences and regional stylistic features. 3 Cr. Fall.

ARH 202 Survey of World Art II: Renaissance to Modern (A,F). Provides an integrated chronological study of world art from the 15th century to present. Covers Renaissance art to modern art, along with later Islamic and Asian arts, Latin American arts, African, Oceanian, and Native-American arts. Aims at illustrating the growing interdependence of the arts of major civilizations and cultures, and their respective contribution to the visual arts. 3 Cr. Spring.

ARH 215 Art Appreciation (A,F,C). Studies the elements of art, the artists’ process, and selected works of painting and sculpture to give an appreciation of diverse art creativity throughout the world. Also discusses and uses artists and artworks of selected non-western cultures to illustrate elements of art. 3 Cr.

ARH 310 Women in Art (A,U,W,C). Studies women artists and the role played by women in the visual arts through the ages. 3 Cr.

ARH 391 Seminar in Art History (A). Explores research methods in fine arts and learn to write about art. Focuses each time on a different subject. May be repeated for credit. 3 Cr.

ARH 410 Contemporary Art Criticism (A). Examines the relationship between the critic, the artist, and the art market. 3 Cr.

ARH 419 19th-century Art (A). Covers the fine and minor arts of 19th-century Europe and America, with emphasis on patronage and the artistic movements that dominated the century. 3 Cr.

ARH 420 20th-century Art (A). Emphasizes the main artistic movements of the late 19th and the 20th century to present, with focus on artists, patronage, styles, and trends in the decorative arts. 3 Cr. Spring.

ARH 424 Medieval Art (A). Covers the art and architecture of Europe from the early Christian period to the Fall of Constantinople. Includes an overview of Byzantine Art. 3 Cr.

ARH 425 Italian Renaissance Art (A). Examines works of art and architecture from the 15th and 16th centuries in Italy. 3 Cr.

ARH 431 American Art (A). Surveys painting, sculpture, architecture, and the decorative arts from colonial times to present. 3 Cr.

ARH 441 Art Worldwide (A). Entails field trips abroad focusing on selected topics in art history. May be repeated for credit. 3 Cr.

ARH 450 Egyptian Art (A). Studies the art and civilizations of pharaonic Egypt and the ancient Near East from the late fourth millennium BC to the conquest of Alexander the Great, with emphasis on pharaonic Egypt, Phoenicia, and Mesopotamia. 3 Cr.

ARH 451 Art of the Classical World (A). Traces the development of Minoen, Mycenean, Greek and Roman art and architecture from the second millennium BCE to the 4th century CE. 3 Cr.

ARH 461 History of Photography (A). (Taught at Visual Studies Workshop). Surveys the development of photographic processes and the movements and artists that have influenced photography. 3 Cr.

ARH 470 Asian Art (A). Studies Indian, Chinese, and Japanese arts from prehistory to the 19th century, with emphasis on painting, sculpture, and the minor arts. 3 Cr.

ARH 474 Islamic Art (A). Studies Islamic art from the origins to the 19th century with emphasis on the evolution of main regional styles, and Chinese influence on the minor arts. 3 Cr.

ARH 490 Topics in Art History (A). Reserved for different topics not listed in this catalog. May be repeated for credit. 3 Cr.

ARH 491 Senior Seminar in Art History (A). Prerequisite: ARH 201 and 202, or instructor’s permission. Examines in detail selected topics in art history with the emphasis on the exploration of research methodologies in fine arts, and writing papers and sharing them in the class. 3 Cr.

ARH 499 Independent Study in Art History (A). Special project in art history arranged in consultation with the instructor-sponsor in accordance with the procedures of the Office of Academic Advisement before registration. May be repeated for credit. 1–6 Cr.
ARTS FOR CHILDREN – INTERDISCIPLINARY MAJOR
147C Hartwell Hall
(585) 395-5304

Director and Associate Professor: Diane B. McGhee; Professor: Oh-Kon Cho; Associate Professors: Jacqueline Davis, William Hullfish; Assistant Professor: Juanita Suarez; Lecturer: Yolanda Daliz.

The BA or BS in Arts for Children, an interdisciplinary major, is recognized as a unique program in the SUNY system. The course of study interrelates the knowledge and skills of art, dance, music, and theatre, with an in-depth study of one of these arts. The curriculum emphasizes philosophical and theoretical concepts of arts education, as well as the skills required for creative expression. Students are trained to work with young children in a variety of situations, such as elementary schools, arts institutions, and community centers in rural and urban environments. The Arts for Children faculty promotes an approach to arts education that fosters inquiry, aesthetic perception and valuing, creative endeavors, and the study of history and culture.

Arts for Children interdisciplinary majors are required to complete a 48-credit program consisting of:

1) Two interdisciplinary courses, IAC 280 Introduction to Related Arts for Children and IAC 491 Seminar in Arts for Children;
2) A 21-credit core in one specialty area: art, dance, or theatre (a specialty in music is not an option at this time);
3) A 21-credit block consisting of two courses in each of the other arts (art, dance, music, and theatre) and one approved elective.

Course requirements are specified under the section heading “Program of Study.”

The degree in Arts for Children can be combined with certification in elementary education. Admission to the teacher certification program, offered through the Department of Education and Human Development, requires a separate application usually prior to entering the junior year. Specific advisement is needed for both the Arts for Children major and the teacher certification program. Students should contact their major advisor and the Department of Education and Human Development as early as possible when planning their course of study. For further details regarding certification, consult the program of study listed under the Department of Education and Human Development.

Students interested in an in-depth study of any of the arts are advised to pursue a major, minor, or take additional courses (maximum of 54 credits) in that discipline. Students are encouraged to participate in study-abroad and internship programs to enhance their knowledge of and abilities in arts in education.

Acceptance into the Program
Students with an affinity for all arts and the ability to communicate proficiently in at least one art area are encouraged to fill out an “Intent to Major” form during the freshman or early sophomore year. Students indicate a specialty of art, dance, or theatre and are then assigned an advisor. Formal acceptance into the major program is granted only after the student has successfully completed:

1) four introductory arts courses, one in each art area;
2) IAC 280 Introduction to Related Arts for Children; and
3) additional requirements as noted for either art or dance specialty areas.

Special Note:
Consult the appropriate section under the heading “Program of Study” to determine the correct introductory courses for the selected art specialty and plan course selection with the Arts for Children advisor. Upon completion of the above requirements, a “Declaration of Academic
Program” form may be filed with the Arts for Children Program Office. A minimum grade of “C” must be attained in all required courses.

Program of Study
Arts for Children majors must take two interdisciplinary core courses and follow the sequence of courses listed under one of the art specialty areas. The specialty areas are art, dance, and theatre. Please check important prerequisites and course descriptions as listed under the respective departments.

All Majors
Arts for Children Interdisciplinary Core Courses: (6 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAC 280 (A)</td>
<td>Introduction to Related Arts for Children (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>IAC 491 (A)</td>
<td>Seminar in Arts for Children (spring only)¹</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Art Specialty
Students wishing to major in Arts for Children with an art specialty must present a portfolio of their artwork for review by the art specialty advisor. They are also urged to take additional studio art courses and ART 419 Practices of Teaching Art on the Elementary Level *(prerequisite: ART 417).*

I. Required Courses in Art: (21 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 210 (A)</td>
<td>Survey of World Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARH 202 (A)</td>
<td>Survey of World Art II</td>
<td>3</td>
</tr>
<tr>
<td>ART 221 (A,P)</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 417 (B)</td>
<td>Methods of Teaching Art on Elementary Level¹</td>
<td>3</td>
</tr>
<tr>
<td>Three courses in any studio art</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

II. Required Courses in Other Arts Disciplines: (21 credits)

<table>
<thead>
<tr>
<th>Art Disciplines</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance</td>
<td>DNS 115 (A,P)</td>
<td>Introduction to Dance</td>
<td>3</td>
</tr>
<tr>
<td>DNS 483 (A)</td>
<td>Children's Dance I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>MUS 105 (A,P)</td>
<td>Introduction to Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 487 (A)</td>
<td>Music and the Child</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Theatre</td>
<td>THE 281 (B)</td>
<td>Creative Drama</td>
<td>3</td>
</tr>
<tr>
<td>THE 353 (A)</td>
<td>Children's Theatre</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>THE 365 (A)</td>
<td>Puppet Theatre OR</td>
<td>3</td>
</tr>
<tr>
<td>ENL 482 (A)</td>
<td>Children's Literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td></td>
</tr>
</tbody>
</table>

Total including core: 48

Dance Specialty
An entry audition is required for all dance majors, minors, and arts for children dance specialty majors and minors. Contact the Department of Dance for information and application materials.

I. Required Courses in Dance: (21 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNS 204 (B)</td>
<td>Dance Conditioning Lab</td>
<td>2</td>
</tr>
<tr>
<td>DNS 205 (A)</td>
<td>Beginning Technique and Survey of Dance</td>
<td>3</td>
</tr>
<tr>
<td>DNS 364 (A)</td>
<td>Dance Improvisation: Technique and Theory</td>
<td>2</td>
</tr>
</tbody>
</table>

¹ This course is taken at the conclusion of the AC major program of study.
II. **Required Courses in Other Arts Disciplines: (21 credits)**

**Art**
- ART 101 (A, P) Visual Art Experience
- ART 417 (B) Methods of Teaching Art on the Elementary Level

**Music**
- MUS 300 (A) Music for Dance
- MUS 487 (A) Music and the Child

**Theatre**
- THE 281 (B) Creative Drama
- THE 353 (A) Children’s Theatre

**Elective**
- THE 365 (A) Puppet Theatre OR
- ENL 482 (A) Children’s Literature

Total including core: 48

Music Specialty

At this time, the Arts for Children Program is not accepting majors in this specialty area.

I. **Required Courses in Music: (21 credits)**

- MUS 105 (A, P) Introduction to Music
- MUS 487 (A) Music and the Child
- MUS 488 (B) Music Practicum

**From the following:** (9 credits)
- DNS 232 (A, P) African Music and Drumming for Dance (3)
- MUS 139 (B) Beginning Voice Class (2)
- MUS 239 (B) Advanced Voice Class (2)
- MUS 300 (A) Music for Dance \(^2\) (3)
- MUS 399 (A) Independent Study in Music (1-3)
- MUS 413 (A) American Music (3)
- MUS 414 (A) American Musical Theatre (3)
- MUS 485 (A) American Folk Music (3)
- MUS 499 (A) Advanced Independent Study in Music (1-3)

Total: 21

\(^2\) Course description is under Department of Dance listings.
II. Required Courses in Other Arts Disciplines: (21 credits)

Art
- ART 101 (A,P) Visual Art Experience 3
- ART 417 (B) Methods of Teaching Art on Elementary Level 3

Dance
- DNS 115 (A,P) Introduction to Dance 3
- DNS 483 (A) Children’s Dance I 3

Theatre
- THE 281 (B) Creative Drama 3
- THE 353 (A) Children’s Theatre 3

Elective
- THE 365 (A) Puppet Theatre OR
- ENL 482 (A) Children’s Literature 3

---

Total including core: 21

Theatre Specialty
Arts for Children Theatre Specialty students must participate in the production program of the Department of Theatre and are required to participate in auditions for faculty-directed productions based on department guidelines.

I. Required Courses in Theatre: (21 credits)

Technical
- THE 201 (A,P) Theatre Arts OR
- THE 202 (B) Stagecraft 3

Performance
- THE 221 (A) Acting I 3

Child Drama
- THE 281 (B) Creative Drama 3
- THE 353 (A) Children’s Theatre 3
- THE 365 (A) Puppet Theatre 3
- THE 483 (B) Creative Drama Practicum 3

History (choose one of the following)
- THE 314 (A,C) History of Theatre I: Classical through Renaissance 3
- THE 315 (A) History of Theatre II: Romanticism through Modern 3
- THE 319 (A,U,W) Play Analysis 3

---

Total including core: 21

II. Required Courses in Other Arts Disciplines: (21 credits)

Art
- ART 101 (A,P) Visual Art Experience 3
- ART 417 (B) Methods of Teaching Art on Elementary Level 3

Dance
- DNS 115 (A,P) Introduction to Dance 3
- DNS 483 (A) Children’s Dance I 3

Music
- MUS 105 (A,P) Introduction to Music 3
- MUS 487 (A) Music and the Child 3

Elective
- ENL 482 (A) Children’s Literature 3

---

Total including core: 21
INTERDISCIPLINARY COURSES FOR ALL ARTS FOR CHILDREN SPECIALTIES

IAC 280 Introduction to Related Arts for Children (A). Prerequisites: Consult with program advisor to choose four introductory arts courses, one in each area: art, dance, music, theatre. Covers the unique aspects of art, dance, music, and theatre, and relationships among the arts: theory, discussion, inquiry, and experiences in creative process. Must be taken before declaring a major in arts for children. 3 Cr. Fall.

IAC 280 Introduction to Related Arts for Children (A). Covers the unique aspects of art, dance, music, and theatre, and relationships among these arts: theory, discussion, teacher-directed arts activities and creative art experiences for children. Must be taken before declaring a major in interdisciplinary arts for children. 3 Cr. Fall.

IAC 399 Independent Study in Art for Children (A). Prerequisite: Instructor’s permission. Arranged in consultation with instructor-sponsor in accordance with procedures of Office of Academic Advisement prior to registration. 1–3 Cr.

IAC 450 Performances for Young Audiences (A). Prerequisite: Instructor’s permission. Explores performance and staging techniques for young audiences; develops skills in improvisation and ensemble playing; prepares shows involving art, dance, music, and theatre; tours and performs for and with young audiences. 4 Cr.

IAC 490 Arts for Children Special Topics (A). Prerequisite: Instructor’s permission. Provides opportunities for arts for children students to focus for a full semester on meaningful current topics which cannot be developed fully in other curricular offerings. Both theory and/or art making may serve as content. 2–6 Cr.

IAC 491 Seminar in Arts for Children (A). Prerequisites: Completion of required arts for children courses. Examines issues and representative theories, program development and evaluation, and the development of leadership skills and ability to utilize arts resources. 3 Cr. Spring.

IAC 499 Independent Study in Arts for Children (A). Prerequisite: Instructor’s permission. Provides opportunities for arts for children students to focus for a full semester on meaningful current topics which cannot be developed fully in other curricular offerings. Both theory and/or art making may serve as content. 2–6 Cr.

All other course descriptions can be found in the Departments of Art, Dance, and Theatre sections of this catalog.

ARTS MANAGEMENT—INTERDISCIPLINARY MINOR/CLAM PROGRAM

Note: Currently, students are not being accepted into this CLAM program. For information, contact the Dean of the School of Arts and Performance at (585) 395-2358.

The Arts Management program provides students with theoretical knowledge and practical experience in several aspects of arts management. This training enables students to manage their own artistic endeavors, seek entry-level positions in a variety of arts management jobs, or pursue graduate study in arts administration. Students can major in Arts Management through a CLAM program which is devised individually for interested students according to the guidelines described in the Your Right to Know & Academic Policies and Procedures Handbook.

Arts Management Minor Requirements (21–24 Credits) Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 210 (B,T) Arts Organization and Information Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 280 (B) Intro to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 335 (A) Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CMC 332 (A) Public Relations Principles and Practices</td>
<td>3</td>
</tr>
<tr>
<td>THE 201 (A,P) Theatre Arts</td>
<td>3</td>
</tr>
<tr>
<td>AMT 451 (B) Internship in Arts Management</td>
<td>3–6</td>
</tr>
</tbody>
</table>

One of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 470 (B) Gallery Management and Exhibition Design</td>
<td></td>
</tr>
<tr>
<td>ARH 210 (A) Decorative Arts</td>
<td></td>
</tr>
<tr>
<td>AMT 365 (A) Art, Law, and Appraisal</td>
<td></td>
</tr>
</tbody>
</table>

Total: 21–24
As a prerequisite to AMT 451 Internship in Arts Management, students are required to take at least one course in the area of their specialization (courses taken as part of a major, General Education, or electives may apply). AMT 210 Arts Organizations and Information Management and ARH 480 Studio and Gallery Studies fulfill the computer literacy component of the General Education requirement. Students also are strongly urged to take at least one studio course in each of the four arts: art, dance, music, and theatre.

Arts Management Courses

**AMT 210 Arts Organizations and Information Management (B,T).** Introduces the principles and techniques of forming arts organizations; and studies concepts and systems, including practical experience of managing information through computers. 3 Cr. Fall.

**AMT 350 Arts Management (B).** Studies management: techniques, organization, planning and programming; development and fund raising; facilities management; audience development, public relations and promotion. Requires students to work on independent research projects. 3 Cr.

**AMT 352 Managing Arts (B).** Provides a study of technique for managing arts organizations and events; organizing, planning, and programming; personnel requirements; legal and financial management; box office and house management; and facilities supervision. Explores appropriate software for personal computers. 3 Cr.

**AMT 353 Promoting Arts (B).** Provides a study of principles and practices for promoting arts organizations and events: marketing, audience development, public relations, advertising and publicity, fund raising, and grant securing. Explores the use of appropriate software for personal computers. 3 Cr.

**AMT 365 Art, Law, and Appraisal (A).** Examines the federal and local laws and practices related to the Visual Arts and Personal Property, with emphasis on appraisals, auctions and copyrights. Also discusses insurance, trusts and estates, divorce settlements, taxes, charitable donations, forgery and fraud, cultural property, and international trade laws as they relate to art and personal property. 3 Cr.

**AMT 451 Internship in Arts Management (B).** Prerequisites: AMT 210, instructor’s permission and one course in the area of specialization. Provides placement in an arts organization to provide theoretical and practical experience in exploring solutions to arts management problems. Includes projects such as box office; fund raising; audience development; and gallery, music, or dance management. 3–6 Cr. Every Semester and Summers.

**ASIAN STUDIES—SEE INTERNATIONAL STUDIES**

**DEPARTMENT OF BIOLOGICAL SCIENCES**

103 Lennon Hall  
(585) 395-2193  
FAX (585) 395-2741  
E-mail: tlasal@brockport.edu

Chairperson and Professor: Stephen Chan; Professor: Thomas Bonner; Associate Professors: David Brannigan, P. Michael Fox, Craig Lending; Assistant Professor: Rey Sia; Visiting Assistant Professor: Nancy Mitchell; Lecturer: Tracey Householder; Adjunct Professors: Timothy Hall, Steven Mauro.

The Department of Biological Sciences offers two majors and two minors, and a variety of tracks in the major. Both majors and one minor are designed for students with an interest in one or several of the many aspects of the life sciences and provide excellent preparation for postgraduate training and careers in the biomedical, health, teaching, and other fields that require an understanding and practice of scientific reasoning and methods.
Through courses taken during the freshman and sophomore years, students build a scientific foundation for understanding how biological systems function. In the junior and senior years, students may concentrate in several areas of departmental strength: pre-medicine, biotechnology, or an individualized program. Internships and cooperative programs with public and private organizations afford students the opportunity to apply their skills outside the classroom. Because of complex biological and issues that face modern society, we encourage non-majors to take selected courses in biological sciences. Upon declaring a major in biological sciences, it is imperative that the student seek a faculty advisor by contacting the department secretary, Room 103 Lennon Hall.

Students majoring in Biological Sciences and Medical Technology are required to obtain a minimum grade of “C” in BIO 201, BIO 202 (and/or BIO 111) before they are allowed to take further courses in the major.

Students may transfer the above courses from other regionally accredited institutions to satisfy this requirement provided that the courses have been approved as equivalent and that the students have earned a grade of “C” or higher in the courses transferred.

**Major in Biological Sciences**

**Biology requirements**

(38 credits; 30 credits at the 300 and 400 level)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 201</td>
<td>Biology I</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Biology II</td>
</tr>
<tr>
<td>BIO 301</td>
<td>Cell Biology</td>
</tr>
<tr>
<td>BIO 302</td>
<td>Genetics</td>
</tr>
<tr>
<td>BIO 300-level electives</td>
<td>4–8</td>
</tr>
<tr>
<td>BIO 306</td>
<td>Cell and Genetics Techniques</td>
</tr>
<tr>
<td>BIO 498</td>
<td>Seminar</td>
</tr>
<tr>
<td>BIO 400-level courses</td>
<td>12–16</td>
</tr>
</tbody>
</table>

Elective credits at the 300 level must be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 303</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIO 305</td>
<td>Comparative Physiology</td>
</tr>
<tr>
<td>BIO 321</td>
<td>Anatomy and Physiology I</td>
</tr>
<tr>
<td>BIO 322</td>
<td>Anatomy and Physiology II</td>
</tr>
<tr>
<td>BIO 323</td>
<td>Microbiology</td>
</tr>
</tbody>
</table>

**Chemistry requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 205–206</td>
<td>College Chemistry I and II</td>
</tr>
<tr>
<td>CHM 305</td>
<td>Organic Chemistry I</td>
</tr>
</tbody>
</table>

**Recommended:** Those students considering graduate or medical school are strongly advised to take the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHM 306</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>MTH 201–202</td>
<td>Calculus I and II</td>
</tr>
<tr>
<td>PHS 201–202</td>
<td>College Physics I and II</td>
</tr>
</tbody>
</table>

Those students in other biology tracks are advised to consider courses in computer science, statistics and general physics to support their career goals. Handbooks that list recommended courses for each track are available from the department secretary.

**NOTE:** In normal progress toward the degree, BIO 201, 202, CHM 205, 206, and the recommended mathematics courses are taken in the freshman year. BIO 301, 302, 306, CHM 305, and the recommended CHM 306 courses are taken in the sophomore year. The recommended PHS 201 and 202 courses are taken in the junior year and 400-level biology courses in the junior and senior years. Only three credits of BIO 499 Independent Study may be included in the 38 credits required for the major.
Transfer Students
Transfer students must complete a minimum of 18 credits of upper-division courses in the Department of Biological Sciences at SUNY Brockport regardless of the numbers of credits transferred.

Advisement: To assure proper advisement in particular tracks, students should declare a major as early as possible, preferably in the freshman year. Majors are declared with the department secretary, Room 103, Lennon Hall.

Concentration Areas

Pre-medicine, Pre-dentistry, Pre-veterinary, Health Careers
Each year, students from SUNY Brockport apply for admission to medical, dental, osteopathic, optometry, podiatric, chiropractic, and physical therapy schools. Although at Brockport most “pre-med” professional students have majored in the biological sciences, there is no special major for pre-professional health care, and the requirements for admission can be met through a variety of majors available at the College. The program in biological sciences is well-established and our graduates successfully compete for positions in professional programs. We do arrange programs with local health care facilities, such as the Oak Orchard Community Health Center, to provide “pre-med” students with the experiential component necessary for successful application to medical school. On your arrival at Brockport, please contact the department for further information on these programs.

A Pre-professional Advisory Committee is available to assist students interested in entering the medically related professions through formal meetings, counseling, and a library of materials; provides application materials for the MCAT, DAT, and OAT exams (the admissions tests for medical, podiatric, dental and optometry schools); and prepares a committee evaluation prior to application based on a formal interview with the applicant as well as test scores and GPA. This committee consists of two faculty members from biological sciences and a faculty member from chemistry.

Resource materials, admission statistics, suggested courses of study, admission test applications, and procedural information are available for SUNY Brockport students in the Biology Club room of the Department of Biological Sciences, Lennon Hall.

Biotechnology: The department is well-equipped to provide skills in cell and tissue culture, immunology, nucleic acid separations and electron microscopy. A substantial percentage of graduates who have obtained these skills have successfully entered jobs in government and industrial laboratories.

Certification in Secondary Education (7–12): Biology and General Science
Students who intend to become secondary school biology teachers qualify for New York state provisional certification by completing the requirement of Bachelor of Science and the requisite courses toward certification in secondary education as arranged with the Department of Education and Human Development.

Because the certification requirements are extensive and changeable, the student should meet with an advisor in each of the Departments of Biological Science and Education and Human Development.

Major in Medical Technology
The major in medical technology enables a student to obtain the BS in Medical Technology from SUNY Brockport at the end of a four-year program, including three academic years here and a fourth calendar year at a school of medical technology approved by the College. During the first three years each student fulfills the General Education requirements and the major requirements. The fourth year at a school of medical technology includes both theoretical and practical work in a medical lab. The BS is awarded upon the satisfactory completion of the requirements of both institutions. Upon completion of the internship, the student is eligible to take the National Registry Examination, which must be passed in order to be qualified as
Biological Sciences 111

a Registered Medical Technologist. The program is currently offered in affiliation with Rochester General Hospital.

To enter this program, students declare a major in biological sciences in the freshman year to assure proper advisement. Majors are declared with the department secretary, Room 103, Lennon Hall. A formal application to the School of Medical Technology is made by the middle of the fall semester of the junior year. Based on the academic record for the freshman, sophomore years and mid-semester grades of the fall semester of the junior year and an interview, the decision is made as to which applicants will be formally admitted into the clinical year. This decision is competitive and made by the School of Medical Technology. Those students accepted into the clinical year are accepted into the major in medical technology at SUNY Brockport.

Suggested Program for SUNY Brockport courses—Medical Technology

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Credits</th>
<th>Semester 2</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 201 Biology I&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
<td>BIO 202 Biology II&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
</tr>
<tr>
<td>CHM 205 College Chemistry I&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
<td>CHM 206 College Chemistry II&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
</tr>
<tr>
<td>GEP 100 APS</td>
<td>1</td>
<td>MTH 121 or higher&lt;sup&gt;1&lt;/sup&gt;</td>
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</tr>
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<td>ENL 112 College Composition</td>
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<td>Breadth Component</td>
<td>3</td>
</tr>
<tr>
<td>Breadth Component</td>
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<td></td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>Total</strong></td>
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<tr>
<th>Semester 3</th>
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<tr>
<td>BIO 302 Genetics&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>CHM 306</td>
<td>4</td>
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<tr>
<td>CHM 305 Organic Chemistry&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
<td>BIO 306 Cell and Genetics Techniques</td>
<td>3</td>
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<tr>
<td>BIO 321 Anatomy and Physiology I&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
<td>BIO 322 Anatomy and Physiology II&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
</tr>
<tr>
<td>Breadth Component</td>
<td>3</td>
<td>BUS 365 Principles of Management</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breadth Component</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>Total</strong></td>
<td><strong>18</strong></td>
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<th>Semester 5</th>
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<th>Semester 6</th>
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<tbody>
<tr>
<td>BIO 323 Microbiology&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
<td>BIO 301 Cell Biology&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>BIO 414 Immunology&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2</td>
<td>PHS 116 General Physics II&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
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<tr>
<td>PHS 115 General Physics I&lt;sup&gt;2&lt;/sup&gt;</td>
<td>4</td>
<td>SOC 200 Social Statistics&lt;sup&gt;2&lt;/sup&gt;</td>
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</tr>
<tr>
<td>HLS 306 Contemporary Issues in Health&lt;sup&gt;2&lt;/sup&gt;</td>
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<td><strong>16</strong></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

The following courses (34 credits) are usually required in the clinical year at an approved school of medical technology: microbiology (immunology), clinical chemistry, hematology, blood bank, urinalysis/clinical microscopy, principles of disease, and toxicology.

Minor in Biological Sciences

A minimum of 18 credits, of which at least 10 must be at the 300/400 level, is required for the minor. Students declaring a minor in biological sciences must earn at least nine credits of biology courses at SUNY Brockport. Since no specific courses are designated, a variety of tracks is possible and it is important that students seek advisement through the Undergraduate Coordinator (inquire in Room 103, Lennon Hall). Many students working towards teacher certification and/or majoring in other disciplines elect a minor to strengthen their degrees.

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<sup>1</sup> Required courses in Medical Technology  
<sup>2</sup> Recommended courses
BIOLOGICAL SCIENCES COURSES

BIO 111 Principles of Biology (A,L,E). Cross listed as ENV 111. Through lectures and laboratory activities, examines the structure and function of living systems, from cells to the biosphere as a whole. For non-majors. Serves as prerequisite for advanced courses, including BIO 321–322. 4 Cr. Every Semester.

BIO 201 Biology I (A). Provides an integrated exploration of the fundamentals of biology as a science, the nature and origin of life, biological chemistry, cell biology, genetics and evolution. Draws upon plants, animals and microbes to illustrate structure and function relationships. For majors. (BIO 201 and 202 are not sequential; either may be taken first.) 4 Cr. Every Semester.

BIO 202 Biology II (A). Focuses on organismal biology by taking an evolutionary approach to examine how animals and plants adapt to the environment, to study structure and functions by examining both animal and plant physiology and to integrate this knowledge with laboratories that run parallel with the lectures. 4 Cr. Every Semester.

BIO 221 Survey of Anatomy and Physiology (A,L,E). Surveys human anatomy and physiology, encompassing structure and function of skeletal, muscular, nervous, cardiovascular and respiratory systems. Presents development and integration of these units as a basis for understanding the anatomical and physiological aspects of humans at rest and during activity. Primarily for physical education and dance majors. Includes a lab. 3 Cr. Every Semester.

BIO 281 Elements of Human Biology (A,N,E). Provides an introduction for non-majors to the human organism—structure, physiology, metabolism, behavior, genetics, evolution, and ecological relationships. Addresses important issues in health and human disease as well as current societal and ethical issues in readings, lectures, and classroom discussions. 3 Cr. Every Semester.

BIO 301 Cell Biology (A). Prerequisites: BIO 201 and 202; CHM 205. Covers cellular functions and structures and the interrelationship between them. Requires a lab including procedures and tools of cell biology. 4 Cr. Spring.

BIO 302 Genetics (A). Prerequisites: BIO 201 and 202; and CHM 205 and 206. Recommended: One semester of organic chemistry. Covers the gene as the basis of variation and principles of heredity. Includes Mendelian genetics as well as molecular aspects including replication, transcription, and translation. Covers topics in genetic regulation, conjugation, mutation and repair, as well as population genetics. Provides experiments to illustrate the above principles. Includes computer simulations of linkage. 4 Cr. Fall.

BIO 303 Ecology (A). Prerequisite: BIO 111 or 201 or 202. Cross listed as ENV 303. Covers basic ecology concerned with interrelationships among organisms and the environment. Considers energy flow, materials cycling, population dynamics, principles of animal behavior, as well as natural history in both lectures and field studies. 4 Cr. Every Semester.

BIO 305 Comparative Physiology (A). Prerequisites: BIO 111 or 201 or 202; and CHM 205 and 206. Takes a comparative and experimental approach to understanding how living organisms function. Examines fundamental but selective aspects of physiology, including homeostatic energy balance, metabolism, water and salt regulation, respiration, locomotion, adaptation to altitude/diving, and nervous and endocrine integration. 4 Cr. Spring.

BIO 306 Cell and Genetics Laboratory (A). Corequisites: BIO 301, 302. Course can be taken concurrently with either of the above. Experiments for the Genetic section focus on topics such as DNA and protein analysis, Mendelian and non-Mendelian segregation principles, bacterial genetics, mutagenesis, gene regulation, and population genetics. The Cell Biology laboratory techniques include microscopy, enzyme assays, organelle isolation and electrophoresis. Instructions and theoretical basis for experiments will be given prior to each lab. 3 Cr. Every Fall and Spring.

BIO 317 The Biology of Aging (A). Introduces the study of aging in the human and a number of other animals at the molecular, cell, tissue and organ level to understand what is meant by aging and how it is measured. Includes effects of genetic composition, sex differences and other factors. 3 Cr. Spring.

BIO 321 Anatomy and Physiology I (A). Prerequisite: BIO 111 or 202 or 221. Studies the structures and functions of cells, tissues and organs with examples drawn from the human body. Introduces students to the anatomy and physiology of the skeletal, muscular, nervous, endocrine and integumentary systems of the body through lectures and laboratories. Recommended for nursing, health science and pre-medical students. 4 Cr. Fall.

BIO 322 Anatomy and Physiology II (A). Prerequisite: BIO 111 or 202 or 221. Introduces students to the anatomy and physiology of circulatory, excretory, respiratory, digestive and reproductive systems of the human body through lectures and laboratories. Recommended for nursing, health sci-
ence and pre-medical students. 4 Cr. Spring.

BIO 323 Microbiology (A). Prerequisites: BIO 111, 201 or 202, and CHM 205. Provides lectures concerned with the structure, function, diversity, and control of microorganisms, including metabolism, growth and regulation, microbial genetics, disease, immunology, and microbial ecology. Provides lab experiences in techniques of pure culture, cultivation, enumeration, isolation and characterization of micro-organisms. 4 Cr. Spring.

BIO 333 Contemporary Issues in Life Sciences (A). What is life? When does human life begin? How do genes control life processes? Is it natural/ethical to alter the genetic makeup of species, including humans? Is genetic engineering a technology for improving the quality of life or for potentially destroying life on Earth as we know it? Vaccines may prevent human diseases, but what are the consequences of over-population and starvation? These and other questions serve as the focal point that explores some of the controversial issues raised by modern biotechnology. Provides background information for identifying, understanding, and analyzing critical issues facing the life sciences. Explores these issues from a variety of perspectives including scientific, economic, political and sociological. 3 Cr. Fall.

BIO 411 Evolution (A). Prerequisite: BIO 302. Corequisite: BIO 303. Commences with a review of philosophical and factual basis of evolutionary biology. Examines the physicochemical background for the evolution of life, mechanisms of evolution, population genetics, phylogeny, speciation, and consequences of the evolution of populations of living organisms. 3 Cr. Spring.

BIO 414 Introduction to Immunology (A). Prerequisite: BIO 202, 301 or 323. Emphasizes aspects of immunology, including the structure and function of immunoglobulins, the role of cell-mediated immunity, the protective role of the immune system, and disease and injury as related to malfunctions of the immune system. 2 Cr. Fall.

BIO 415 Molecular Biology (A). Prerequisites: BIO 301 and 302; and CHM 305. Covers the biosynthesis and function of macromolecules, especially nucleic acids. Includes topics in regulation, molecular virology, transposition and transformation, as well as recombinant DNA methods. 3 Cr. Every Other Spring.

BIO 416 Lab Techniques in Exercise Physiology (B). Cross-listed as PES 416. Prerequisite: BIO 111 or equivalent, PES 310, MTH 121, or instructor’s permission. Complements the theoretical preparation of students in exercise physiology. Provides experiences in the measurement of acute and chronic adaptations to exercise, the use of technology in the measurement and assessment of physiological functioning during such conditions, and the maintenance and calibration of such equipment. Actively immerses students in the subject to better conceptualize, and internalize, what it means to administer tests, and analyze and interpret data in a meaningful and systematic manner. 3 Cr. Fall.

BIO 417 Recombinant DNA Laboratory (A). Prerequisites: BIO 302 or instructor’s permission. Covers laboratory methods involved in the isolation and cloning of genetic material. Uses procedures such as bacterial and viral growth and selection techniques, gene isolation and detection, restriction analysis, use of DNA ligase and PCR methods, as well as site-specific mutagenesis. DNA “fingerprinting” methods. Utilizes non-radioactive detection methods in the above techniques. 3 Cr. Spring.

BIO 424 Experimental Research (A). Prerequisites: BIO 201, 202, 302 and 303; CHM 205 and 206; and instructor’s and chairperson’s permission. Under the supervision of a faculty member in biology, allows the student to undertake a lab or field research project in some area of biological science. Establishes the topic and methodology by mutual consent of the student and faculty member. Requires all students enrolled to meet together with the involved faculty once a week to discuss the background, methods, and results of their projects. Encourages students to present their research at Scholars Day. May be repeated; a maximum of six credits may be applied toward the major in biological sciences. Enrollment is with the department chairperson. 1–4 Cr. Every Semester.

BIO 426 Recombinant DNA (A). Considers theory and techniques in the recombinant DNA field. Includes topics such as cloning vectors, restriction analysis, PCR methods, and expression of cloned genes in both prokaryotes and eukaryotes. Also considers examples and implications of recombinant DNA methodology in plants and agriculture as well as in medicine, human genetics and disease. 3 Cr. Every Other Spring.

BIO 428 Microtechnique (A). Prerequisite: BIO 202. Requires students to demonstrate competency in the preparation of tissue by paraffin sectioning and histochemistry. Discusses the theory underlying these techniques in lecture, and considers their application to a hospital pathology laboratory. 3 Cr. Spring.

BIO 429 Electron Microscopy (A). Prerequisite: BIO 301. Provides the theory of electron optics and skills of electron microscopy. Also includes methods of specimen preparation and skills of ultramicrotomy. Places a strong emphasis on lab. 4 Cr. Fall.
BIO 433 Instrumental Methods III—Radioactivity and Enzyme Assay (A). Prerequisites: BIO 301 and 302; and CHM 305. Covers principles and experiments involving the use and measurement of radioactive isotopes, liquid scintillation counting, and measurement of enzyme activity using spectrophotometric and radioisotope techniques. Given third four weeks of semester only with eight, three hour lab sessions. 1 Cr. Fall.

BIO 443 Biotechniques III—Immunoassays (RIA/ELISA) (A). Prerequisites: BIO 201 and 202; and CHM 205, 206, and CHM 305. Covers principles of radioimmunoassays (RIA) and enzyme-ligand-sorbent-immunoassays (ELISA). Provides hands-on learning of either/both methods and applying them to assay biological samples. Discusses accuracy, precision and variability and limitations of the procedures. Given second four weeks of the semester only with 8 3-hour laboratory sessions. 1 Cr. Spring.

BIO 445 Histology (A). Prerequisite: BIO 202. Studies the microanatomy of animal tissue and organs with emphasis on functional correlations. Includes lab examinations of prepared slides and fresh materials, as well as normal and pathological tissues. 4 Cr. Spring.

BIO 466 General Endocrinology (A). Prerequisite: BIO 202 or equivalent. Covers the morphology of endocrine glands; the relationship between the molecular structure of a hormone and its ability to regulate metabolism; the role of the hormones in growth, metabolic and reproductive processes; and various endocrine diseases. 3 Cr. Fall.

BIO 467 Biochemistry I (A). Cross-listed as CHM 467. Prerequisite: CHM 306; a college course in biology is strongly recommended. Covers the chemistry of proteins, lipids, carbohydrates, nucleic acids and other biomolecules with an emphasis on buffers, structures, experimental methods, main energy production pathways and biosynthesis. Applies concepts and information to experimental data and deduction of structures, functional roles and mechanisms. Three hours lecture per week. 3 Cr. Fall.

BIO 468 Biochemistry II (A). Cross-listed as CHM 468. Prerequisite: BIO 467 or CHM 467. Provides a continuation of BIO 467. Covers additional metabolic pathways, human nutrition, chromosomes and genes, protein biosynthesis, cell walls, immunoglobulins, muscle contraction, cell motility, membrane transport and excitable membranes and sensory systems. Investigates experimental evidence for the structures and functions of biomolecules. 3 Cr. Spring.

BIO 470 Biochemistry Lab (A). Cross-listed as CHM 470. Prerequisite: BIO 467 or CHM 467; CHM 303 is helpful. Covers biochemical analyses, including preparation, separations and characterization of products from a variety of biological sources; and experiments with enzymes and experiments designed to measure changes inherent in the dynamics of living systems. 1 Cr. Fall.

BIO 481 & BIO 482. Medical Technology I and II (A). Provides training through Rochester General Hospital’s School of Medical Technology. Teaches several areas under this name that include: Blood Bank, Biochemistry, Hematology, Microbiology, Urinalysis, Mechanisms of Disease, and Independent Research Project. For admission into this course, students must contact the department chair or the Coordinator of Medical Technology in Lennon Hall nine months prior to the course. BIO 481, 15 Cr. Fall; BIO 482, 15 Cr. Spring.

BIO 491 Biological Sciences Overseas Program (A). Prerequisite: Prior departmental approval. Requires students to attend classes in the biological sciences and/or related areas at the participating overseas university. 1–15 Cr.

BIO 495 Topics in Biology I (A). To be defined by the instructor-sponsor in accordance with the specific topic to be covered that semester. Additional information may be obtained from the department office. 3 Cr. Every Semester.

BIO 498 Seminar in Biology (A). Requires students to research, organize, and present a seminar. Techniques of seminar speaking are fundamental. 1 Cr. Every Semester.

BIO 499 Independent Study (A). Prerequisite: Instructor’s permission. To be defined in consultation with the instructor-sponsor and in accordance with the procedures of the Office of Academic Advisement prior to registration. Variable Credit. Every Semester.
BOARD OF STUDY FOR THE
TEACHING OF SCIENCE AND MATHEMATICS


The Board of Study was created within SUNY Brockport’s scientific, mathematics and education faculties to work for the improvement of science and mathematics teaching, especially at the elementary and secondary school levels. Its intent is to supplement departmental efforts, and to carry out functions and programs that are not within the interest of a single department nor appropriately administered through one department.

Subject matter courses emphasizing the fundamental principles of the sciences and mathematics are scheduled regularly by the Board of Study for prospective elementary school teachers. Advisement services are also available.

NATURAL SCIENCES COURSES

NAS 273 Investigation in the Physical Sciences (A,L). Corequisites: ENL 112 and QNT 111. Provides a study of fundamental aspects of physics and chemistry using processes commonly employed by scientists to probe nature. Gives particular attention to those areas of physical science from which elementary school science topics are drawn. Required for candidates for certification in elementary education unless waived by the Department of Education and Human Development. Requires three hours of lecture/discussion and one two-hour lab per week. 4 Cr. Every Semester.

NAS 371 Investigations in the Biological Sciences (A). Provides an activity-oriented investigation of environmental concepts and problems. Provides a basic ecological background for students with no previous experience in the area. 3 Cr.

NAS 372 Investigation in the Earth Sciences (A). Provides students with a variety of firsthand experiences relating to rocks, water, air, sunlight, and other aspects of the earth sciences. Emphasizes observation, experimentation, and other fundamental processes of science, especially with simple and homemade equipment. 3 Cr.

NAS 373 Investigations in the Physical Sciences (A). Studies the fundamental aspects of physics and chemistry by processes and procedures commonly employed by scientists to probe nature. Gives particular attention to those areas of physical science from which elementary science topics are drawn. 3 Cr.

NAS 486 Lab Science Safety (A). Pre-requisites: Senior status, and an academic major in one of the natural sciences. Required for students in Secondary Science Certification programs. Describes lab teaching practices for students pursuing certification to teach science courses. Emphasizes lab hazard potential, especially when working with chemicals in biology, earth science/geology, physics and chemistry. Includes three hours of lecture/lab per week. 3 Cr.