



BXA Undergraduate Student Handbook 2011-2012



Introduction

Congratulations on being admitted to Carnegie Mellon University and welcome to the Bachelor of Humanities and Arts, the Bachelor of Science and Arts, and the Bachelor of Computer Science and Arts Program! You are among a select group of students who have the opportunity for an intercollege educational structure at Carnegie Mellon University.

The Bachelor of Humanities and Arts (BHA) Degree Program began in the fall of 1993. As a BHA student you may blend courses between the College of Fine Arts and the Dietrich College of Humanities and Social Sciences to develop a unique interdisciplinary curriculum.

The Bachelor of Science and Arts (BSA) Degree Program began in the fall of 1999. As a BSA student, you may design an interdisciplinary curriculum between the College of Fine Arts and the Mellon College of Science.

The Bachelor of Computer Science and Arts (BCSA) Degree Program began in the fall of 2008. As a BCSA student, you may intermix classes between the College of Fine Arts and the School of Computer Science to create an interdisciplinary curriculum that reflects Carnegie Mellon University's emphasis between the arts and technology.

Collectively the BHA, BSA, and BCSA programs are grouped under the single heading of BXA Intercollege Degree Programs.

This 2011-2012 Undergraduate Student Handbook is a guide to the policies, procedures and requirements of the BXA Programs, as well as to other useful information. It is designed to give quick answers to many questions about the curriculum, the university and your role as a student in the four-year BXA Programs.

The material in this handbook is based on current policies, procedures and requirements. You will be notified of changes as they occur.

Please familiarize yourself with the contents of this handbook. A new edition is issued every year. Your questions and suggestions will make each edition more useful.

Franco Sciannnameo, D.M.
Director & Principal Faculty

M. Stephanie Murray, Ph.D.
Associate Director & Academic Advisor
Adjunct Assistant Professor

Emily Syes, B.S.
Communications Manager

Table of Contents

Table of Contents	2
Directory	4
2011-2012 Academic Calendar	6
Vision, Mission, Values	8
Degree Requirements	9
BHA General Education Requirements	10
BHA Humanities and Social Sciences Concentrations	16
BHA & BSA College of Fine Arts Concentrations	18
BSA Core Requirements	27
BSA Mellon College of Science Concentrations	33
BCSA Core Requirements	38
BCSA School of Computer Science Concentration	44
BCSA College of Fine Arts Concentrations	45
BXA Capstone Project	53
BXA Students	55
Academic Advising Statement	60
Registration	61
Adding/Dropping Classes	61
Class Standing	61
Overloads	61
Cross-Registration	62
Internships	62
Pittsburgh Filmmakers/Pittsburgh Glass Center	63
Study Abroad	63
Undergraduate Research Projects	63
Transcripts	64
Transfer and AP/IB Credit Evaluation	64
Academic Regulations, Requirements, and Procedures	65
Academic Actions	65
Disabilities	66
Privacy Policy	70
Grading Policies	70
Deans' List/Honors	70
Internal Transfer	71
Leaving the University	71

Table of Contents, Continued

University Code	72
University Information	74
Outside the Classroom	77
Lectures and Events	77
Housing Cluster	77
Student Advisory Committee (SAC) Meetings	77
Kaleidoscope	77
Meeting of the Minds	78
Center for Arts and Society	78
STUDIO for Creative Inquiry	78
Where to Go for What	79
Work-Study	81
Grants	81
Communication	82
Address and Phone Number Changes	82
Electronic Information and Communication	82
E-Mail	82
Social Media	82
BXA Calendars	82
Bulletin Board	82
Glossary	83
Index	84

Directory

BXA Office

Director & Principal Faculty
Franco Sciannameo, D.M.

MMCH 107, x8-8326
franco@andrew.cmu.edu

Associate Director & Academic Advisor
Adjunct Assistant Professor
M. Stephanie Murray, Ph.D.

MMCH 107, x8-1745
<http://bit.ly/BXAadvising>
msmurray@andrew.cmu.edu

Communications Manager
Emily Syes, B.S.

MMCH 107, x8-7690
esyas@andrew.cmu.edu

College of Fine Arts (CFA)

CFA Associate Dean
Barbara Anderson

PCA 218, x8-1580
bandrson@andrew.cmu.edu

CFA Academic Advisors:

Architecture
Doug Cooper

MMCH 412B, x8-2367
dcooper@andrew.cmu.edu

Architecture BCSA
Mark Gross

CFA 211, x8-3995
mdgross@andrew.cmu.edu

Art
Mark Cato

CFA 300C, x8-1531
mdcato@andrew.cmu.edu

Art BCSA
Golan Levin

CFA 405, 917-520-7456
golan@andrew.cmu.edu

Design
Steve Stadelmeier

MMCH 204B, x8-6952
ssiu@andrew.cmu.edu

Drama
Ari Blackford

PCA 223, x8-1581
ariblackford@andrew.cmu.edu

Music
Sharon Johnston

CFA 108, x8-2385
slj@andrew.cmu.edu

Music BCSA
Riccardo Schulz

CFA A-6A, x8-3450
rs6k@andrew.cmu.edu

Directory, Continued

Dietrich College of Humanities and Social Sciences (H&SS)

Undecided H&SS, Interdisciplinary H&SS, Economics, Modern Languages
H&SS Asst. Dean & Director of Academic Advisory Center
Gloria Hill

BH A-57, x8-2924
gphill@cmu.edu

H&SS Academic Advisors:

New Media, Philosophy
Robert Cavalier

BP 155C, x8-7643
rc2z@andrew.cmu.edu

Creative Writing, English, Professional Writing
James Daniels

BP 260B, x8-2842
jimdaniels@cmu.edu

Psychology
Ken Kotovsky

BP 324F, x8-8110
kotovsky@cmu.edu

Environmental Studies
Peter Madsen

HBH 2108A, x8-5703
pm2n@andrew.cmu.edu

Anthropology, History
Marie Norman

CYH 122, x8-7406
mnorman@andrew.cmu.edu

Mellon College of Science (MCS)

MCS Associate Dean
Eric Grotzinger

DH 1324, x8-6679
eg1b@andrew.cmu.edu

MCS Academic Advisors:

Biological Sciences
Maggie Braun

DH 1321, x8-3262
mabraun@andrew.cmu.edu

Chemistry
Karen Stump

DH 1316, x8-2340
ks01@andrew.cmu.edu

Mathematical Sciences
John Mackey

WEH 6117, x8-2545
jmackey@andrew.cmu.edu

Physics
Kunal Ghosh

WEH 7303, x 8-3413
kunalghosh@cmu.edu

School of Computer Science (SCS)

CS Assistant Dean & Academic Advisor
Mark Stehlik

GHC 5206, x8-3609
mjs@cmu.edu

2011-2012 Academic Calendar

2011 Fall Semester

August 29	Semester & Mini-1 Classes Begin
September 2	Mini-1 Course Add Deadline without Dean's Permission
September 2	Mini-1 Course Audit Grade Option Deadline
September 2	Mini-1 Course Drop Deadline to Receive Tuition Adjustment
September 5	Labor Day; No Classes
September 12	Semester Course Add Deadline without Dean's Permission
September 12	Semester Course Audit Grade Option Deadline
September 12	Semester Course Drop Deadline to Receive Tuition Adjustment
September 21	Mini-1 Course Drop & Pass/Fail Grade Option Deadline; Assign Withdrawal Grade for Course Dropping After This Date
October 10-21	Mini-1 Faculty Course Evaluations
October 17	Mini-1 Last Day of Classes
October 17	Mini-1 Course Drop Deadline to Receive a Withdrawal Grade
October 18-20	No Undergraduate Mini-1 Course Meetings (Reading Period)
October 21	Undergraduate Mini-1 Exam Day
October 21	Mid-Semester Break; No Classes
October 24	Mid-Semester Grades Due by 9 p.m.
October 24	Mini-2 Classes Begin
October 26	Mini-1 Final Grades Due by 6 p.m.
October 28	Mini-2 Course Add Deadline without Dean's Permission
October 28	Mini-2 Course Audit Grade Option Deadline
October 28	Mini-2 Course Drop Deadline to Receive Tuition Adjustment
November 7	Semester Course Drop & Pass/Fail Grade Option Deadline; Assign Withdrawal Grade for Course Dropping After This Date
November 14-18	Spring 2012 Registration Week
November 23-25	Thanksgiving Holiday; No Classes
November 30	Mini-2 Course Drop & Pass/Fail Grade Option Deadline; Assign Withdrawal Grade for Course Dropping After This Date
Nov. 28-Dec. 20	Semester & Mini-2 Faculty Course Evaluations
December 9	Semester & Mini-2 Last Day of Classes
December 9	Semester & Mini-2 Course Drop Deadline to Receive a Withdrawal Grade
December 12-13	Final Examinations
December 14	Reading Day
December 15-16	Final Examinations
December 19-20	Final Examinations
December 22	Final Grades Due by 4 p.m.

2011-2012 Academic Calendar, Continued

2012 Spring Semester

January 16	Semester & Mini-3 Classes Begin
January 16	Martin Luther King Jr. Day; No Classes after 12:30 p.m.
January 20	Mini-3 Course Add Deadline without Dean's Permission
January 20	Mini-3 Course Audit Option Deadline
January 20	Mini-3 Course Drop Deadline to Receive Tuition Adjustment
January 27	Semester Course Add Deadline without Dean's Permission
January 27	Semester Course Audit Grade Option Deadline
January 27	Semester Course Drop Deadline to Receive Tuition Adjustment
February 13	Mini-3 Course Drop & Pass/Fail Grade Option Deadline; Assign Withdrawal Grade for Course Dropping After This Date
February 27-March 9	Mini-3 Faculty Course Evaluations
March 5	Mini-3 Last Day of Classes
March 5	Mini-3 Course Drop Deadline to Receive a Withdrawal Grade
March 6-8	No Undergraduate Mini-3 Course Meetings (Reading Period)
March 9	Undergraduate Mini-3 Exam Day
March 9	Mid-Semester Break; No Classes
March 12	Mid-Semester Grades Due by 9 p.m.
March 12-16	Spring Break; No Classes
March 14	Mini-3 Final Grades Due by 6 p.m.
March 19	Mini-4 Classes Begin
March 23	Mini-4 Course Add Deadline without Dean's Permission
March 23	Mini-4 Audit Grade Option Deadline
March 23	Mini-4 Course Drop Deadline to Receive Tuition Adjustment
March 30	Semester Course Drop & Pass/Fail Grade Option Deadline; Assign Withdrawal Grade for Course Dropping After This Date
April 16	Summer 2012 Registration begins
April 17	Mini-4 Course Drop & Pass/Fail Grade Option Deadline; Assign Withdrawal Grade for Course Dropping After This Date
April 19	No Classes
April 20-21	Spring Carnival; No Classes
April 23-27	Fall 2012 Registration Week
April 23-May 15	Semester & Mini-4 Faculty Course Evaluations
May 4	Semester & Mini-4 Last Day of Classes
May 4	Semester & Mini-4 Course Drop Deadline to Receive a Withdrawal Grade
May 7-8	Final Examinations
May 9	Reading Day
May 10-11	Final Examinations
May 14-15	Final Examinations
May 17	Final Grades for graduating students due by 6 p.m.
May 20	Commencement
May 22	Final Grades for non-graduating students due by 4 p.m.

Vision – Mission – Values

BXA Intercollege Degree Programs

Our Vision

Our Vision is the lifelong success of students as leaders of their own educational experience and growth, creators of innovative and complex approaches to learning, and responsible contributors in an interdisciplinary world.

Our Mission

The goal of the Bachelor of Science and Arts (BSA), Bachelor of Humanities and Arts (BHA), and Bachelor of Computer Science and Arts (BCSA) BXA Intercollege Degree Programs is to allow a select group of students who demonstrate interest and accomplishment in the fine arts and the humanities, social sciences or natural sciences, computer science, and emerging media to pursue both arenas of study through a self-designed interdisciplinary curriculum. To explore beyond the traditional academic major, or integrate more than one field of study across disciplines, students develop concentrations in the College of Fine Arts, the Dietrich College of Humanities and Social Sciences, the Mellon College of Science or the School of Computer Science.

These programs foster the creativity of students who explore innovative approaches to the academic environments of two colleges. Rather than follow the predetermined curriculum of a particular school or department, the students reach across boundaries to create their own unique educational careers. By merging the components in the arts and humanities, natural sciences, or computer science into an interdisciplinary/multidisciplinary study, a unique, complex product is born which leads to the discovery of new information, questions and theory. BXA students are models of independence, motivation and well-rounded scholarship as humanists, scientists, and artists at the same time.

In the context of the Carnegie Mellon University environment, BXA Intercollege Degree Programs hold a special role. It provides access to four strong colleges that offer specialized training with expert faculty and researchers. The challenge of the students is to utilize those resources to explore and develop their own concentrations or interdisciplinary studies in the fine arts and the humanities/social sciences, the natural/mathematical sciences, or computer science.

Our Values

Artistic and Intellectual Excellence, Creativity and Innovation, Independence, Leadership, Community

Written by BXA students

Degree Requirements

The Bachelor of Humanities and Arts (BHA) Degree

The BHA Degree has the following requirements:

BHA General Education	111 units
H&SS Concentration	72 units
CFA Concentration	108 units
Curriculum	291 units
Free Electives	+ 78 units
<hr/>	
Total required for Graduation	369 units

The Bachelor of Science and Arts (BSA) Degree

The BSA Degree has the following requirements:

BSA Core	135 units
MCS Concentration	120-134 units
CFA Concentration	108 units
Curriculum	363-377 units
Free Electives	+ 3-17 units
<hr/>	
Total required for Graduation	380 units

The Bachelor of Computer Science and Arts (BCSA) Degree

The BCSA Degree has the following requirements:

BCSA Core	121 units
SCS Concentration	111 units
CFA Concentration	108-118 units
Curriculum	340-350 units
Free Electives	+ 30-40 units
<hr/>	
Total required for Graduation	380 units

BHA General Education

BHA General Education (Gen Ed) Requirements

Any questions concerning the BHA Gen Ed requirements may be answered by the H&SS Academic Advisory Center located in BH A-57 or by visiting their website at: www.hss.cmu.edu/departments/deans_office/aac/default.html

General Education (Gen Ed) (14 courses, 111 units minimum)

The BHA General Education curriculum is a modified version of the H&SS General Education program. In addition, students are required to fulfill a freshman research seminar requirement, a junior seminar requirement, a junior portfolio review, a senior capstone project, and a computing skills workshop.

1. Communicating: Language and Interpretations (3 courses, 27 units minimum, 76-101 required, two approved modern language courses required)
2. Reflecting: Societies and Cultures (1 course, 9 units minimum, 79-104 required)
3. Modeling: Mathematics and Experiments (1 course, 9 units minimum)
4. Deciding: Social Sciences and Values (3 courses, 27 units minimum, 36-201 required)
5. BXA Freshman Research Seminar (1 course, 9 units, 62-190 required)
6. BXA Junior Seminar (1 course, 9 units, 62-410 required)
7. BXA Junior Portfolio Review (complete 1 required review, 0 units, 62-391 required)
8. BXA Capstone Project (2 courses, 18 units, 62-401 & 62-402 required)
9. University Requirement (1 mini-course, 3 units, 99-10x required)

1. Communicating: Language and Interpretations (3 courses, complete 27 units minimum)

Courses in this category give special attention to the study of language as interpretation, expression and argument within and across multiple discourses. Students examine language for its internal logics and structures.

76-101	Interpretation and Argument - REQUIRED (various topics by section) www.cmu.edu/hss/english/first_year/index.html	9
82-xxx	Modern Languages - REQUIRED Complete two courses taught in a language offered by the Modern Languages Department. A wide selection of courses are offered in Arabic, Chinese Studies, European Studies, French and Francophone Studies, German Studies, Hispanic Studies, Italian, Japanese Studies, and Russian Studies. Students must complete two courses in the same language. Languages taught at other institutions are also acceptable (with advisor approval).	18

2. Reflecting: Societies and Cultures (1 course, complete 9 units minimum)

This category emphasizes the study of history, society, and culture from local and global perspectives.

79-104	Global Histories - REQUIRED (various topics by section) www.history.cmu.edu/under/courses.html	9
--------	---	---

BHA General Education, Continued

3. Modeling: Mathematics and Experiments (1 course, complete 9 units minimum)

Courses in this category stress the interplay of mathematical (formal) theories and experimental work. Some courses investigate the internal structure of theories, whereas others use them as models for producing real-world knowledge. Such models may be drawn from a variety of disciplines including the natural sciences, but also, for example, psychology and computer science. The interactions between theorizing and experimenting (observing) can be understood within an intellectual framework that invites comparative assessment. Select one course from the following course options:

Mathematics

21-110	Problem Solving in Recreational Mathematics	9
21-111	Calculus I	10
21-112	Calculus II *	10
21-120	Differential and Integral Calculus	10
21-122	Integration, Differential Equations and Approximation *	10
21-127	Concepts of Mathematics	9
21-241	Matrices and Linear Transformations *	10
21-256	Multivariate Analysis and Approximation *	9
21-259	Calculus of Three Dimensions *	9
80-110	Nature of Mathematical Reasoning	9
80-210	Logic and Proofs	9
80-211	Logic and Mathematical Inquiry	9

Natural Science

03-121	Modern Biology	9
03-122	Organismic Botany *	9
03-125	Evolution and the History of Life *	9
03-203	Bench to Bedside: Process of Regenerative Therapeutics	6
03-231/232	Biochemistry I *	9
03-311	Introduction to Computational Molecular Biology *	6
09-101	Introduction to Experimental Chemistry	3
09-103	Atoms, Molecules and Chemical Change	9
09-104	Fundamental Aspects of Organic Chemistry and Biochemistry	9
09-105	Introduction to Modern Chemistry I	10
09-106	Modern Chemistry II *	10
09-217/218	Organic Chemistry I or II *	9
09-221	Laboratory I: Introduction to Chemical Analysis *	12
09-222	Laboratory II: Organic Synthesis and Analysis *	12
12-201	Geology	9
33-100	Basic Experimental Physics	6
33-104	Experimental Physics	9
33-106/107	Physics I or II for Engineering Students *	12
33-111/112	Physics I or II for Science Students *	12
33-114	Physics of Musical Sound	9
33-115	Physics for Future Presidents	9
33-124	Introduction to Astronomy	9
33-131/132	Matter and Interactions I or II *	12
33-211	Physics III: Modern Essentials *	10
33-213	Mini-Course in Special Relativity *	4

BHA General Education, Continued

Continued course options for Modeling: Mathematics and Experiments.

33-224	Stars, Galaxies and the Universe *	9
33-355	Nanoscience and Nanotechnology *	9

Other Courses

05-291	HCI for Computer Scientists *	12
05-413	Human Factors	9
06-100	Introduction to Chemical Engineering *	12
09-109	Kitchen Chemistry Sessions	3
09-209	Kitchen Chemistry Sessions *	3
12-100	Introduction to Civil and Environmental Engineering *	12
15-110	Principles of Computing	10
15-121	Introduction to Data Structures	10
18-100	Introduction to Electrical and Computer Engineering *	12
19-101	Introduction Engineering and Public Policy *	12
24-101	Fundamentals of Mechanical Engineering *	12
27-100	Engineering the Materials of the Future *	12
33-120	Science and Science Fiction	9
36-202	Statistical Methods *	9
42-101	Introduction to Biomedical Engineering	12
79-382	History of Biomedical Research	9
80-220	Philosophy of Science	9
80-226	Revolutions in Science	9
80-312	Philosophy of Mathematics	9
80-313	Philosophical Logic	9
80-322	Philosophy of Physics	9
80-323	Philosophy of Biology	9
85-355	Introduction to Cognitive Neuroscience *	9
85-370	Perception *	9
85-392	Human Expertise *	9
85-406	Autism: Psychological and Neuroscience Perspectives *	9
85-412	Cognitive Modeling *	9
85-414	Cognitive Neuropsychology *	9
85-419	Introduction to Parallel Distributed Processing *	9
85-423	Cognitive Development *	9
85-429	Cognitive Brain Imaging	9
88-110	Experiments with Economic Principles	9
88-360	Behavioral Economics *	9
88-391	Technology and Economic Growth	9
99-238	Materials, Energy and Environment	9

* Indicates co-requisites and/or prerequisites required.

4. Deciding: Social Sciences and Values (3 courses, complete 27 units minimum)

The theme of this category is the exploration of cognitive, behavioral and ethical dimensions of decision-making on both the individual and social level. Making decisions requires a broad understanding of human rationality and social interaction. Some courses examine the critical collection and analysis of data for achieving such an understanding,

BHA General Education, Continued

of human rationality and social interaction. Some courses examine the critical collection and analysis of data for achieving such an understanding, whereas others emphasize the historical development of policies and values, which form the matrix for decision-making.

36-201	Statistical Reasoning and Practice - REQUIRED	9
36-220	Engineering Statistics and Quality Control	9
36-247	Statistics for Lab Sciences	9
36-303	Sampling, Survey and Society *	9
73-100	Principles of Economics	9
73-150	Intermediate Microeconomics *	9
79-313	Objects of Value	9
79-342	Introduction to Science and Technology Studies	9
80-130	Introduction to Ethics	9
80-136	Social Structure, Public Policy & Ethics	9
80-208	Critical Thinking	9
80-221	Philosophy of Social Science	9
80-230	Ethical Theory	9
80-235	Political Philosophy	9
80-241	Ethical Judgments in Professional Life	9
80-242	Conflict and Dispute Resolution	9
80-244	Environmental Ethics	9
80-245	Medical Ethics	9
80-247	Ethics and Global Economics	9
80-270	Philosophy of Mind	9
80-271	Philosophy and Psychology	9
80-305	Rational Choice	9
80-321	Causation, Law, and Social Policy *	9
80-337	Philosophy Politics & Economics	9
80-341	Computers, Society and Ethics	9
80-348	Health Development and Human Rights	9
80-405	Game Theory	9
80-447	Global Justice	9
85-102	Introduction to Psychology	9
85-211	Cognitive Psychology	9
85-213	Human Information Processing and Artificial Intelligence *	9
85-219	Biological Foundations of Behavior	9
85-221	Principles of Child Development	9
85-241	Social Psychology	9
85-251	Personality	9
85-261	Abnormal Psychology	9
85-395	Applications of Cognitive Science *	9
88-104	Decision Processes in American Political Institutions	9
88-120	Reason, Passion and Cognition	9
88-365	Behavioral Economics and Public Policy *	9
88-386	Desires and Decisions *	9

* Indicates co-requisites and/or prerequisites required.

BHA General Education, Continued

5. **BXA Freshman Research Seminar (1 course, 9 units)**

Section B of the BXA Freshman Research Seminar introduces first-year students to the field of interdisciplinary work and arts-based research. Students engage with theoretical and practical readings from across the various concentrations, with particular emphasis on aesthetic theory. Guest lectures complement the weekly readings by giving insight into practical implementations of these ideas. Students will conceive, research, and create a final project to be presented at the end of the semester.

Section A of the BXA Research Freshman Seminar has been designed for internal transfer students only and it is offered in the fall and spring semesters. Using the arts as primary modes of inquiry, this course's content probes the idiosyncratic field of arts-based research by following the principle that there is no aspect of human life that cannot be studied objectively, quantified and analyzed. Aside from discussing a digest of the latest writings on arts-based research, students will try their own approach to arts-based research by building prismatic artistic and literary constructs inspired by the reading of Calvino's prose-poems *Invisible Cities*.

62-190 BXA Freshman Research Seminar - REQUIRED 9

6. **BXA Junior Seminar (1 course, 9 units)**

This course, offered only in the spring, is taught by a team of interdisciplinary scholars led by a Carnegie Mellon University professor who will focus on a particular global, cultural, and political situation preeminent at the time. The theme chosen for spring 2012 will be "Music From An Ancient Land, Traditional, Folk, and Contemporary Music of Iran." Prof. Mahmood-Reza Vali and guests will teach the course.

The Iranian civilization is one of the oldest continuing civilizations in the world. Music has played an important role in the continuation and preservation of this ancient culture. In this course, the traditional, folk, and contemporary music of Iran will be studied and discussed. The focal point of the course will be the Persian modal system, the *Dástgâh*. Starting with a historical survey of the ancient and medieval Persian music, different aspects of the *Dástgâh* system will be demonstrated and discussed. In addition, religious music and folk music of Iran as well as Iranian contemporary music will be discussed during the course.

62-410 BXA Junior Seminar (Spring) - REQUIRED 9

7. **BXA Junior Portfolio Review (complete 1 required review, 0 units)**

To better assess the progress and accomplishments of BXA students as they enter their final year, students submit a portfolio for review during the spring semester junior year. Students should work with their BXA advisor and their concentration faculty advisors to assemble a portfolio that represents their academic and creative accomplishments over the course of their college career. This portfolio should also include a reflective essay in which students evaluate how they integrated their two areas of interest, and how they will extend that integration into the BXA Capstone Project in the senior year.

Students should identify their own specific goals for their academic career and how they are fulfilling them in this reflective essay, as well as how they evaluate their performance in light of the programs' broader pedagogical goals. Students in the BXA program should be working toward being able to:

BHA General Education, Continued

- describe the connections between their chosen concentration disciplines and to integrate them into their work
- communicate ideas in writing, visual expression, and oral expression
- discuss the intersection of history, society, and culture from local and global perspectives
- synthesize mathematical theories and experimental work to produce real-world knowledge
- use cognitive, behavioral, and ethical dimensions to make decisions on individual and social levels

62-391 BXA Junior Portfolio Review (Spring) - REQUIRED 0
(pass/no pass)

8. **BXA Capstone Project (2 courses, complete 18 units)**

The BXA Capstone Project gives BXA students the opportunity to demonstrate the extent of their interdisciplinary work over the course of their academic career. The Capstone Project should include elements that span the student's CFA and H&SS concentrations (for BHA students), CFA and MCS concentrations (for BSA students), or CFA and SCS concentrations (for BCSA students). The project can be either a scholarly or creative endeavor, and may take one of many possible forms (e.g., a written thesis, a compilation of creative work or works, an experiment and report, a computer program or animation, etc.).

The BXA Capstone sequence covers both semesters of a student's senior year. In the fall, students are enrolled in 62-401 BXA Capstone Project I (9 units), which has no required classroom time. Instead, students spend the semester doing the research and foundational work necessary for the project, as well as meeting with their faculty and BXA advisors. In the spring, students enroll in 62-402 BXA Capstone Project II (9 units), a weekly seminar in which students share their work and critiques with their peers as they create their Capstone Project and prepare to present it at the annual Meeting of the Minds Undergraduate Research Symposium held each May.

62-401 BXA Capstone Project I (Fall) - REQUIRED 9
(does not meet, by appointment with instructor)

62-402 BXA Capstone Project II (Spring) - REQUIRED 9
(course attendance required)

7. **University Requirement (1 mini-course, 3 units)**

This is a mini-course, pass/no pass, to be completed in the 1st semester.

99-10x Computing @ Carnegie Mellon - REQUIRED 3
(99-101, 99-102, or 99-103)

BHA - H&SS Concentrations

Humanities and Social Sciences (H&SS) Concentrations

Each student meets individually with an H&SS Academic Advisor to design a 72 unit H&SS concentration based on existing H&SS majors/minors, or by creating a self-defined interdepartmental concentration. Each student must complete an H&SS Concentration Sheet (with signature of H&SS Academic Advisor) and return to MMCH 107. This form is kept in the student's file. It is recommended that a student complete this form at the end of their first semester sophomore year.

Primary BHA H&SS Academic Advisors

Undecided H&SS, Interdisciplinary H&SS, Economics, Modern Languages Gloria Hill	BH A-57, x8-2924	gphill@cmu.edu
New Media Philosophy Robert Cavalier	BH 155C, x8-7643	rc2z@andrew.cmu.edu
Creative Writing, English, Professional Writing James Daniels	BH 260B, x8-2842	jimdaniels@cmu.edu
Psychology Ken Kotovsky	BH 324-F, x8-8110	kotovsky@cmu.edu
Environmental Studies Peter Madsen	HBH 2108A, x8-5703	pm2n@andrew.cmu.edu
Anthropology, History Marie Norman	CYH 122, x8-7406	mnorman@andrew.cmu.edu

H&SS Departments Majors/Additional Majors Minors

Economics	Economics Economics & Mathematical Sciences *	Economics
English	Creative Writing English Professional Writing Technical Writing & Comm.	Creative Writing English Studies Professional Writing Technical Writing
History	Global Studies History	History
Modern Languages	Chinese Studies French & Francophone Studies German Studies Hispanic Studies Japanese Studies Russian Studies	Chinese Studies French & Francophone Studies German Studies Hispanic Studies Japanese Studies Russian Studies

BHA - H&SS Concentration, Continued

H&SS Departments Majors/Additional Majors Minors

Philosophy	Logic and Computation Philosophy Philosophy	Ethics Logic and Computation Philosophy
Psychology	Cognitive Science Psychology Psychology & Biological Sciences **	Psychology
Social & Decision Sciences	Decision Science International Relations & Politics Policy & Management	Policy & Management
Statistics	Statistics	Statistics
Interdepartmental	Economics & Statistics Environmental Policy (add'l only) Ethics, History, & Public Policy European Studies Information Systems Linguistics Student-Defined Major	African & African Am. Studies Environmental Studies European Studies Film & Media Studies Gender Studies Global Systems & Mgmt. Health Care Policy & Mgmt. Innovation, Entrepreneurship & Economic Development Linguistics Religious Studies Science, Technology & Society Sociology Student-Defined Minor

* Intercollege major jointly administered by the Mathematical Sciences Department in the Mellon College of Science and the Economics Department in the College of Humanities and Social Sciences.

** Intercollege major jointly administered by the Biological Sciences Department in the Mellon College of Science and the Psychology Department in the College of Humanities and Social Sciences.

BHA/BSA - CFA Concentrations

College of Fine Arts (CFA) Concentrations

Students choose their fine arts concentration from among the five schools in CFA: Architecture, Art, Design, Drama or Music. A student must meet entry requirements for the specific CFA School of their choice. While in the BHA or BSA Program, a student may change their CFA concentration only if they pass all admission requirements for that particular CFA school.

Architecture	108 units
Art	108 units
Design	108 units
Drama	108 units
Music	108 units

BHA/BSA - CFA Concentration: Architecture

Architecture Concentration (108 units minimum)

BHA/BSA Architecture Academic Advisor:
Doug Cooper MMCH 412B, x8-2367 dcooper@andrew.cmu.edu

Architecture Required Courses (54 units minimum)

48-095	Spatial Concepts for Non-Architects I	9
or 48-100	Architecture Design Studio: Foundation I (Fall)	12
48-130	Architectural Drawing I: A Tactile Foundation (Fall)	9
48-135	Architectural Drawing II: Appearance (Spring)	9
48-240	Historical Survey of World Architecture and Urbanism (Fall)	9
48-34x	Architectural History Lecture (varying topics)	9
48-44x	Architectural History Lecture (varying topics)	9

Work with Architecture Advisor to Form Concentration. Please Review the Following Suggested Curricula Areas of Elective Focus. (54 units minimum):

Elective Focus: General Education in Architecture (54 units)

48-210	Statics (prerequisite: 33-106 or 48-116; Fall)	9
48-215	Materials and Assembly (prerequisite: 12-235 or 48-210; Spring)	9
48-217	Structures (prerequisite: 48-207 or 48-210; Spring)	9
48-3xx	Drawing Elective	9
48-34x	Architectural History Lecture (varying topics)	9
48-44x	Architectural History Lecture (varying topics)	9

Elective Focus: Architectural Representation and Visualization (57 units)

This sequence is intended to develop particular skills in architectural representation.

48-120	Introduction to Digital Media I (Fall)	6
48-125	Introduction to Digital Media II (prerequisite: 48-120; Spring)	6
48-3xx	Drawing Elective	9
48-xxx	Undergraduate Representation/Visualization Elective (pre-approval of coursework required)	18
48-xxx	Graduate Representation/Visualization Elective (pre-approval of coursework required)	18

BHA/BSA - CFA Concentration: Architecture, Cont'd

Elective Focus: Architectural Technology (54 units)

This sequence is intended to develop intellectual links to the technical aspects of the profession.

Prerequisite Courses:

48-116	Building Physics	9
62-175	Descriptive Geometry	6

Elective Courses:

48-210	Statics (prerequisite: 33-106 or 48-116; Fall)	9
48-215	Materials and Assembly (prerequisite: 12-235 or 48-210; Spring)	9
48-217	Structures (prerequisite: 12-207 or 48-210; Spring)	9
48-315	Environment I: Climate & Energy (prerequisite: 33-106 or 48-116; Fall)	9
48-412	Environment II: Mechanical Systems (prerequisite: 48-105; Fall)	9
48-4xx	Designated Departmental Technical Elective	9

Elective Focus: Architectural History (six varying topics, 54 units)

48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9

BHA/BSA - CFA Concentration: Art

Art Concentration (108 units minimum)

PORTFOLIO REVIEW REQUIRED FOR ADMISSION

BHA/BSA Art Academic Advisor:

Mark Cato CFA 300C, x8-1531 mdcato@andrew.cmu.edu

Concept Studios (2 courses, 20 units)

Complete two courses:

60-101	Concept Studio I	10
60-201	Concept Studio II	10
60-202	Concept Studio III	10
60-203	Concept Studio: EcoArt	10
60-204	Concept Studio: Networked Narrative	10

Media Studios (3 courses, 30 units)

Complete three courses:

60-150	2D Media Studio: Drawing	10
60-160	2D Media Studio: Imaging	10
60-250	2D Media Studio: Painting	10
60-251	2D Media Studio IV: Print Media	10
60-130	3D Media Studio I (two minis, 5 units each)	10
60-131	3D Media Studio II (two minis, 5 units each)	10
60-110	Electronic Media Studio I	10
60-210	Electronic Media Studio II	10

Advanced Studios (4 courses, 40 units)

Complete four courses. Courses may be offered in the fall and/or spring. Students may take courses in any media area (ETB, SIS, CP or PDP). They may take all courses in one media area if a focus is desired.

60-410-29	Advanced Electronic and Time-Based Work (ETB)	10
60-430-47	Advanced Sculpture, Installation and Site-Work (SIS)	10
60-448-49	Advanced Contextual Practice (CP)	10
60-450-98	Advanced Painting, Drawing and Printmaking (PDP)	10
60-499	Studio Independent Study (one only)	10

Art History/Theory (2 courses, 18 units)

60-205	Modern Visual Culture 1789-1945	9
60-206	Contemporary Visual Culture from 1945 to the Present	9

Review Requirement (complete 2 required reviews, 0 units)

A review is required at the end of the sophomore and senior years. Pass/no pass only.

60-200	Sophomore Review (Spring)	0
60-400	Senior Review (Spring)	0

BHA/BSA - CFA Concentration: Design

Design Concentration (108 units minimum)

PORTFOLIO REVIEW REQUIRED FOR ADMISSION

Options available in the following areas, to be selected in the sophomore year:

1) Communication Design, 2) Industrial Design

BHA/BSA Design Academic Advisor:

Steve Stadelmeier MMCH 204B, x8-6952 ss1u@andrew.cmu.edu

Required Courses for Both Concentration Options (75 units)

51-101	Design Studio I (Fall, Freshman year)	9
51-102	Design Studio II (Spring, Freshman year)	9
51-103	Design Workshop (Fall, Freshman year)	3
51-121	Design Drawing I (Fall, Freshman year)	9
51-122	Design Drawing II (Spring, Freshman year)	9
51-132	Introduction to Photo Design (Spring, Freshman year)	4.5
51-134	Photo Design II (Spring, Freshman year)	4.5
51-171	Human Experience in Design (Fall, Sophomore year)	9
51-271	Design History I (Fall, Sophomore year)	9
62-100	Critical Histories of the Arts	9

Work with Design Advisor in the Sophomore Year to Form Concentration Option (33 units minimum):

Communication Design Required Courses (12 units)

51-201	Basic Typography Communication Design I (Fall)	9
51-203	Communication Design Computer Lab (Fall)	3

Choose 21 additional Design units in consultation with the Design advisor.

Industrial Design Required Courses (18 units)

51-211	Generation of Form: Industrial Design I	9
51-243	Prototyping	4.5
51-251	Digital Prototyping	4.5

Choose 15 additional Design units in consultation with the Design advisor.

NOTE: 51-241 How People Work (Fall, 9 units) is highly recommended.

BHA/BSA - CFA Concentration: Drama

Drama Concentration (108 units minimum)

AUDITION/INTERVIEW REQUIRED FOR DIRECTING OR DRAMATURGY CONCENTRATION OPTION. PORTFOLIO REVIEW/INTERVIEW REQUIRED FOR DESIGN OR PRODUCTION TECHNOLOGY AND MANAGEMENT CONCENTRATION OPTION.

Options available in the following areas:

1) Design, 2) Directing, 3) Dramaturgy, 4) Production Technology and Management (There is no BXA Acting or Music Theatre option.)

BHA/BSA Drama Academic Advisor:

Ari Blackford PCA 223, x8-1581 ariblackford@cmu.edu

Students will be assigned a faculty advisor in Drama.

Required Courses for All Concentration Options (20 units)

54-175 & 176	Conservatory Hour (1 unit each)	2
54-177 or 178	Foundations of Drama I	6
54-281 or 282	Foundations of Drama II (prerequisite: 54-177 or 54-178)	6
54-381	History of Drama	6

Work with Drama Faculty Advisor to Form Concentration Option (88 units minimum):

Design Required Courses (26 units)

54-151 & 152	Stagecraft (15+11 units)	26
--------------	--------------------------	----

Choose 62 additional Design units in consultation with the Design faculty advisor.

Directing Required Courses (49-52 units)

54-121 & 122	Directing I: Sources	18
54-221 & 222	Directing II: Fundamentals (6 or 9 + 9 units)	15-18
54-159 & 160	Production Symposium I	12
54-517 & 518	Director's Colloquium (four times)	4

Choose 36-39 additional Directing units in consultation with the Directing faculty advisor.

BHA/BSA - CFA Concentration: Drama, Continued

Dramaturgy Required Courses (53 units)

54-109	Dramaturgy 1: Approaches to Text	9
54-184	Dramaturgy 2: History and Practice	9
54-160	Production Symposium I (Spring)	6
54-200	Ghost Light Forum (two times; Fall)	2
54-387	Dramaturgy: Production I	9
54-xxx	Dramaturgy 3, 4, 5 or 6 (take two in any order during the sophomore, junior, and senior years)	18

Choose 35 additional Dramaturgy units in consultation with the Dramaturgy faculty advisor.

Production Technology and Management Required Courses (26 units)

54-151 & 152	Stagecraft (15+11 units)	26
--------------	--------------------------	----

Choose 62 additional PTM units in consultation with the PTM faculty advisor.

BHA/BSA - CFA Concentration: Music

Music Concentration (108 units minimum)

AUDITION AND INTERVIEW REQUIRED FOR ADMISSION TO THE MUSIC PERFORMANCE CONCENTRATION OPTION. INTERVIEW REQUIRED FOR ADMISSION TO THE MUSICOLOGY AND CULTURAL STUDIES OR MUSIC TECHNOLOGY CONCENTRATION OPTION.

Options available in the following areas:

1) Music Performance (Instrumental, Piano, Organ, Composition, Voice), 2) Musicology and Cultural Studies, 3) Music Technology

BHA/BSA Music Academic Advisor:

Sharon Johnston CFA 108, x8-2385 slj@cmu.edu

Required Courses for All Concentration Options (21 units)

57-152	Harmony I	9
57-173	Survey of Western Music History	9
57-189	Repertoire and Listening for Musicians I (co-requisite: 57-173)	3

Music Performance Required Courses (66 units)

57-69x	BXA Studio (4 semesters)	36
57-xxx	Major Ensemble (4 semesters)	24
57-161	Eurhythmics I	3
57-181	Solfege I	3

Choose 21 additional Music units in consultation with the Music advisor.

Musiology and Cultural Studies Required Courses (30 units)

57-283	Music History I	9
57-284	Music History II	9
57-289	Repertoire and Listening for Musicians III (co-requisite: 57-283)	3
57-290	Repertoire and Listening for Musicians IV (co-requisite: 57-284)	3
57-611	Independent Study in Music History	6

Choose 36 units from:

57-209	Beatles	9
57-306	World Music	6
57-377	Psychology of Music	9
57-412	Opera Since Wagner	9
57-413	The Interpretation of Music	6
57-414	Music and Nature	9
57-477	Music and the Spirit	6
57-478	Survey of Historical Recording	6
57-480	History of Black American Music	6

Graduate Musicology courses may be taken with instructor permission.

Choose 21 additional Music units in consultation with the Music advisor.

BHA/BSA - CFA Concentration: Music, Continued

Music Technology Required Courses (30 units)

57-101	Introduction to Music Technology	6
57-181	Solfege I	3
57-337	Sound Recording	6
57-347	Electronic and Computer Music	6
57-xxx	Independent Study in Music Technology or Sound Recording	9

Choose 36 units from:

57-153	Harmony II	9
57-182	Solfege II	3
57-283	Music History I	9
57-284	Music History II	9
57-289	Repertoire and Listening for Musicians III (co-requisite: 57-283)	3
57-290	Repertoire and Listening for Musicians IV (co-requisite: 57-284)	3
57-338	Sound Editing and Mastering	6
57-438	Multitrack Recording	9

Choose 21 additional Music units in consultation with the Music advisor.

BSA Core

BSA Core Requirements

The BSA Core is a distinctive core curriculum that provides a foundation in humanities, social sciences, natural sciences, and mathematics. In addition, students are required to fulfill a freshman research seminar requirement, a junior seminar requirement, a junior portfolio review, a senior capstone project, and a computing skills workshop.

BSA Core Requirements (16 courses, 135 units minimum)

1. Writing/Expression (1 course, 9 units, 76-101 required)
2. Cultural Analysis (1 course, 9 units minimum)
3. Economic, Political, and Social Institutions *or* Cognition, Choice and Behavior (1 course, 9 units minimum)
4. Two additional courses from one of the following departments: English, History, Modern Languages, Philosophy, or Psychology (2 courses, 18 units)
5. Mathematics (2 courses, 20 units, 21-120 and 21-122 required)
6. Science (3 courses, 31 units, 03-121, 09-105, and 33-111 required)
7. BXA Freshman Research Seminar (1 course, 9 units, 62-190 required)
8. BXA Junior Seminar (1 course, 9 units, 62-410 required)
9. BXA Junior Portfolio Review (complete 1 required review, 0 units, 62-391 required)
10. BXA Capstone Project (2 courses, 18 units, 62-401 & 62-402)
11. University Requirement (1 mini-course, 3 units, 99-10X required)

1. Writing/Expression (1 course, 9 units)

Broadly considered, language is a tool used to communicate, as well as a way to organize non-visual and non-mathematical thinking. This requirement focuses on the social nature of language and the ways in which writing constitutes thinking.

76-101	Interpretation and Argument - REQUIRED (various topics by section) www.cmu.edu/hss/english/first_year/index.html	9
--------	--	---

2. Cultural Analysis (1 course, complete 9 units minimum)

This category explores definitions of culture and the role culture plays in producing different actions and institutions as well as the roles of institutions, systems and human actions in shaping cultural contexts. Listed below are examples of courses that meet the requirement for this category.

57-173	Survey of Western Music History	9
57-209	The Beatles	9
70-342	Managing Across Cultures *	9
76-227	Comedy	9
76-232	African American Literature	9
76-239	Introduction to Film Studies	9
76-241	Introduction to Gender Studies	9
79-011	AP European History **	9
79-015	AP World History **	9
79-104	Global Histories	9
79-113	Culture and Identity in American Society	9
79-202	Flesh and Spirit: Early Modern Europe, 1400-1750	9

BSA Core, Continued

Continued required courses for Cultural Analysis

79-207	Development of European Culture	9
79-221	Development and Democracy in Latin America	9
79-240	The Development of American Culture	9
79-241	African American History I	9
79-242	African American History II	9
79-255	Irish History	9
79-261	Chinese Culture and Society	9
79-265	Russian History: From the First to the Last Tsar	9
79-266	Russian History: From Communism to Capitalism	9
79-281	Introduction to Religion	9
79-307	Religion and Politics in the Middle East	9
79-310	Religions of China	9
79-311	Introduction to Anthropology	9
79-345	The Roots of Rock and Roll, 1870-1970	9
79-350	Early Christianity	9
79-368	Poverty, Charity, and Welfare	9
80-100	Introduction to Philosophy	9
80-250	Ancient Philosophy	9
80-251	Modern Philosophy	9
80-253	Continental Philosophy	9
80-254	Analytic Philosophy	9
80-255	Pragmatism	9
80-276	Philosophy of Religion	9
82-011	AP Latin 1 **	9
82-012	AP Latin 2 **	9
82-2xx	Any 200 level or greater course from Modern Languages	9

* Indicates co-requisites and/or prerequisites required.

** Indicates credit is based on the AP Credit Policy.

3. Economic, Political and Social Institutions or Cognition, Choice and Behavior (1 course from either category, complete 9 units minimum)

Economic, Political and Social Institutions

This category examines the ways in which institutions organize individual preferences and actions into collective outcomes using model-based reasoning.

70-332	Business, Society and Ethics *	9
73-100	Principles of Economics	9
79-012	AP US History **	9
79-306	Delinquency, Crime and Juvenile Justice, 1967 to the Present	9
79-330	Medicine and Society	9
79-335	Drug Use and Drug Policy	9
79-341	The Cold War in Documents and Film	9
79-374	American Environmental History: Critical Issues	9
79-377	Food, Culture, and Power: A History of Eating	9
79-392	History of Modern Warfare	9
80-135	Introduction to Political Philosophy	9
80-136	Social Structure, Public Policy & Ethics	9

BSA Core, Continued

Continued required courses for Economic, Political and Social Institutions or Cognition, Choice and Behavior

80-226	Revolutions in Science	9
80-235	Political Philosophy	9
80-245	Medical Ethics	9
80-276	Philosophy of Religion	9
80-341	Computers, Society and Ethics	9
88-011	AP Government & Politics: Comparative **	9
88-012	AP Government & Politics: US **	9
88-104	Decision Processes in American Political Institutions	9
88-110	Experiments with Economic Principles	9
88-205	Comparative Politics	9

* Indicates co-requisites and/or prerequisites required.

** Indicates credit is based on the AP Credit Policy.

Cognition, Choice, and Behavior

This category use model-based analysis to broaden an understanding of human thinking, choices, and behavior on an individual basis across a variety of settings.

80-130	Introduction to Ethics	9
80-150	Nature of Reason	9
80-180	Nature of Language	9
80-208	Critical Thinking	9
80-220	Philosophy of Science	9
80-221	Philosophy of Social Science	9
80-230	Ethical Theory	9
80-241	Ethical Judgments in Professional Life	9
80-242	Conflict and Dispute Resolution	9
80-270	Philosophy of Mind	9
80-271	Philosophy and Psychology	9
80-312	Philosophy of Mathematics	9
85-011	AP Psychology **	9
85-102	Introduction to Psychology	9
85-211	Cognitive Psychology	9
85-221	Principles of Child Development	9
85-241	Social Psychology	9
85-251	Personality	9
85-261	Abnormal Psychology	9
85-390	Human Memory	9
88-120	Reason, Passion and Cognition	9

** Indicates credit is based on the AP Credit Policy.

BSA Core, Continued

4. Complete TWO additional courses from one of the following departments (2 courses, complete 18 units minimum)

- English
- History
- Modern Languages
- Philosophy
- Psychology

5. Mathematics (2 courses, 20 units)

Complete these two courses in Calculus:

21-120	Differential and Integral Calculus	10
21-122	Integration, Differential Equations, and Approximation	10

6. Science (3 courses, 31 units)

Complete the following science courses:

03-121	Modern Biology	9
09-105	Introduction to Modern Chemistry I	10
33-111	Physics I for Science Students	12

7. BXA Freshman Research Seminar (1 course, 9 units)

Section B of the BXA Freshman Research Seminar introduces first-year students to the field of interdisciplinary work and arts-based research. Students engage with theoretical and practical readings from across the various concentrations, with particular emphasis on aesthetic theory. Guest lectures complement the weekly readings by giving insight into practical implementations of these ideas. Students will conceive, research, and create a final project to be presented at the end of the semester.

Section A of the BXA Research Freshman Seminar has been designed for internal transfer students only and it is offered in the fall and spring semesters. Using the arts as primary modes of inquiry, this course's content probes the idiosyncratic field of arts-based research by following the principle that there is no aspect of human life that cannot be studied objectively, quantified and analyzed. Aside from discussing a digest of the latest writings on arts-based research, students will try their own approach to arts-based research by building prismatic artistic and literary constructs inspired by the reading of Calvino's prose-poems *Invisible Cities*.

62-190	BSA Freshman Research Seminar - REQUIRED	9
--------	--	---

8. BXA Junior Seminar (1 course, 9 units)

This course, offered only in the spring, is taught by a team of interdisciplinary scholars led by a Carnegie Mellon University professor who will focus on a particular global, cultural, and political situation preminent at the time. The theme chosen for spring 2012 will be "Music From An Ancient Land, Traditional, Folk, and Contemporary Music of Iran." Prof. Mahmood-Reza Vali and guests will teach the course.

BSA Core, Continued

The Iranian civilization is one of the oldest continuing civilizations in the world. Music has played an important role in the continuation and preservation of this ancient culture. In this course, the traditional, folk, and contemporary music of Iran will be studied and discussed. The focal point of the course will be the Persian modal system, the *Dástgâh*. Starting with a historical survey of the ancient and medieval Persian music, different aspects of the *Dástgâh* system will be demonstrated and discussed. In addition, religious music and folk music of Iran as well as Iranian contemporary music will be discussed during the course.

62-410	BSA Junior Seminar (Spring) - REQUIRED	9
--------	--	---

9. BXA Junior Portfolio Review (complete 1 required review, 0 units)

To better assess the progress and accomplishments of BXA students as they enter their final year, students submit a portfolio for review during the spring semester junior year. Students should work with their BXA advisor and their concentration faculty advisors to assemble a portfolio that represents their academic and creative accomplishments over the course of their college career. This portfolio should also include a reflective essay in which students evaluate how they integrated their two areas of interest, and how they will extend that integration into the BXA Capstone Project in the senior year.

Students should identify their own specific goals for their academic career and how they are fulfilling them in this reflective essay, as well as how they evaluate their performance in light of the programs' broader pedagogical goals. Students in the BXA program should be working toward being able to:

- describe the connections between their chosen concentration disciplines and to integrate them into their work
- communicate ideas in writing, visual expression, and oral expression
- discuss the intersection of history, society, and culture from local and global perspectives
- synthesize mathematical theories and experimental work to produce real-world knowledge
- use cognitive, behavioral, and ethical dimensions to make decisions on individual and social levels

62-391	BSA Junior Portfolio Review (Spring) - REQUIRED (pass/no pass)	0
--------	--	---

10. BXA Capstone Project (2 courses, 18 units)

The BXA Capstone Project gives BXA students the opportunity to demonstrate the extent of their interdisciplinary work over the course of their academic career. The Capstone Project should include elements that span the student's CFA and H&SS concentrations (for BHA students), CFA and MCS concentrations (for BSA students), or CFA and SCS concentrations (for BCSA students). The project can be either a scholarly or creative endeavor, and may take one of many possible forms (e.g., a written thesis, a compilation of creative work or works, an experiment and report, a computer program or animation, etc.).

BSA Core, Continued

The BXA Capstone sequence covers both semesters of a student's senior year. In the fall, students are enrolled in 62-401 BXA Capstone Project I (9 units), which has no required classroom time. Instead, students spend the semester doing the research and foundational work necessary for the project, as well as meeting with their faculty and BXA advisors. In the spring, students enroll in 62-402 BXA Capstone Project II (9 units), a weekly seminar in which students share their work and critiques with their peers as they create their Capstone Project and prepare to present it at the annual Meeting of the Minds Undergraduate Research Symposium held each May.

62-401	BXA Capstone Project I (Fall) - REQUIRED (does not meet, by appointment with instructor)	9
--------	---	---

62-402	BXA Capstone Project II (Spring) - REQUIRED (course attendance required)	9
--------	---	---

11. University Requirement (1 mini-course, 3 units)

This is a mini-course, pass/no pass, to be completed in the 1st semester.

99-10x	Computing @ Carnegie Mellon - REQUIRED (99-101, 99-102, or 99-103)	3
--------	---	---

BSA - MCS Concentrations

Mellon College of Science (MCS) Concentrations

BSA students choose their science concentration from among the four departments in MCS: Biological Sciences, Chemistry, Mathematical Sciences, or Physics.

Biological Sciences	120 - 123 units
----------------------------	------------------------

Chemistry	124 units
------------------	------------------

Mathematical Sciences	121 - 122 units
------------------------------	------------------------

Physics	134 units
----------------	------------------

MCS Concentration: Biological Sciences

Biological Sciences Concentration (120-123 units minimum)

BSA Biological Sciences Academic Advisor:

Maggie Braun DH 1321, x8-3262 mabraun@andrew.cmu.edu

Biological Sciences Required Courses (102 units minimum)

03-231 or 232	Biochemistry I	9
03-240	Cell Biology	9
03-330	Genetics	9
03-124	Modern Biology Laboratory	9
or 03-343	Experimental Techniques in Molecular Biology	12
03-201 &/or 202	Undergraduate Colloquium for Sophomores	2
09-106	Modern Chemistry II	10
09-217	Organic Chemistry I	9
09-218	Organic Chemistry II	9
09-221	Laboratory I: Introduction to Chemical Analysis	12
09-222	Laboratory II: Organic Synthetics and Analysis	12
33-112	Physics II for Science Students	12

Advanced Biological Sciences Electives (2 courses, 18 units)

Must be selected from 03-3xx, excluding 03-445.

MCS Concentration: Chemistry

Chemistry Concentration (124 units minimum)

BSA Chemistry Academic Advisor:

Karen Stump DH 1316, x8-2340 kso1@andrew.cmu.edu

Chemistry Required Courses (106 units)

09-106	Modern Chemistry II	10
09-219	Modern Organic Chemistry	10
09-220	Modern Organic II	10
09-214	Physical Chemistry	9
or 09-344	Physical Chemistry (Quantum)	9
or 09-345	Physical Chemistry (Thermo)	9
09-348	Inorganic Chemistry	10
09-221	Laboratory I: Introduction to Chemical Analysis	12
09-222	Laboratory II: Organic Synthesis and Analysis	12
09-321	Laboratory III: Molecular Design and Synthesis	12
09-204	Professional Communication Skills in Chemistry	3
09-201, 202 & 301	Undergraduate Seminars (1 unit each)	3
09-402	Undergraduate Seminar VI	3
33-112	Physics II for Science Students	12

Advanced Chemistry Electives (2 courses, 18 units)

May be any upper level chemistry course, 09-3xx or higher, or Biochemistry I, 03-231 or 03-232, with the exception of 09-435 Independent Study, which can be used only by permission of the Director of Undergraduate Studies.

MCS Concentration: Mathematical Sciences

Mathematical Sciences Concentration (121-122 units minimum)

BSA Mathematical Sciences Academic Advisor:

John Mackey WEH 6117, x8-2545 jmackey@andrew.cmu.edu

Mathematical Sciences Required Courses (85 units minimum)

(Reasonable substitutions within the core program will be allowed.)

15-110	Principles of Computing	10
21-127	Concepts of Mathematics (prerequisite for 15-211)	9
21-228	Discrete Mathematics	9
21-241	Matrices and Linear Transformations	10
or 21-341	Linear Algebra	9
21-259	Calculus in Three Dimensions	9
21-260	Differential Equations	9
21-355	Principles of Real Analysis I	9
21-373	Algebraic Structures	9
33-112	Physics II for Science Students	12

Mathematical Sciences Electives (2 courses, 18 units)

Students with a Music concentration should take 21-372 Partial Differential Equations.

Mathematical Sciences, Statistics, or Computer Science Electives (2 courses, 18 units)

May be computer science courses above the 100 level, mathematical science courses beyond the calculus sequence, and statistics courses at the level of 36-225 or higher.

MCS Concentration: Physics

Physics Concentration (134 units)

BSA Physics Academic Advisor:

Kunal Ghosh WEH 7303, x8-3413 kunalghosh@cmu.edu

Physics Required Courses (116 units)

21-259	Calculus in Three Dimensions	9
33-104	Experimental Physics	9
33-112	Physics II for Science Students	12
33-201	Physics Sophomore Colloquium I (Fall)	2
33-202	Physics Sophomore Colloquium II (Spring)	2
33-211	Physics III: Modern Essentials	10
33-228	Electronics I	10
33-231	Physical Analysis	10
33-232	Mathematical Methods of Physics	10
33-234	Quantum Physics	10
33-301	Physics Upperclass Colloquium I (Fall)	1
33-302	Physics Upperclass Colloquium II (Spring)	1
33-331	Physical Mechanics I	10
33-338	Intermediate Electricity and Magnetism I	10
33-340	Modern Physics Laboratory	10
33-341	Thermal Physics I	10

Physics Elective Courses (2 courses, 18 units)

Two courses to be pre-approved by the Physics Department.

33-xxx	Two Physics Electives	18
--------	-----------------------	----

NOTE: 33-114 Physics of Musical Sound (9 units) is highly recommended for students with a Music concentration.

BCSA Core

BCSA Core Requirements

The BCSA Core is a distinctive core curriculum that provides a foundation in humanities, social sciences, natural sciences, and mathematics. In addition, students are required to fulfill a freshman research seminar requirement, a junior seminar requirement, a junior portfolio review, a senior capstone project, and a computing skills workshop.

BCSA Core Requirements (15 courses, 121 units minimum)

1. Writing/Expression (1 course, 9 units, 76-101 required)
2. Cultural Analysis (1 course, 9 units minimum)
3. Mathematics (2 courses, 19 units minimum, 21-120 and 21-122, or 21-241 required), Probability (1 course, 9 units minimum required)
4. Science (2 courses, 18 units minimum)
5. Engineering (In consultation with your academic advisor, an engineering course could substitute for one of the two Science requirements)
6. Economic, Political, and Social Institutions *or* Cognition, Choice and Behavior (1 course, 9 units minimum)
7. One additional course from one of the following departments: English, History, Modern Languages, Philosophy, or Psychology (1 courses, 9 units minimum)
8. BXA Freshman Research Seminar (1 course, 9 units, 62-190 required)
9. BXA Junior Seminar (1 course, 9 units, 62-410 required)
10. BXA Junior Portfolio Review (complete 1 required review, 0 units, 62-391 required)
11. BXA Capstone Project (2 courses, 18 units, 62-401 & 62-402 required)
12. University Requirement (1 mini-course, 3 units, 99-10x required)

1. Writing/Expression (1 course, 9 units)

Broadly considered, language is a tool used to communicate, as well as a way to organize non-visual and non-mathematical thinking. This requirement focuses on the social nature of language and the ways in which writing constitutes thinking.

76-101	Interpretation and Argument - REQUIRED (various topics by section) www.cmu.edu/hss/english/first_year/index.html	9
--------	--	---

2. Cultural Analysis (1 course, complete 9 units minimum)

This category explores definitions of culture and the role culture plays in producing different actions and institutions as well as the roles of institutions, systems and human actions in shaping cultural contexts. Listed below are examples of courses that meet the requirement for this category.

57-173	Survey of Western Music History	9
70-342	Managing Across Cultures	9
76-227	Comedy	9
76-232	African American Literature	9
76-239	Introduction to Film Studies	9
76-241	Introduction to Gender Studies	9
79-104	Global Histories	9
79-113	Culture and Identity in American Society	9
79-207	Development of European Culture	9

BCSA Core, Continued

Continued required courses for Cultural Analysis

79-240	The Development of American Culture	9
79-241	African-American History I	9
79-242	African-American History II	9
79-261	Chinese Culture and Society	9
79-281	Introduction to Religion	9
79-311	Introduction to Anthropology	9
79-330	Medicine and Society	9
79-345	The Roots of Rock and Roll, 1870-1970	9
79-350	Early Christianity	9
79-368	Poverty, Charity, and Welfare	9
80-100	Introduction to Philosophy	9
80-250	Ancient Philosophy	9
80-251	Modern Philosophy	9
80-253	Continental Philosophy	9
80-254	Analytical Philosophy	9
80-255	Pragmatism	9
80-276	Philosophy of Religion	9
82-3xx	Any 300 level or greater course from Modern Languages	9

3. Mathematics & Probability (3 courses, 29 units minimum)

Choose two mathematics courses (20 units minimum):

21-120	Differential and Integral Calculus	10
21-122	Integration, Differential Equations, and Approximation	10
<i>or</i> 21-241	Matrices and Linear Transformations	10

Choose one probability course (9 units minimum):

15-359	Probability and Computing	12
21-325	Probability	9
36-217	Probability Theory and Random Processes	9
36-225	Introduction to Probability Theory	9
36-625	Probability and Mathematical Statistics I	12

4. Science (2 courses, 18 units minimum)

Choose two courses from the following list:

03-121	Modern Biology	9
09-105	Introduction to Modern Chemistry I	10
21-259	Calculus in Three Dimensions	9
33-111	Physics I for Science Students	12

5. Engineering

In consultation with your academic advisor, an engineering course could substitute for one of the two Science requirements.

BCSA Core, Continued

6. Economic, Political and Social Institutions or Cognition, Choice, and Behavior (1 course from either category, complete 9 units minimum)

Economic, Political and Social Institutions

This category examines the ways in which institutions organize individual preferences and actions into collective outcomes using model-based reasoning.

36-303	Sampling, Survey and Society	9
70-332	Business, Society and Ethics	9
73-100	Principles of Economics	9
73-150	Intermediate Microeconomics	9
79-335	Drug Use and Drug Policy	9
79-374	American Environmental History: Critical Issues	9
80-135	Introduction to Political Philosophy	9
80-136	Social Structure, Public Policy & Ethics	9
80-235	Political Philosophy	9
80-341	Computers, Society and Ethics	9
88-104	Decision Processes in American Political Institutions	9
88-110	Experiments with Economic Principles	9
88-205	Comparative Politics	9
88-220	Policy Analysis I	9

Cognition, Choice, and Behavior

This category use model-based analysis to broaden an understanding of human thinking, choices, and behavior on an individual basis across a variety of settings.

70-311	Organizational Behavior	9
80-130	Introduction to Ethics	9
80-150	Nature of Reason	9
80-180	Nature of Language	9
80-221	Philosophy of Social Science	9
80-230	Ethical Theory	9
80-241	Ethical Judgments in Professional Life	9
80-242	Conflict and Dispute Resolution	9
80-270	Philosophy of Mind	9
80-271	Philosophy and Psychology	9
80-275	Metaphysics	9
80-281	Language and Thought	9
85-102	Introduction to Psychology	9
85-211	Cognitive Psychology	9
85-221	Principles of Child Development	9
85-241	Social Psychology	9
85-251	Personality	9
85-261	Abnormal Psychology	9
88-120	Reason, Passion and Cognition	9
88-260	Organizations	9

BCSA Core, Continued

7. Complete ONE additional course from one of the following departments (1 course, complete 9 units minimum)

- English
- History
- Modern Languages
- Philosophy
- Psychology

8. BXA Freshman Research Seminar (1 course, 9 units)

Section B of the BXA Freshman Research Seminar introduces first-year students to the field of interdisciplinary work and arts-based research. Students engage with theoretical and practical readings from across the various concentrations, with particular emphasis on aesthetic theory. Guest lectures complement the weekly readings by giving insight into practical implementations of these ideas. Students will conceive, research, and create a final project to be presented at the end of the semester.

Section A of the BXA Research Freshman Seminar has been designed for internal transfer students only and it is offered in the fall and spring semesters. Using the arts as primary modes of inquiry, this course's content probes the idiosyncratic field of arts-based research by following the principle that there is no aspect of human life that cannot be studied objectively, quantified and analyzed. Aside from discussing a digest of the latest writings on arts-based research, students will try their own approach to arts-based research by building prismatic artistic and literary constructs inspired by the reading of Calvino's prose-poems *Invisible Cities*.

62-190	BXA Freshman Research Seminar - REQUIRED	9
--------	--	---

9. BXA Junior Seminar (1 course, 9 units)

This course, offered only in the spring, is taught by a team of interdisciplinary scholars led by a Carnegie Mellon University professor who will focus on a particular global, cultural, and political situation preeminent at the time. The theme chosen for spring 2012 will be "Music From An Ancient Land, Traditional, Folk, and Contemporary Music of Iran." Prof. Mahmood-Reza Vali and guests will teach the course.

The Iranian civilization is one of the oldest continuing civilizations in the world. Music has played an important role in the continuation and preservation of this ancient culture. In this course, the traditional, folk, and contemporary music of Iran will be studied and discussed. The focal point of the course will be the Persian modal system, the *Dástgâh*. Starting with a historical survey of the ancient and medieval Persian music, different aspects of the *Dástgâh* system will be demonstrated and discussed. In addition, religious music and folk music of Iran as well as Iranian contemporary music will be discussed during the course.

62-410	BXA Junior Seminar (Spring) - REQUIRED	9
--------	--	---

BCSA Core, Continued

10. BXA Junior Portfolio Review (complete 1 required review, 0 units)

To better assess the progress and accomplishments of BXA students as they enter their final year, students submit a portfolio for review during the spring semester junior year. Students should work with their BXA advisor and their concentration faculty advisors to assemble a portfolio that represents their academic and creative accomplishments over the course of their college career. This portfolio should also include a reflective essay in which students evaluate how they integrated their two areas of interest, and how they will extend that integration into the BXA Capstone Project in the senior year.

Students should identify their own specific goals for their academic career and how they are fulfilling them in this reflective essay, as well as how they evaluate their performance in light of the programs' broader pedagogical goals. Students in the BXA program should be working toward being able to:

- describe the connections between their chosen concentration disciplines and to integrate them into their work
- communicate ideas in writing, visual expression, and oral expression
- discuss the intersection of history, society, and culture from local and global perspectives
- synthesize mathematical theories and experimental work to produce real-world knowledge
- use cognitive, behavioral, and ethical dimensions to make decisions on individual and social levels

62-391	BXA Junior Portfolio Review (Spring) - REQUIRED (pass/no pass)	0
--------	---	---

11. BXA Capstone Project (2 courses, 18 units)

The BXA Capstone Project gives BXA students the opportunity to demonstrate the extent of their interdisciplinary work over the course of their academic career. The Capstone Project should include elements that span the student's CFA and H&SS concentrations (for BHA students), CFA and MCS concentrations (for BSA students), or CFA and SCS concentrations (for BCSA students). The project can be either a scholarly or creative endeavor, and may take one of many possible forms (e.g., a written thesis, a compilation of creative work or works, an experiment and report, a computer program or animation, etc.).

The BXA Capstone sequence covers both semesters of a student's senior year. In the fall, students are enrolled in 62-401 BXA Capstone Project I (9 units), which has no required classroom time. Instead, students spend the semester doing the research and foundational work necessary for the project, as well as meeting with their faculty and BXA advisors. In the spring, students enroll in 62-402 BXA Capstone Project II (9 units), a weekly seminar in which students share their work and critiques with their peers as they create their Capstone Project and prepare to present it at the annual Meeting of the Minds Undergraduate Research Symposium held each May.

62-401	BXA Capstone Project I (Fall) - REQUIRED (does not meet, by appointment with instructor)	9
--------	---	---

62-402	BXA Capstone Project II (Spring) - REQUIRED (course attendance required)	9
--------	---	---

BCSA Core, Continued

12. University Requirement (1 mini-course, 3 units)

This is a mini-course, pass/no pass, to be completed in the 1st semester.

99-10x	Computing @ Carnegie Mellon - REQUIRED (99-101, 99-102, or 99-103)	3
--------	---	---

BCSA - SCS Concentration

School of Computer Science Concentration (111 units minimum)

BCSA CS Assistant Dean & Academic Advisor:
Mark Stehlik GHC 5206, x8-3609 mjs@cmu.edu

Prerequisite

15-112	Fundamentals of Programming	12
--------	-----------------------------	----

Computer Science Core Requirements (57 units)

15-122	Principles of Imperative Computation	10
15-128	Freshman Immigration Course	1
15-150	Principles of Functional Programming	10
15-210	Parallel and Sequential Structures and Algorithms	12
15-213	Introduction to Computer Systems	12
15-251	Great Theoretical Ideas in Computer Science	12

Concepts of Mathematics (9 units)

21-127	Concepts of Mathematics (co-requisite for 15-122; prerequisite for 15-150)	9
--------	--	---

Applications Courses or CS Electives (5 courses, 45 units minimum)

Choose a minimum of five courses from the following list in consultation with the Computer Science advisor:

11-411	Natural Language Processing	12
15-214	Principles of Software Systems Construction	12
15-313	Foundations of Software Engineering	12
15-322	Introduction to Computer Music	9
15-323	Computer Music Systems and Information Processing	9
15-381	Artificial Intelligence: Representation and Problem Solving	9
15-384	Robotic Manipulation	12
15-385	Computer Vision	9
15-415	Database Applications	12
15-437	Web Application Development	12
15-451	Algorithm Design and Analysis	12
15-462	Computer Graphics	12
15-463	Computational Photography	12
15-464	Technical Animation	12
15-465	Animation Art and Technology	12
15-466	Computer Game Programming	12
16-362	Mobile Robot Programming Laboratory	12

Others as appropriate with advisor's permission.

BCSA - CFA Concentrations

College of Fine Arts (CFA) Concentrations

Students choose their fine arts concentration from among the five schools in CFA: Architecture, Art, Design, Drama or Music. A student must meet entry requirements for the specific CFA School of their choice. While in the BCSA Program, a student may change their CFA concentration only if they pass all admission requirements for that particular CFA school.

Architecture	108 units
---------------------	------------------

Art	118 units
------------	------------------

Design	108 units
---------------	------------------

Drama	108 units
--------------	------------------

Music	108 units
--------------	------------------

BCSA - CFA Concentration: Architecture

Architecture Concentration (108 units minimum)

BCSA Architecture Academic Advisors:

Mark Gross CFA 211, x8-3995 mgross@andrew.cmu.edu

Doug Cooper MMCH 412B, x8-2367 dcooper@andrew.cmu.edu

Architecture Required Courses (54 units minimum)

48-095	Spatial Concepts for Non-Architects I	9
or 48-100	Architecture Design Studio: Foundation I (Fall)	12
48-130	Architectural Drawing I: A Tactile Foundation (Fall)	9
48-135	Architectural Drawing II: Appearance (Spring)	9
48-240	Historical Survey of World Architecture and Urbanism (Fall)	9
48-34x	Architectural History Lecture (varying topics)	9
48-44x	Architectural History Lecture (varying topics)	9

Work with Architecture Advisor to Form Concentration. Please Review the Following

Suggested Curricula Areas of Elective Focus. (54 units minimum):

Elective Focus: General Education in Architecture (54 units)

48-210	Statics (prerequisite: 33-106 or 48-116; Fall)	9
48-215	Materials and Assembly (prerequisite: 12-235 or 48-210; Spring)	9
48-217	Structures (prerequisite: 48-207 or 48-210; Spring)	9
48-3xx	Drawing Elective	9
48-34x	Architectural History Lecture (varying topics)	9
48-44x	Architectural History Lecture (varying topics)	9

Elective Focus: Architectural Representation and Visualization (57 units)

This sequence is intended to develop particular skills in architectural representation.

48-120	Introduction to Digital Media I (Fall)	6
48-125	Introduction to Digital Media II (prerequisite: 48-120; Spring)	6
48-3xx	Drawing Elective	9
48-xxx	Undergraduate Representation/Visualization Elective (pre-approval of coursework required)	18
48-xxx	Graduate Representation/Visualization Elective (pre-approval of coursework required)	18

BCSA - CFA Concentration: Architecture, Continued

Elective Focus: Architectural Technology (54 units)

This sequence is intended to develop intellectual links to the technical aspects of the profession.

Prerequisite Courses:

48-116	Building Physics	9
62-175	Descriptive Geometry	6

Elective Courses:

48-210	Statics (prerequisite: 33-106 or 48-116; Fall)	9
48-215	Materials and Assembly (prerequisite: 12-235 or 48-210; Spring)	9
48-217	Structures (prerequisite: 12-207 or 48-210; Spring)	9
48-315	Environment I: Climate & Energy (prerequisite: 33-106 or 48-116; Fall)	9
48-412	Environment II: Mechanical Systems (prerequisite: 48-105; Fall)	9
48-4xx	Designated Departmental Technical Elective	9

Elective Focus: Architectural History (six varying topics, 54 units)

48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9
48-34x/44x	Architectural History	9

BCSA - CFA Concentration: Art

Art Concentration (118 units minimum)

PORTFOLIO REVIEW REQUIRED FOR ADMISSION

BCSA Art Academic Advisors:

Golan Levin CFA 405, 917-520-7456 golan@andrew.cmu.edu

Mark Cato CFA 300C, x8-1531 mdcato@andrew.cmu.edu

Concept Studios (2 courses, 20 units)

Complete two courses:

60-101	Concept Studio I	10
60-201	Concept Studio II	10
60-202	Concept Studio III	10
60-203	Concept Studio: EcoArt	10
60-204	Concept Studio: Networked Narrative	10

Media Studios (2 courses, 20 units)

Complete two courses:

60-150	2D Media Studio: Drawing	10
60-160	2D Media Studio: Imaging	10
60-250	2D Media Studio: Painting	10
60-251	2D Media Studio IV: Print Media	10
60-130	3D Media Studio I (complete 2 minis, 5 units each)	10
60-131	3D Media Studio II (complete 2 minis, 5 units each)	10
60-110	Electronic Media Studio I	10
60-210	Electronic Media Studio II	10

Advanced Studios (6 courses, 60 units)

Complete six courses. Courses may be offered in the fall and/or spring. Students may take courses in any media area (ETB, SIS, CP or PDP). They may take all courses in one media area if a focus is desired.

60-410-29	Advanced Electronic and Time-Based Work (ETB)	10
60-430-47	Advanced Sculpture, Installation and Site-Work (SIS)	10
60-448-49	Advanced Contextual Practice (CP)	10
60-450-98	Advanced Painting, Drawing and Printmaking (PDP)	10
60-499	Studio Independent Study (one only)	10

Art History/Theory (2 courses, 18 units)

60-205	Modern Visual Culture 1789-1945	9
60-206	Contemporary Visual Culture from 1945 to the Present	9

Review Requirement (complete 2 required reviews, 0 units)

A review is required at the end of the sophomore and senior years. Pass/no pass only.

60-200	Sophomore Review (Spring)	0
60-400	Senior Review (Spring)	0

BCSA - CFA Concentration: Design

Design Concentration (108 units minimum)

PORTFOLIO REVIEW REQUIRED FOR ADMISSION

Options available in the following areas, to be selected in the sophomore year:

1) Communication Design, 2) Industrial Design

BCSA Design Academic Advisor:

Steve Stadelmeier MMCH 204B, x8-6952 ss1u@andrew.cmu.edu

Required Courses for Both Concentration Options (75 units)

51-101	Design Studio I (Fall, Freshman year)	9
51-102	Design Studio II (Spring, Freshman year)	9
51-103	Design Workshop (Fall, Freshman year)	3
51-121	Design Drawing I (Fall, Freshman year)	9
51-122	Design Drawing II (Spring, Freshman year)	9
51-132	Introduction to Photo Design (Spring, Freshman year)	4.5
51-134	Photo Design II (Spring, Freshman year)	4.5
51-171	Human Experience in Design (Fall, Sophomore year)	9
51-271	Design History I (Fall, Sophomore year)	9
62-100	Critical Histories of the Arts	9

Work with Design Advisor in the Sophomore Year to Form Concentration Option (33 units minimum):

Communication Design Required Courses (12 units)

51-201	Basic Typography Communication Design I (Fall)	9
51-203	Communication Design Computer Lab (Fall)	3

Choose 21 additional Design units in consultation with the Design advisor.

Industrial Design Required Courses (18 units)

51-211	Generation of Form: Industrial Design I	9
51-243	Prototyping	4.5
51-251	Digital Prototyping	4.5

Choose 15 additional Design units in consultation with the Design advisor.

NOTE: 51-241 How People Work (Fall, 9 units) is highly recommended.

BCSA - CFA Concentration: Drama

Drama Concentration (108 units minimum)

AUDITION/INTERVIEW REQUIRED FOR DIRECTING OR DRAMATURGY CONCENTRATION OPTION. PORTFOLIO REVIEW/INTERVIEW REQUIRED FOR DESIGN OR PRODUCTION TECHNOLOGY AND MANAGEMENT CONCENTRATION OPTION.

Options available in the following areas:

1) Design, 2) Directing, 3) Dramaturgy, 4) Production Technology and Management (There is no BXA Acting or Music Theatre option.)

BCSA Drama Academic Advisor:

Ari Blackford PCA 223, x8-1581 ariblackford@cmu.edu

Students will be assigned a faculty advisor in Drama.

Required Courses for All Concentration Options (20 units)

54-175 & 176	Conservatory Hour (1 unit each)	2
54-177 or 178	Foundations of Drama I	6
54-281 or 282	Foundations of Drama II (prerequisite: 54-177 or 54-178)	6
54-381	History of Drama	6

Work with Drama Faculty Advisor to Form Concentration Option (88 units minimum):

Design Required Courses (26 units)

54-151 & 152	Stagecraft (15+11 units)	26
--------------	--------------------------	----

Choose 62 additional Design units in consultation with the Design faculty advisor.

Directing Required Courses (49-52 units)

54-121 & 122	Directing I: Sources	18
54-221 & 222	Directing II: Fundamentals (6 or 9 + 9 units)	15-18
54-159 & 160	Production Symposium I	12
54-517 & 518	Director's Colloquium (four times)	4

Choose 36-39 additional Directing units in consultation with the Directing faculty advisor.

BCSA - CFA Concentration: Drama, Continued

Dramaturgy Required Courses (53 units)

54-109	Dramaturgy 1: Approaches to Text	9
54-184	Dramaturgy 2: History and Practice	9
54-160	Production Symposium I (Spring)	6
54-200	Ghost Light Forum (two times; Fall)	2
54-387	Dramaturgy: Production I	9
54-xxx	Dramaturgy 3, 4, 5 or 6 (take two in any order during the sophomore, junior, and senior years)	18

Choose 35 additional Dramaturgy units in consultation with the Dramaturgy faculty advisor.

Production Technology and Management Required Courses (26 units)

54-151 & 152	Stagecraft (15+11 units)	26
--------------	--------------------------	----

Choose 62 additional PTM units in consultation with the PTM faculty advisor.

BCSA - CFA Concentration: Music

Music Concentration (108 units minimum)

AUDITION AND INTERVIEW REQUIRED FOR ADMISSION TO THE COMPOSITION CONCENTRATION OPTION. INTERVIEW REQUIRED FOR ADMISSION TO THE MUSIC TECHNOLOGY CONCENTRATION OPTION.

Options available in the following areas:

1) Composition, 2) Music Technology

BCSA Music Academic Advisors:

Riccardo Schulz CFA A-6A, x8-3450 rs6k@andrew.cmu.edu

Sharon Johnston CFA 108, x8-2385 slj@cmu.edu

Required Courses for Both Concentration Options (21 units)

57-152	Harmony I	9
57-173	Survey of Western Music History	9
57-189	Repertoire and Listening for Musicians I (co-requisite: 57-173)	3

Composition Required Courses (66 units)

57-69x	BXA Studio (4 semesters)	36
57-xxx	Major Ensemble (4 semesters)	24
57-161	Eurhythmics I	3
57-181	Solfege I	3

Choose 21 additional Music units in consultation with the Music advisor.

Music Technology Required Courses (30 units)

57-101	Introduction to Music Technology	6
57-181	Solfege I	3
57-337	Sound Recording	6
57-347	Electronic and Computer Music	6
57-xxx	Independent Study in Music Technology or Sound Recording	9

Choose 36 units from:

57-153	Harmony II	9
57-182	Solfege II	3
57-283	Music History I	9
57-284	Music History II	9
57-289	Repertoire and Listening for Musicians III (co-requisite: 57-283)	3
57-290	Repertoire and Listening for Musicians IV (co-requisite: 57-284)	3
57-338	Sound Editing and Mastering	6
57-438	Multitrack Recording	9

Choose 21 additional Music units in consultation with the Music advisor.

BXA Capstone Project

BXA Capstone Project

The goal of the BXA Capstone Project is to give BXA students the opportunity to weave together the interdisciplinary elements of their curricula into an integrated project. The project's goals are based on the student's curriculum that is based in part on their interdisciplinary vision in the arts and humanities/social sciences (BHA), physical and natural sciences (BSA), or computer science (BCSA).

The creation and completion of such a project can be an important integrative and fulfilling capstone for BXA students, as well as, influence the development of the BXA programs as a distinguished scholarly and creative undergraduate student community.

The project topic should include elements that span the student's CFA and H&SS concentrations, CFA and MCS concentrations, or CFA and SCS concentrations, though it could emphasize one area more than the other. The project could be a scholarly or creative endeavor, and may take one of many possible forms (e.g., a written thesis, a compilation of creative work or works).

BXA Capstone Projects are year-long (18 units for two semesters), and are structured as exploratory study under the supervision of a single faculty member or a small committee of faculty from the areas relevant to the project, in addition to the BXA Associate Director/Academic Advisor instructing both courses. Registration for these courses will be through CFA interdisciplinary. Students with approved projects will be registered for the following BXA Capstone Project courses by the BXA office:

62-401	BXA Capstone Project I (Fall) - REQUIRED (does not meet, by appointment with instructor)	9
62-402	BXA Capstone Project II (Spring) - REQUIRED (course attendance required)	9

It is expected that BXA Capstone Project participants will present their projects during the university's spring Undergraduate Research Symposium, the Meeting of the Minds, in their senior year. Please register online. <http://www.cmu.edu/uro/MoM>

BXA Capstone Project, Continued

Eligibility

To be eligible for entry into the BXA Capstone Project, the student needs to:

- be a BHA/BSA/BCSA student
- be on track to graduate at the end of the fall or spring semester of the capstone project year
- be sponsored by one or more faculty members to serve as project advisor(s) in addition to the BXA Associate Director/Academic Advisor

Capstone Project with Intercollege Honors

BHA, BSA, and BCSA students who successfully complete a BXA Capstone Project under the guidance of a faculty member will graduate with BHA, BSA, or BCSA Intercollege Honors if all of the following conditions are met:

- grade of "A" achieved in 62-401 and 62-402
- overall QPA of 3.25 or higher
- research results presented at Meeting of the Minds Undergraduate Research Symposium

NOTE: Two semesters (18 units) of the BXA Capstone Project is required for freshmen beginning fall '09 and internal transfer students applying fall '09, beginning spring '10. Students may substitute the BXA Capstone Project requirement by completing an honors project/thesis with H&SS, MCS, or SCS. Students must gain pre-approval of substitution with the BXA Associate Director/Academic Advisor.

BXA Students - Fall 2011

Bachelor of Humanities and Arts (BHA)

BHA Students	H&SS	CFA	User ID
Freshmen			
Anderson, Nicole	H&SS	Art	nanderso
Burlingham, Charles	H&SS	Art	cburling
Campos, Daniel	H&SS	Art	dcampos
Denton, Rosalyn	H&SS	Art	rdenton
Imas, Elizabeth	H&SS	Art	eei
Paik, Laura	H&SS	Art	lpaik
Porten, Tyler	H&SS	Art	tporten
Wettergreen, Anna	H&SS	Art	awetterg
Xie, Minnar	H&SS	Art	minnarx
Chiu, Samantha	H&SS	Design	sechiu
Eiten, Joshua	H&SS	Design	jeiten
Levin, Talia	H&SS	Drama	tlevin
Watson, Amanda	H&SS	Drama	amwatson
Boucicaut, Jordan	H&SS	Music	jboucica
Weiss, Isabella	H&SS	Music	iweiss
Sophomores			
Dong, Danielle	History	Architecture	dmdong
Klingensmith, Jacob	H&SS	Architecture	jklingen
Van Varick, Aimee	Psychology	Architecture	avanvari
Faber, Emily	Creative Writing	Art	efaber
Heglas, Kayla	Professional Writing	Art	kheglas
Heiner, Cole	Creative Writing	Art	cheiner
Kiell, Saskia	Japanese	Art	skiell
Lee, Alexander	Creative Writing	Art	asli
Lorenz, Janet	Environmental Studies	Art	jlorenz
Nelson, Anna	Creative Writing	Art	alnelson
Popat, Sejal	H&SS	Art	spopat
Rahl, Hayley	Cognitive Psychology	Art	hrah
Shepperson, Anna	Environmental Studies	Art	ashepper
Young, Emma	Creative Writing	Art	ety
Gao, Sarah	Psychology	Design	sarahgao
Gibson, Emily	English, History	Drama	eagibson
Marlton, Nicolas	Environmental Studies	Drama	nmarlton
Pettitt-Schieber, Brian	Creative Writing	Drama	bpettitt
Barton, Sam	Psychology	Music	sbarton

BXA Students - Fall 2011, Continued

Bachelor of Humanities and Arts (BHA)

BHA Students	H&SS	CFA	User ID
Juniors			
Ohito, Prisca	Public Policy	Architecture	pohito
Pattison-Gordon, Benjamin	Japanese	Architecture	bpattiso
Apple, Harrison	Global Studies	Art	happle
Ceurvorst, Sarah	Psychology	Art	sceurvor
Cook, Molly	Modern Languages	Art	mbcook
Goodwyn, Jillian	Psychology	Art	jgoodwyn
Lewis, Eleanor	Creative Writing	Art	eflewis
Michaels, Esther	Visual & Material Culture	Art	elmichae
Narvaez, Alina	Psychology	Art	alnarvae
Olsen, Emma	Creative Writing	Art	eolsen
Smith, Gina	Psychology	Art	gsmith
Sullivan, Claire	Creative Writing	Art	cesulliv
Supinka, Carolyn	Professional & Creative Writing	Art	csupinka
Thornton, Catherine (Grace)	Creative Writing	Art	cgt
Wittekind, Courtney	Anthropology	Art	cwitteki
DeRonde, Alexander	Anthropology	Design	aderonde
Read, Sarah	Decision Science	Design	sread
Swartz, Molly	Social Psychology	Design	mrschwartz
Keats, Sara	English, History	Drama	skeats
Smith-Bernstein, Isabel	History	Drama	ismithbe
Gluskin, Marissa (Suvi)	Psychology	Music	mgluskin
Levitin, Joshua	Creative Writing, English	Music	jlevitin
Lu, Melody	Global Systems Management	Music	mjlu
Zurcher, Matthew	English, History	Music	mzurcher

BXA Students - Fall 2011, Continued

Bachelor of Humanities and Arts (BHA)

BHA Students	H&SS	CFA	User ID
Seniors			
de Carteret, Christine	Ethics, History & Public Policy	Architecture	cdecarte
Franz, Rachel	Digital Media	Architecture	rchlfranz@gmail.com
Howe, Benjamin	Psychology	Architecture	bshowe
Lavery, Samuel	Economics	Architecture	slavery
Yosca, Gabriella Pascale	Psychology, Sociology	Architecture	gyosca
Baker, Ashley	Decision Science, Psychology	Art	aebaker
Barnes, Madeleine	Creative Writing, Poetry	Art	mbarnes
Borhani, Mahsa	Global Politics	Art	mborhani
Chan, Helena	Japanese	Art	hyc
Durbin, Emily	Creative Writing	Art	edurbin
Fenzi, Francesca	Creative Writing	Art	ff
Hart, Sondra	Psychology	Art	sondrah
Lipson, Daniel	Creative Writing	Art	dlipson
Mallis, Julie	Anthropology	Art	jmallis
Murphey, Ava	Spanish	Art	amurphey
Pettijohn-Hernandez, William	Creative Writing	Art	wpettijo
Ratliff, Meagan	Anthropology	Art	mratliff
Saidon, Tome	Psychology	Art	tsaidon
Trott, Meagan	German	Art	mtrott
Weitzman, Anya	Cultural Anthropology	Art	aweitzma
Gilchrist, Hannah	Information Systems	Design	hgilchri
Hwang, Mi Jin	Economics	Design	hwangmijin@gmail.com
Martindale, Elizabeth	Psychology	Design	emartind
Zucker, Samantha	Linguistics	Design	srz
Smith-Wade-El, Ismail	Anthropology, History	Drama	ismithwa
Amelia	Hispanic Studies	Music	Cessna, accessna
Keil, Natalie	Psychology	Music	nkeil
Ki, Yuki	Economics	Music	yki
Murcek, Sarah	Psychology	Music	smurcek
Palantoni, Mark	Psychology	Music	mpalanto
Raffaele, Maria	Professional Writing	Music	mraffael
Ridge, Hannah	Policy & Management	Music	hridge
Sefcik, Roberta	Psychology	Music	rsefcik
Soderlund, Johanna	Global Studies	Music	johannasoderlund@gmail.com

 BXA Students - Fall 2011, Continued

Bachelor of Science and Arts (BSA)

BSA Students	MCS	CFA	User ID
Freshmen			
Cheung, Stephanie	Physics	Art	scheung3
Michel-Schottman, Laurel	Mathematical Sciences	Art	lmichels
Schwartz, Catherine	Physics	Drama	caschwar
Nadig, Andrew	Biological Sciences	Music	awnadig
Rogers, Campbell	Mathematical Sciences	Music	carogers
Smith, Sam	Physics	Music	samsmith
Sophomores			
Luo, Ruth	Mathematical Sciences	Art	ruthl
Lo, Angela	Biological Sciences	Music	avlo
Marshall, Korey	Biological Sciences	Music	ecpeters
Moore, Erica	Biological Sciences	Music	ecmoore
Zakko, Philip	Biological Sciences	Music	pzakko
Juniors			
Colombo, Caroline	Physics	Art	ccolombo
Julian, Michael	Biological Sciences	Art	mjjulian
Soni, Shephaly	Biological Sciences	Art	ssoni
Alderman, Brian	Mathematical Sciences	Drama	balderma
Henderson, Emily	Biological Sciences	Music	ekhender
Mao, Stephanie	Biological Sciences	Music	smao1
Seniors			
Tan, Winny	Physics	Architecture	wtan
Chait, Michael	Biological Sciences	Music	mchait

 BXA Students - Fall 2011, Continued

Bachelor of Computer Science and Arts (BCSA)

BCSA Students	SCS	CFA	User ID
Freshmen			
Armero, Henry	CS	Art	harmero
Oh, Seowon	CS	Art	seowono
Sandford, Jolyn	CS	Art	jsandfor
Simon, Joel	CS	Art	jssimon
Sweet, Andrew	CS	Art	asweet
Sophomores			
Bueno, Andrew	CS	Art	abueno
McIntosh, Kyna	CS	Art	kpmcinto
Strelow, Mark	CS	Art	mstrelow
Waldman, Jessica	CS	Art	jwaldman
Shimizu, Evan	CS	Drama	eshimizu
Biar, Andrew	CS	Music	abiar
Juniors			
Genser, Danuta	CS	Architecture	dkg
Lazrus, Erica	CS	Architecture	elazrus
Hawkins, Maxwell	CS	Art	mhawkins
Hegde, Sachin	CS	Art	shegde
Miller, Paul	CS	Art	ppm
Seniors			
Park, Ju Young	CS	Art	juyoungp
Vu, Daniel	CS	Art	ddv
Wolfe, Alexandra	CS	Art	akwolfe
Sherman, Timothy	CS	Inter: Art & Drama	tmsherma
Kotcher, Robert	CS	Music	rkotcher

Academic Advising Statement

BXA Academic Advising

Academic advising is an essential component of a Carnegie Mellon University education. The University is committed to providing the individual advice and assistance that students need at every step throughout their degree programs. A successful system of academic advising is highly dependent upon the shared commitment of students, faculty, and staff to the process and the availability of timely, accurate information.

Students are encouraged to seek advice from all possible resources on and off campus in order to get the most out of the undergraduate years. As a BXA student, you have a rich advising network of individuals committed to guiding your unique curricular experience. Please visit your advisors and make sure they know who you are. Your advisors are valuable resources for today and for your future.

BXA students are responsible for scheduling, preparing for, and keeping advising appointments; for seeking out contacts and information; and for knowing the basic requirements of their individual degree programs. Students bear the final responsibility for making their own decisions based on the best information and advice available and, ultimately, on their own judgment.

BXA advisors are responsible for developing a thorough knowledge of the degree requirements within the students' program of study and a working knowledge of academic options and resources throughout the university. Advisors are expected to involve students by encouraging them to ask questions, gather information, and explore options so that they may develop a meaningful academic plan. Advisors will be available to students on a regular basis, monitor their advisees' progress, assist in considering career options, and make appropriate referrals to other campus offices.

Registration

Registration

Spring 2012 Registration Week: November 14-18
Fall 2012 Registration Week: April 23-27

Students register for most courses electronically. Information regarding the procedure is distributed by email and through the Tartan prior to registration each semester.

www.cmu.edu/hub

Adding and Dropping Classes

After the first two weeks of classes, students must meet with the Director or Associate Director/Academic Advisor of the BXA Intercollege Degree Programs before adding and/or dropping classes in order to discuss the impact on degree requirements or the appropriateness of overloading.

Following university policy, students may add or drop a course during the first ten class days of each semester. Classes may be dropped online during the first ten weeks. When a course is dropped by this deadline, the course does not appear on the permanent record.

After the deadline to drop courses online, students may withdraw from a course with the approval of the Director or Associate Director/Academic Advisor of the BXA Intercollege Degree Programs until the last class day of the semester. After the deadline to drop online, a "W" (withdrawal) is assigned and appears on the student's academic record. Undergraduates who are registered as full-time students as of the 10th day of classes are expected to remain full-time for the duration of the semester. Full-time is defined as a minimum of 36 units. Permission to drop below the 36 unit minimum must be granted by the CFA College Council. Undergraduates who are registered as part-time are also subject to the above deadlines to drop or withdraw from a course.

NOTE: Not all colleges have the same deadlines, nor are the same deadlines in effect for mini-courses. Students registered for mini-courses or courses in another college, should check the university calendar for deadlines.

Class Standing

According to university policy, a full-time student is one who is registered in a degree program for 36 or more units. Sophomore status is achieved when a student earns passing grades in a minimum of 72 units; junior status is achieved when a student earns a minimum of 164 units; and senior status is achieved when a student earns 263 units. Changes in class standing occur only for the fall semester.

Overloads

Freshmen are limited to the normal schedule of 45-54 units in the first semester of attendance. Thereafter, students may carry additional units, provided they have earned at least a 3.0 grade point average in the previous semester. Contact the BXA Associate Director/Academic Advisor to request an increase in maximum units.

Registration, Continued

Cross-Registration

Cross-registration forms are available in MMCH 107 or at the HUB.

Carnegie Mellon University is a member of the Pittsburgh Council on Higher Education (PCHE), a consortium which allows students from any one of its member institutions to cross-register for any other during the fall and spring semesters. Participating institutions include Carlow College, Chatham College, Community College of Allegheny County, Duquesne University, LaRoche College, Point Park College, Pittsburgh Theological Seminary, Robert Morris College and the University of Pittsburgh. Following is the policy statement to which all cooperating institutions adhere:

1. The opportunity to cross-register is open to each full-time student. Part-time students are not permitted to cross register. Students must be registered for 36 units at Carnegie Mellon University before processing a cross-registration request.
2. Students register with their home institution registrar. Each college or university accepts registration from the other institutions; however, first priority in registration is given to students of the host college, and not all departments or schools in all institutions are able to participate in this program.
3. In each case of cross-registration the signature of the Director of the BXA Intercollege Degree Programs must be obtained prior to registration. Pick up a cross-registration form from MMCH 107.
4. Each student's advisor is responsible for assuring eligibility for the course.
5. Full credit and grade will be transferred; the academic regulations of the host institution will prevail.
6. The academic honesty code and other rules of conduct of the institution providing instruction apply with respect to its courses and behavior on its campus. That institution also determines whether its rules have or have not been violated. Your own institution will impose such penalties as it considers proper when violations are reported to it.
7. Cross-registrants do not acquire student status in the host institution (for purposes of participation in student activities, insurance programs, etc.). Library privileges at the host institution are available. Course texts may be purchased at the host bookstore.
8. Students may enroll in no more than one course off campus in any one term or semester.
9. Cross-registration does not apply to summer sessions.
10. Adding or dropping a course after the home institution's deadline requires permission from the home institution; after the host institution's deadline, permission from the host institution.

Internships

To register for an internship for academic credit, each school/department has different guidelines and requirements. If you are interested in completing an internship to receive BXA interdisciplinary credit, you can obtain an Internship Agreement Form from the BXA Associate Director/Academic Advisor in MMCH 107. Students with approved internships will be registered for course 62-590. Students can earn 3, 6, 9, or 12 units of pass/no pass credit for the BXA Internship. Only one BXA Internship can be counted to fulfill degree requirements.

Registration, Continued

Pittsburgh Filmmakers/Pittsburgh Glass Center

All Carnegie Mellon University students may register for classes at Pittsburgh Filmmakers and Pittsburgh Glass Center during the fall and spring semesters. These courses are offered at the Filmmakers' facility at 477 Melwood Avenue in North Oakland or the Glass Center's facility at 5472 Penn Avenue in the East End. The College of Fine Arts, CFA 100 handles registration during university registration week. Course descriptions are available online at www.pghfilmmakers.org and www.pittsburghglasscenter.org.

Please direct questions about Pittsburgh Filmmakers and Pittsburgh Glass Center courses to Patty Doane in CFA 100, or email pattyd@andrew.cmu.edu.

Study Abroad

Registration for study abroad requires a special form, the Study Abroad Transfer Credit (SATC) form, that can be obtained in the Office of International Education. Registering for study abroad through another institution allows the student to retain Carnegie Mellon University student status, but without financial obligation to the university. Registering for an exchange program establishes the student's status as an active Carnegie Mellon University student with only tuition liability. Students may not study abroad the spring semester of their senior year.

The Study Abroad Advisor is:

Christine Menand

Office of International Education, Warner Hall 322

Tel: 412-268-5231, E-mail: cmenand@andrew.cmu.edu

Be sure to let the BXA office know that you will be studying abroad, and meet with the BXA Associate Director/Academic Advisor in MMCH 107 before and after your return to discuss transfer credits. Once your official transcript is received from the institution abroad, approved transfer credit will be added to your Carnegie Mellon University record.

Undergraduate Research Projects

To register for the BXA Undergraduate Research Project you must obtain a faculty project advisor and submit a completed application and project proposal to the BXA Associate Director/Academic Advisor in MMCH 107. Students with approved projects will be registered for course 62-390. Students can earn 3, 6, 9, or 12 units of academic credit (a letter grade) per semester.

Transcripts, Transfer and AP/IB Credit

Transcripts

Official Transcripts are required for such situations as application to study abroad programs, graduate programs and potential employment. In most cases, the transcript must be mailed from the HUB directly to a designated person in another institution. Sometimes a transcript must be mailed along with an application. The HUB will either mail the transcript directly to the institution or to the student, depending upon request.

All students may generate an Unofficial Transcript through the HUB website. Students are responsible for the accuracy of their record. Report any errors to the Undergraduate Program Assistant.

Transfer and AP/IB Credit Evaluation

Transfer of credit is considered on an individual basis. Carnegie Mellon University course credit for equivalent courses taken at another college or university may be granted when the grade is a “C” or better. Elective credit may be awarded for courses with no equivalent at Carnegie Mellon University. Grades do not transfer—only credits transfer.

Credit may be awarded for Advanced Placement (AP) scores of 4 or 5 following the guidelines established by each school/department at Carnegie Mellon University. Students are responsible for having AP scores sent to Carnegie Mellon University.

Credit may also be awarded for International Baccalaureate (IB) scores. Students are responsible for having IB scores sent to Carnegie Mellon University.

If you need additional information concerning AP/IB or transfer credits, contact the BXA Associate Director/Academic Advisor in MMCH 107.

Academic Regulations, Requirements & Procedures

Academic Actions

The academic performance of each student is reviewed at the end of each semester. Academic actions are initiated by the Director of the BXA Intercollege Degree Programs when students have not met minimum academic progress standards. A recommendation is presented to the associate deans of the appropriate colleges and Academic Actions Committee of the College of Fine Arts for confirmation. An appeals process is available to the student. The academic actions listed below do not follow a particular sequence; any of these actions may be imposed at any time.

BHA Academic Actions

BHA students are expected to maintain a 3.0 quality point average (QPA). If a student's QPA falls below 3.0 at the end of the semester this signals an advising response. The student will be asked to meet with the Director of the BHA Program to discuss strategies to improve his/her academic performance.

If a student has two consecutive semesters with a QPA below 3.0, the Director will meet with the student and carefully evaluate the situation in consultation with the student's advisors in H&SS and CFA. If it seems in the best interest of the student, the student may be advised to transfer out of the BHA Program and into H&SS or CFA.

Warning

A Warning is intended to notify the student of unsatisfactory performance and to suggest that the student take steps to determine and correct the cause of the difficulty. A Warning is imposed when a student receives a “D” in a required H&SS concentration course, or if the student's semester QPA is between a 2.0 and 2.49, or if the cumulative QPA drops below a 2.75.

Conditions for removing a Warning: the student must receive at least a 3.0 QPA in the following semester, and at least a 2.75 cumulative QPA, with at least 36 units, no incompletes, and no grades less than a “C”. Otherwise the student may continue on Warning, or, depending on individual grades, the action could escalate to Probation, Final Probation, or Drop from the BHA Program.

Probation

Probation is imposed when a student receives a “D” or “R” grade in a required CFA concentration course, or an “R” in a required H&SS course, or if the student's semester QPA is below a 2.0.

Conditions for removing Probation: the student must receive at least a 3.0 QPA in the following semester, with at least 36 units, no incompletes and no grades less than a “C”. The student will be moved to Warning if they meet these conditions, but the cumulative QPA is still between 2.5 and 2.75. Otherwise the student may continue on Probation, or, depending on the individual grades, the action could escalate to Final Probation, or Drop from the BHA Program.

Final Probation

Final Probation is imposed when a student receives two or more “D” or “R” grades in required H&SS or CFA concentration courses, or if the student's semester QPA is below 2.0 (1.75 for freshmen) for the second consecutive semester.

Academic Regulations, Requirements & Procedures, Continued

Conditions for removing Final Probation: the student must receive at least a 3.0 QPA in the following semester, with at least 36 units, no incompletes, and no grades less than a “C”. The student will be moved to Probation if they meet these conditions but their cumulative QPA is still between 2.0 and 2.49. They will be moved to Warning if they meet these conditions but their cumulative QPA is between a 2.5 and 2.75. Otherwise the student may continue on Final Probation or, depending on individual grades, the action could escalate to Drop from the BHA Program.

Drop from the BHA Program

If a student has two consecutive semesters receiving “D” or “R” grades in required H&SS and/or CFA concentration courses, the Director will carefully evaluate the student’s situation in consultation with the student’s H&SS and CFA advisors. At this time, the student may be advised to transfer out of the BHA Program, or they may be dropped from the BHA Program.

If a student has two consecutive semesters with a cumulative QPA below 2.5, and the student shows no progress or improvement in their academic performance, they will be dropped from the BHA Program.

If a student is dropped from BHA, they may be able to successfully transfer into H&SS or CFA as a traditional full major, depending on their academic performance. If the student is doing poorly in both H&SS and CFA courses, then the student should consider the following options:

- Transfer to another department/school within the university. The student is responsible for contacting the department/school of choice to discuss possible transfer.
- Request Transitional Student status in the College of Fine Arts for one semester. A student must make an appointment with the Associate Dean of the College of Fine Arts to discuss this option.
- Withdraw from Carnegie Mellon University. A Withdrawal/Leave of Absence form is available in the BHA office or in Enrollment Services.

BSA Academic Actions

BSA students are expected to maintain a 3.0 quality point average (QPA). If a student’s QPA falls below 2.75 at the end of the semester this signals an advising response. The student will be asked to meet with the Director of the BSA Program to discuss strategies to improve their academic performance.

If a student receives “C” and “D” grades in calculus and/or physics courses the student will be required to consult with their MCS advisor to discuss strategies to improve their academic performance.

If a student has two consecutive semesters with a QPA below 2.75, the Director will meet with the student and carefully evaluate the situation in consultation with the student’s advisors in MCS and CFA. If it seems in the best interest of the student, the student may be advised to transfer out of the BSA Program and into MCS or CFA.

Warning

A Warning is intended to notify the student of unsatisfactory performance and to suggest that the student take steps to determine and correct the cause of the difficulty.

Academic Regulations, Requirements & Procedures, Continued

A Warning is imposed when a student receives a “D” in a required MCS concentration course, or if the student’s semester QPA is between a 2.0 and 2.49, or if the cumulative QPA drops below a 2.75.

Conditions for removing a Warning: the student must receive at least a 3.0 QPA in the following semester, and at least a 2.5 cumulative QPA, with at least 36 units, no incompletes, and no grades less than a “C”. Otherwise the student may continue on Warning, or, depending on individual grades, the action could escalate to Probation, Final Probation, or Drop from the BSA Program.

Probation

Probation is imposed when a student receives a “D” or “R” grade in a required CFA concentration course, or an “R” in a required MCS course, or if the student’s semester QPA is below a 2.0.

Conditions for removing Probation: the student must receive at least a 3.0 QPA in the following semester, with at least 36 units, no incompletes and no grades less than a “C”. The student will be moved to Warning if they meet these conditions, but the cumulative QPA is still between 2.5 and 2.75. Otherwise the student may continue on Probation, or, depending on the individual grades, the action could escalate to Final Probation, or Drop from the BSA Program.

Final Probation

Final Probation is imposed when a student receives two or more “D” or “R” grades in required MCS or CFA concentration courses, or if the student’s semester QPA is below 2.0 (1.75 for freshmen) for the second consecutive semester.

Conditions for removing Final Probation: the student must receive at least a 3.0 QPA in the following semester, with at least 36 units, no incompletes, and no grades less than a “C”. The student will be moved to Probation if they meet these conditions but their cumulative QPA is still between 2.0 and 2.49. They will be moved to Warning if they meet these conditions but their cumulative QPA is between a 2.5 and 2.75. Otherwise the student may continue on Final Probation or, depending on individual grades, the action could escalate to Drop from the BSA Program.

Drop from the BSA Program

If a student has two consecutive semesters receiving “D” or “R” grades in required MCS and/or CFA concentration courses, the Director will carefully evaluate the student’s situation in consultation with the student’s MCS and CFA advisors. At this time, the student may be advised to transfer out of the BSA Program, or they may be dropped from the BSA Program.

If a student has two consecutive semesters with a cumulative QPA below 2.5, and the student shows no progress or improvement in their academic performance, they will be dropped from the BSA Program.

If a student is dropped from BSA, they may be able to successfully transfer into MCS or CFA as a traditional full major, depending on their academic performance. If the student is doing poorly in both MCS and CFA courses, then the student should consider the following options:

Academic Regulations, Requirements & Procedures, Continued

- Transfer to another department/school within the university. The student is responsible for contacting the department/school of choice to discuss possible transfer.
- Request Transitional Student status in the College of Fine Arts for one semester. A student must make an appointment with the Associate Dean of the College of Fine Arts to discuss this option.
- Withdraw from Carnegie Mellon University. A Withdrawal/Leave of Absence form is available in the BSA office or in Enrollment Services.

BCSA Academic Actions

BCSA students are expected to maintain a 3.0 quality point average (QPA). If a student's QPA falls below 2.5 at the end of the semester this signals an advising response. The student will be asked to meet with the Director of the BCSA Program to discuss strategies to improve his/her academic performance.

If a student receives "C" or "D" grades in computer science courses (15-xxx) the student will be required to consult with their SCS advisor to discuss strategies to improve their academic performance.

If a student has two consecutive semesters with a QPA below 2.5, the Director will meet with the student and carefully evaluate the situation in consultation with the student's advisors in SCS and CFA. If it seems in the best interest of the student, the student may be advised to transfer out of the BCSA Program and into SCS or CFA.

Warning

A Warning is intended to notify the student of unsatisfactory performance and to suggest that the student take steps to determine and correct the cause of the difficulty. A Warning is imposed when a student's cumulative QPA drops below a 2.75.

Conditions for removing a Warning: the student must receive at least a 3.0 QPA in the following semester, and at least a 2.5 cumulative QPA, with at least 36 units, no incompletes, and no grades less than a "C". Otherwise the student may continue on Warning, or, depending on individual grades, the action could escalate to Probation, Final Probation, or Drop from the BCSA Program.

Probation

Probation is imposed when a student receives a "D" or "R" grade in a required CFA concentration course, or an "R" in a required SCS course, or if the student's semester QPA is below a 2.0 (1.75 for freshmen).

Conditions for removing Probation: the student must receive at least a 3.0 QPA in the following semester, with at least 36 units, no incompletes and no grades less than a "C". The student will be moved to Warning if they meet these conditions, but the cumulative QPA is still between 2.5 and 2.75. Otherwise the student may continue on Probation, or, depending on the individual grades, the action could escalate to Final Probation, or Drop from the BCSA Program.

Final Probation

Final Probation is imposed when a student receives two or more "D" or "R" grades in required SCS or CFA concentration courses, or if the student's semester QPA is below 2.0 (1.75 for freshmen) for the second consecutive semester.

Academic Regulations, Requirements & Procedures, Continued

Conditions for removing Final Probation: the student must receive at least a 3.0 QPA in the following semester, with at least 36 units, no incompletes, and no grades less than a "C". The student will be moved to Probation if they meet these conditions but their cumulative QPA is still between 2.0 and 2.49. They will be moved to Warning if they meet these conditions but their cumulative QPA is between a 2.5 and 2.75. Otherwise the student may continue on Final Probation or, depending on individual grades, the action could escalate to Drop from the BCSA Program.

Drop from the BCSA Program

If a student has two consecutive semesters receiving "D" or "R" grades in required SCS and/or CFA concentration courses, the Director will carefully evaluate the student's situation in consultation with the student's SCS and CFA advisors. At this time, the student may be advised to transfer out of the BCSA Program, or they may be dropped from the BCSA Program.

If a student has two consecutive semesters with a cumulative QPA below 2.0, and the student shows no progress or improvement in their academic performance, they will be dropped from the BCSA Program.

If a student is dropped from BCSA, they may be able to successfully transfer into SCS or CFA as a traditional full major, depending on their academic performance. If the student is doing poorly in both SCS and CFA courses, then the student should consider the following options:

- Transfer to another department/school within the university. The student is responsible for contacting the department/school of choice to discuss possible transfer.
- Request Transitional Student status in the College of Fine Arts for one semester. A student must make an appointment with the Associate Dean of the College of Fine Arts to discuss this option.
- Withdraw from Carnegie Mellon University. A Withdrawal/Leave of Absence form is available in the BCSA office or in Enrollment Services.

School Suspension

School Suspension is not applicable to the BHA, BSA, and BCSA Programs.

University Suspension

University Suspension is imposed for exceptionally poor performance or for personal problems that create an impediment to any academic achievement. The student is required to withdraw from the university for a specific period. Re-admission is subject to conditions specified in each case by the Director of the BXA Intercollege Degree Programs.

Study Abroad While on Academic Action

BXA students with a cumulative QPA between 2.5 - 3.0 wishing to spend a semester abroad will need the Director's special permission.

BXA students with a cumulative QPA below 2.5 will not be allowed to pursue studies abroad.

Academic Regulations, Requirements & Procedures, Continued

Disabilities

Students with a learning disability or a physical disability are encouraged to contact Everrett Tademey, Assistant Vice President for Diversity and Equal Opportunity Services (x8-1018). The circumstances will remain confidential to the extent desired. The university has a formal procedure for documenting disabilities, notifying advisors and faculty, and making arrangements to utilize university resources in support of expressed needs, but will take no action until contacted by the student. The Director of the BXA Intercollege Degree Programs will work with the student to coordinate assistance.

Privacy Policy

The following is a quote from the “Buckley Amendment” to the Family Educational Rights and Privacy Act of 1974: “Whenever a student has attained eighteen years of age, or is attending an institution of postsecondary education, the rights accorded to and the consent required of the parent of the student shall thereafter only be accorded to and required of the eligible student.” In effect, the law provides for: a) inspection of records by a student; b) the opportunity through a hearing for a student to challenge the contents of the records; c) the permission of the student for release of the records; and d) maintenance of a record of all persons, including the student, who inspect the file. As a result of this law, the HUB sends copies of grade reports to parents only during freshman year. The BXA Intercollege Degree Programs does not send anything to parents. The full Privacy act, as amended, is available in MMCH 107. The complete university interpretation of the policy is available in the HUB.

Grading Policies

University grading policies may vary depending on the particular school/department. Please consult the Carnegie Mellon University Student Guidebook.

BHA, BSA, & BCSA Deans’ List

Students who earn 36 graded units (no “pass/no pass” grades) with a grade point average of 3.5 or higher, no “incompletes” and “no grades” qualify for the BHA, BSA, & BCSA Deans’ List. The BHA, BSA, & BCSA Deans’ List Honors are posted on the glass window outside of MMCH 107 each semester.

BHA, BSA, & BCSA Intercollege Honors

BHA, BSA, and BCSA students who successfully complete a BXA Capstone Project under the guidance of a faculty member will graduate with BHA, BSA, or BCSA Intercollege Honors if all of the following conditions are met:

- grade of “A” achieved in 62-401 and 62-402
- overall QPA of 3.25 or higher
- research results presented at Meeting of the Minds Undergraduate Research Symposium

As a citizen of two colleges, a BHA, BSA, or BCSA student also has the opportunity to graduate with H&SS College Honors, CFA College Honors, and MCS College Honors. These particular honors are defined by each college. Students will receive honors color cords during the CFA Commencement Honors Ceremony.

University Honors

Students who graduate with an overall QPA of 3.5 or higher will graduate with University Honors. Students will receive an honors medallion during the CFA Commencement Honors Ceremony.

Academic Regulations, Requirements & Procedures, Continued

BHA, BSA, & BCSA Internal Transfer Process

For current Carnegie Mellon students who wish to apply to the BHA, BSA, or BCSA program, an internal transfer application process takes place in both the fall and spring semester. Applications are available online and in MMCH 107 and are reviewed by a committee of BHA, BSA, and BCSA advisors in October and in March.

Withdrawal or Leave of Absence

A student who decides to leave the university must meet with the Director of the BXA Intercollege Degree Programs and complete a Withdrawal or Leave of Absence form located in MMCH 107 or the HUB. Withdrawal means leaving the university with no intention of returning. Leave of Absence means temporarily leaving the university with a stated intention to return. A withdrawal or leave of absence from the university at any time up to and including the last day of classes (excluding the final examination period), means that no grades will be recorded for the semester. Financial responsibility for the semester is dependent upon the date of and the reasons for filing the form. Questions about financial responsibility should be directed to the HUB.

A leave of absence may be voluntary or involuntary. If the leave is voluntary, the student may return any time within four years following the beginning of the leave by filing an Application for Return from Leave of Absence form. If the leave is involuntary, that is, required for academic or disciplinary reasons, the conditions for return will be stated. Forms are available in MMCH 107 or the HUB.

Carnegie Mellon University Code

Students at Carnegie Mellon University, because they are members of an academic community dedicated to the achievement of excellence, are expected to meet the highest standards of personal, ethical, and moral conduct possible. These standards require personal integrity, a commitment to honesty without compromise, as well as truth without equivocation, and a willingness to place the good of the community above the good of the self. Obligations once undertaken must be met, and commitments kept. Rarely can the life of a student in an academic community be so private that it will not affect the community as a whole or that the standards above do not apply. The discovery, advancement, and communication of knowledge are not possible without a commitment to these standards. Creativity cannot exist without acknowledgment of the creativity of others. New knowledge cannot be developed without credit for prior knowledge. Without the ability to trust that these principles will be observed, an academic community cannot exist. The commitment of its faculty, staff and students to these standards contributes to the high respect in which the Carnegie Mellon University degree is held. Students must not destroy that respect by their failure to meet these standards. Students who cannot meet them should voluntarily withdraw from the university.

Cheating and Plagiarism

Students at Carnegie Mellon are engaged in preparation for professional activity of the highest standards. Each profession constrains its members with both ethical responsibilities and disciplinary limits. To assure the validity of the learning experience, a university establishes clear standards for student work. In any presentation, creative, artistic, or research, it is the ethical responsibility of each student to identify the conceptual sources of the work submitted. Failure to do so is dishonest and is the basis for a charge of cheating or plagiarism which is subject to disciplinary action. Cheating includes but is not necessarily limited to:

1. Plagiarism includes, but is not limited to, failure to indicate the source with quotation marks or footnotes, where appropriate, if any of the following are reproduced in the work submitted by a student: a phrase, written or musical; a graphic element; a proof; specific language; an idea derived from the work, published or unpublished, of another person.
2. Submission of work that is not the student's own papers, assignments or exams.
3. Submission or use of falsified data.
4. Theft of or unauthorized access to an exam.
5. Use of an alternate, stand-in, or proxy during an examination.
6. Use of unauthorized material including textbooks, notes, or computer programs in the preparation of an assignment or during an examination.
7. Supplying or communicating in any way unauthorized information to another student for the preparation of an assignment or during an examination.
8. Collaboration in the preparation of an assignment. Unless specifically permitted or required by the instructor, Collaboration will usually be viewed by the University as cheating. Each student is responsible for understanding the policies of any course as they refer to the amount of help and collaboration permitted in preparation of assignments.
9. Submission of the same work for credit in two courses without obtaining the permission of the instructors beforehand.

Penalties

In cases of cheating or plagiarism the instructor has the option of assigning an appropriate penalty; the instructor may consult a departmental committee, if one exists, to determine whether to refer the case directly to the University Committee on Discipline. Whenever a faculty member or a departmental committee imposes a penalty for cheating or plagiarism, the facts of the case and the penalty must be reported to the Dean of Student Affairs; in such cases the University Committee on Discipline may review and change the penalty in the event of an appeal by the student or a record of prior offenses. This reporting procedure assures that repeated offenders will be identified and treated severely. The ordinary penalty for cheating or plagiarism is failure in the course; lesser penalties may be assigned for minor offenses. In cases referred to the University Committee on Discipline, no grade will be recorded until the Committee has come to a decision. Particularly serious offenses may be punished by suspension or by expulsion from the university upon the committee's action. A student found guilty of cheating or plagiarism may also be placed on disciplinary probation for a period to be determined by the University Committee on Discipline. In the event that a student on probation from a prior finding of cheating or plagiarism is again guilty of academic dishonesty (cheating, plagiarism, etc.) the student will be dropped from the university.

Statement of Assurance

Carnegie Mellon University does not discriminate and Carnegie Mellon University is required not to discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex or handicap in violation of Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973 or other federal, state, or local laws or executive orders.

In addition, Carnegie Mellon University does not discriminate in admission, employment, or administration of its programs on the basis of religion, creed, ancestry, belief, age, veteran status, sexual orientation or gender identity. Carnegie Mellon University does not discriminate in violation of federal, state, or local laws or executive orders. However, in the judgment of the Carnegie Mellon Human Relations Commission, the Presidential Executive Order directing the Department of Defense to follow a policy of "Don't ask, don't tell, don't pursue" excludes openly gay, lesbian and bisexual students from receiving ROTC scholarships or serving in the military. Nevertheless, all ROTC classes at Carnegie Mellon University are available to all students.

Inquiries concerning application of these statements should be directed to the provost, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-6684 or the vice president for enrollment, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2056.

Obtain general information about Carnegie Mellon University by calling 412-268-2000.

University Information

University Information Resources

Academic Advisors Outside of BX A

www.cmu.edu/student-affairs/theword//index.html

In other schools/departments and colleges at Carnegie Mellon University, advisors will answer questions about their programs and will discuss the requirements for academic minors, second majors or second degrees. "The Word" booklet lists locations and phone numbers.

Career and Professional Development Center

www.studentaffairs.cmu.edu/career

The Career and Professional Development Center offers career counseling and information about internships and employment, located on the lower level of the University Center. Students may visit the career library or sign-up for a workshop or seminar. Information is regularly posted on the website. They can also assist you in making a fabulous resume.

Carnegie Mellon Advising Resource Center (CMARC)

www.cmu.edu/cmARC/index.html

CMARC is an advising and information center designed to assist undergraduate students of all majors in their academic and social development from their first year through graduation.

Counseling and Psychological Services (CAPS)

www.studentaffairs.cmu.edu/counseling/index.html

Located in Morewood Gardens E Tower, Second Floor, the CAPS office is staffed by professionals trained to deal with problems that may impede academic progress, for example, dealing with stress or depression, or working through a difficult personal situation or relationship. Office hours are Monday through Friday between 8:30 a.m. and 5:00 p.m. Emergency help is available 24-hours a day, x8-2922.

Health Services

www.studentaffairs.cmu.edu/HealthServices

Located in Morewood Gardens E Tower, First Floor, Room 144, Student Health Services offers the same range of services provided by any doctor's office, but at a fraction of the cost. Visit the website for hours and details on the many ways health services can help you. If you are enrolled in the student health insurance plan, most clinic services are covered in full. Labwork usually generates a fee, however. Call x8-2157 for an appointment or Campus Police x8-2323 for medical emergencies when the Health Service is closed.

University Information, Continued

The HUB

www.cmu.edu/hub

The HUB, Warner Hall concourse level, is your one-stop shop for enrollment services. The HUB has a 24-hour hotline, x8-8686. The HUB is comprised of the Cashier's Office, Financial Aid Office, and the Office of the Registrar, all in one place. Visit the HUB to:

- ask enrollment and financial aid questions
- pick up and drop off academic and financial aid forms
- resolve enrollment problems
- order official transcripts and enrollment verifications
- pick up course schedules, invoices, validation stickers, etc.
- make appointments to meet with staff members
- obtain a student employment directory
- change your meal plan
- obtain a student ID card
- obtain a public bus sticker

Hub On-Line Services include:

- Schedule of Classes (SOC)
- On-Line Registration (OLR)
- Student Information On-Line (SIO)
- Course Information On-Line (CIO)
- Graduation On-Line (GOL)
- Academic Audit On-Line
- Faculty Course Evaluations (FCEs)
- Space Quest

Office of International Education (OIE)

www.studentaffairs.cmu.edu/oie

The Office of International Education (OIE), located in Warner Hall 301, is the resource center for information about opportunities for study abroad, student travel, temporary employment, and internships. OIE processes registration for a student's semester abroad. Christine Menand, Coordinator of Study Abroad and Exchange Programs, email: cmemand@andrew.cmu.edu.

Student Affairs Office

www.studentaffairs.cmu.edu

Gina Casalegno, the Dean of Student Affairs, and professionals in this office are concerned with student growth and welfare as members of both the university's academic and social communities. The Student Affairs Office is the best place to start to resolve non-academic problems. These problems may include missing several classes due to illness or family crisis.

Scholarships and Fellowships (FSO)

www.cmu.edu/fso

The Fellowship and Scholarship Office provides support to Carnegie Mellon students who are interested in securing external scholarships and fellowships. The office works with students to help them develop competitive applications, identifies and supports faculty and staff representatives for a select number of prestigious scholarships and fellowships, maintains a searchable database of external scholarship and fellowship opportunities and manages campus selection processes. Stephanie Wallach, Director of FSO, email: sw4s@andrew.cmu.edu.

Security

www.cmu.edu/police

Carnegie Mellon University is an urban campus with most facilities open to students 24 hours a day. In giving around-the-clock access to students, the university becomes open to access by the uninvited. Though campus security officers patrol buildings on a regular basis, at night when the campus population and activity are diminished, students need to take precautions for their personal safety. Working with a partner is recommended. Any student working in a space for which there is key access should keep the space locked. Doors should never be propped open. Students should become familiar with the facilities, the nearest security phones and the quickest exit route from buildings.

Campus Security offers a shuttle service between 7:00 a.m. and 10:30 p.m. to take students between academic buildings and dormitories or to off-campus university housing. An escort service is available during hours when the shuttle is not available. The Student Information Desk in the University Center has detailed information.

This advice comes not from a history of incidents, but an acknowledgment that the potential for problems exists. Generally, the campus is a safe environment.

Carnegie Mellon University publishes an annual campus security report describing the university's security, alcohol and drug, and sexual assault policies and containing statistics about the number and type of crimes committed on the campus during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon University Police Department at 412-268-2323. The security report is also available online at www.cmu.edu/police/annualreports/index.html

The Undergraduate Research Office (URO)

www.cmu.edu/uro/index.html

The Undergraduate Research Office provides seed funds for undergraduate research projects, recognizes students conducting research, funds undergraduates presenting their findings at academic conferences, and presents an annual undergraduate research symposium. The program is available to students from each of the university's six undergraduate colleges. The URO Office has proven extremely successful in encouraging students to pursue graduate studies and research careers.

Lectures and Events

Robert Lepper Distinguished Lecture Series in Creative Inquiry

This lecture series is endowed by alumnus Russell Cameron, A'41, in honor of the late Professor Robert Lepper, A'23. Lecturers from a broad range of disciplines "provide unique, articulate examples of social engagement and private searching which evidence wonder, inspire imagination and encourage experimentation."

The WATS:ON? Festival

The Jill Watson Festival of the Arts is an annual event in the College of Fine Arts in the memory of Jill Watson, a graduate of the School of Architecture and student in the MFA program of the School of Art. This event honors Jill Watson's commitment to an interdisciplinary philosophy as an artist, and celebrates her accomplishments and reputation as an architect.

University Lecture Series

www.cmu.edu/uls

The University Lecture Series features lectures and performances by a broad spectrum of speakers and scholars on a wide and diverse range of topics. Potential lecture ideas are suggested by Carnegie Mellon University students, faculty and staff. This Series is a partnership between the Office of the Vice Provost for Education and the Division of Student Affairs. All lectures are free and open to the public and are on Carnegie Mellon University's Oakland campus.

The University Community

Watch university hallway and electronic bulletin boards and campus newspapers for interesting campus events.

BXA Housing Cluster

This living learning community, located on the 5th floor of Stever House, allows students in the BXA Intercollege Degree Programs to extend their classroom activities in a social setting with their peers.

BXA SAC Meetings

BXA Student Advisory Committee (SAC) meetings are usually held once a month between 4:30 p.m. and 5:30 p.m. in MMCH 107. These meetings provide a forum for students to discuss program objectives, listen to guest speakers, and initiate multidisciplinary collaborations. Students also share resources on different internships and study abroad opportunities. These gatherings help students become more familiar with the work of their peers and fosters a sense of community within the three programs. Food is provided!

Kaleidoscope

Kaleidoscope is the annual BXA spring exhibition of student artwork and performance. Students explore interdisciplinary ideas and collaborations, and present multimedia artworks, poetry readings, musical performances, documentation of architectural projects, drawings, paintings, and other artistic expressions.

Outside the Classroom, Continued

Meeting of the Minds

www.cmu.edu/uro/MoM/index.html

The spring Undergraduate Research Symposium, or the Meeting of the Minds, is a university-wide celebration of undergraduate research. All Carnegie Mellon University undergrads engaged in research and creative projects are encouraged to apply. It is expected that BXA Capstone Project participants will present their projects and should register online.

Center for the Arts in Society

www.hss.cmu.edu/cas

Carnegie Mellon University recently launched a formal center of study, the Center for the Arts in Society, dedicated to energizing research and teaching that links the College of Humanities and Social Sciences with the College of Fine Arts. The Center supports graduate and undergraduate courses, faculty and student research projects, and collaborations with arts institutions in the Pittsburgh community. Members of the Center explore pressing issues such as cultural production and social responsibility, as well as developing new disciplinary approaches—visual anthropology, public arts policy, statistical graphics, and more.

STUDIO for Creative Inquiry

<http://studioforcreativeinquiry.org>

The STUDIO for Creative Inquiry was founded in 1989 to support experimental and cross-disciplinary work in the arts. It carries out this mission by:

- Providing artist residencies with stipends, commissions and facilities.
- Maintaining a work environment populated by a broad range of practitioners, including resident fellows, Carnegie Mellon University faculty and students, and other associates.
- Facilitating access to human and technical resources at Carnegie Mellon University and throughout the Pittsburgh community.
- Developing public venues for presenting innovative work.

Outside the Classroom, Continued

Where to Go for What...

Here's a summary of campus resources frequently used by BXA students:

Art Store (x8-2968)

Located on the ground floor of the University Center.

Computer Store (x8-2636)

Located on the ground floor of the University Center, the Computer Store stocks computers, peripherals and software along with tapes, CDs and disks for all electronic media formats. Their website is www.cmu.edu/stores/computer.

Hunt Library (x8-2444)

In addition to the general collection, the first floor reference section of the Hunt Library has numerous resource directories for many topics. The fourth floor Fine Arts Department (x8-2451) holds the architecture, art, design, drama and music collections. See Fine Arts Librarian Mo Dawley for assistance.

To check the hours of the library or to do an on-line search, visit the university libraries web-site at www.library.cmu.edu.

Instructional Technology (x8-2430)

Instructional Technology, in room 119 of Cyert Hall, rents a broad range of audio/video equipment, and offers in-house equipment to view video cassettes, films or slides. Contact the Instructional Technology office for policies regarding rental fees, check out procedures and in-house use of equipment. Equipment for projects or exhibitions is rented at the student's own expense. There is no charge for equipment used in regularly scheduled classes, however, faculty must personally order equipment for their classes.

Photographic Processing

Several photo processing services will pick up photo processing work from the School of Art (CFA 300) and School of Design (MMCH 110) Office. Students may leave materials for pick-up in the bin marked "Pick-Ups" in the Art/Design Office. Students must make arrangements for pick-up and payment directly with photo-processing companies. Two companies offering such services are Sukolsky-Brunelle, 391-6440 and Pro-Photo, 381-3886.

Post Office (x8-2927)

The campus Post Office is in the basement of the University Center. This is the place to go if you need stamps and money orders. They also handle UPS packages and rent post office boxes.

Public Computer Clusters

There are many computer clusters throughout campus, the most convenient to CFA students are the CFA Multimedia Studio on the third floor of CFA and the Apple Orchard, lower level Hunt Library (x8-8477). The CFA Multimedia Studio is open 24 hours a day but only staffed between 8:00 am and 12:00 am. Cluster information is found at their website www.cmu.edu/computing/clusters.

Outside the Classroom, Continued

Security (x8-2323)

The Office of Security provides 24-hour campus patrol, emergency medical transportation, escort services, a lost and found department, and other assistance to ensure safety and to protect property. Security also provides after hours access to certain locked university classrooms.

Student Information Desk (x8-2107)

Located in the University Center, this is the place to find campus and student phone numbers and information about student activities, bus schedules, student organization mailboxes, tickets, and more.

University Bookstore (x8-2966)

The University Store in the University Center is a one-stop shop for art supplies, textbooks, office supplies and gift items. The University Store carries required textbooks for all university courses. Textbooks are sold at a discount to students enrolled in those courses.

Work Study, Grants

Work Study/Student Employment

There are a number of part-time student positions in CFA, H&SS, MCS or SCS. Most require a commitment of 3 to 10 hours per week. Availability varies from semester to semester and jobs range from working in an administrative office to assisting with research projects. Students must be eligible for work study and must know the amount of their work study before applying. Obtain this information from the HUB. The HUB also keeps a listing of other work study and non-work study positions available throughout campus.

BXA Small Grants

The BXA Intercollege Degree Programs periodically have funds available to assist students with the following: 1) an undergraduate research project, a capstone project, or other student project that requires a small budget, 2) an unpaid internship over the summer, 3) study abroad with an international program that is not currently sponsored by Carnegie Mellon University. These funds are reserved for BXA students. Please keep in mind that funds are not always available for BXA small grants.

SURG/SURF/ISURG Grants

www.cmu.edu/uro

The campus-wide Undergraduate Research Initiative encourages and supports independent student research and creative projects sponsored by university faculty. The Small Undergraduate Research Grants (SURG) provide monetary support, one-person up to \$500 and groups up to \$1,000, for many projects selected from a pool of applications. Each semester, students are invited to submit proposals for participation in SURG. To qualify, the project must be sponsored by a university faculty member and must be a project undertaken in addition to regularly scheduled classes. Watch university and electronic bulletin boards for announcements. This is an excellent opportunity for BXA students!

The Summer Research Fellowship program awards \$3500 to undergraduates at Carnegie Mellon for 8-10 full-time weeks of summer research in any field of study.

The International Small Undergraduate Research Grant (ISURG) is a new program at Carnegie Mellon University, run jointly through the Undergraduate Research Office (URO) and the Office of International Education (OIE). ISURG, for the first time, allows students who are planning to study/travel abroad to apply for funds to support a research project while they are abroad. ISURG (like SURG) is open to undergraduates in all disciplines at Carnegie Mellon University to defray research expenses. Grants are offered to individual students for up to \$500 for materials, supplies and possible travel related to the research project. All ISURG students must submit a proposal following the guidelines and deadlines for SURG.

Communication

General Communication

BXA and university communications are generally through e-mail. In addition to e-mail, a BXA bulletin board outside of MMCH 107 and others around the university still play a role in distributing information. Some information will be available only electronically, some only hard copy. Consider the information below to be general guideline.

Address and Phone Number Changes

Students can change their address on-line with Student Information On-Line (SIO) at the HUB website www.cmu.edu/hub. This will only change the student's online information and does not communicate changes to schools/departments, payroll and human resources.

Electronic Information and Communication

BXA Intercollege Degree Programs:	www.cmu.edu/interdisciplinary
College of Fine Arts:	www.cfa.cmu.edu
College of Humanities & Social Sciences:	www.hss.cmu.edu
Mellon College of Science:	www.cmu.edu/mcs
School of Computer Science:	www.cs.cmu.edu
Center for Arts in Society:	www.hss.cmu.edu/cas
STUDIO for Creative Inquiry:	http://studioforcreativeinquiry.org

E-Mail

Faculty, staff and students regularly communicate with one another through e-mail. Students are expected to read e-mail on a regular basis. Students will receive information and will be asked to respond to questions sent to their e-mail address from faculty, staff and other students. Treat e-mail with the same discretion as any written document.

Social Media

The Social Media Directory provides access to the many social media channels offered across the university at www.cmu.edu/social-media/index.shtml. Most are updated weekly—some daily—to provide the most recent content from the campus community. Students, alumni, and friends of BXA can “Like” the BXA Facebook Page, follow @CMU_BXA on Twitter, and network in the BXA Alumni Group on LinkedIn.

BXA Calendars

The Google BXA Event Calendar is available on the BXA website www.cmu.edu/interdisciplinary/buzz/index.html. Students can access the same information through the University BXA Event Calendar at <https://my.cmu.edu>. Students can schedule advising appointments with the Associate Director/Academic Advisor on the Google BXA Appointment Calendar at <http://bit.ly/BXAadvising>.

BXA Bulletin Board

There is a hallway bulletin board is available for BXA postings outside of MMCH 107.

Glossary

Add/Drop.....	Procedure where courses are officially added and/or removed to a current schedule
BA.....	Bachelor of Arts (also used by the Business Administration major)
BA.....	Business Administration
BCSA.....	Bachelor of Computer Science and Arts
BFA.....	Bachelor of Fine Arts
BH.....	Baker Hall (“home” to most H&SS departments)
BHA.....	Bachelor of Humanities and Arts
BS.....	Bachelor of Science
BSA.....	Bachelor of Sciences and Arts
BXA.....	BXA Intercollege Degree Programs (BHA, BSA, & BCSA programs)
C@CM.....	Computing @ Carnegie Mellon
CFA.....	College of Fine Arts
CIT.....	Carnegie Institute of Technology
CMU.....	Carnegie Mellon University
Co-requisite.....	indicates courses to be taken during the same semester
Cross-listed.....	when the same course has more than one course number (e.g.: 73-110/ 88-110)
The Cut.....	the grassy area between Hunt Library and Forbes Avenue; the quad
DH.....	Doherty Hall
Double-counting.....	when one course can count toward two different requirements
Elective.....	A pure elective is a course not required by a student's academic program; it is usually taken to supplement a particular program or simply out of personal interest or curiosity
GenEd.....	General Education Program; coursework in the H&SS curriculum
GHC.....	Gates and Hillman Center
HBH.....	Hamburg Hall (Heinz)
Heinz.....	Heinz College
Hrs.....	hours of class time per day (e.g.: 50-minutes per day)
HUB.....	Enrollment Services
L/Rec.....	“lecture” and “recitations” meetings
The Mall.....	the grassy area between CFA and Hamerschlag Hall
MI.....	Mellon Institute
Mini.....	courses offered during half of the semester
MCS.....	Mellon College of Science
MMCH.....	Margaret Morrison Carnegie Hall (BXA Office in 107)
MWF.....	Mondays, Wednesdays and Fridays
Pass/No Pass.....	Some courses are always taken Pass/No Pass (e.g.: Physical Education and some ROTC courses). Required courses may never be taken Pass/No Pass.
PCA.....	Purnell Center for the Arts
PH.....	Porter Hall
Prereq.....	“Prerequisite” is a course which must be completed before taking another
Registration.....	Requesting entrance into specific courses. For freshmen entering in the fall, registration takes place in MMC 107 during the summer prior to your first semester. In November, you will register for the following Spring semester.
ROTC.....	Reserve Officer Training Corps
SCS.....	School of Computer Science
SH.....	Scaife Hall
SHS.....	Sciences and Humanities Scholar program
TBA.....	“To Be Announced” (with regard to times for a course or instructor for a course)
TR.....	Tuesdays and Thursdays
UC.....	University Center
WEH.....	Wean Hall
WH.....	Warner Hall (location of most Student Services offices)

Index

A		F	
Academic Actions	65	Fellowships	76
Academic Advisors	4	Final Probation	65, 67, 68
Academic Calendar	6	G	
Adding Classes	61	Glossary	83
Advising	60	Grading Policies	70
AP Credit	64	Grants	81
Address Changes	82	H	
Art Store	79	H&SS Academic Advisory Center	10
B		Health Services	74
BHA Degree Requirements	9	Honors	70
BSA Degree Requirements	9	Housing Cluster	77
BCSA Degree Requirements	9	HUB	65
Bookstore, University	80	Hunt Library	79
Bulletin Board	82	I	
C		IB Credit	64
Calendars	6, 82	Information Desk	80
Capstone Project	53	Instructional Technology	79
Career and Prof. Development Center	74	Internal Transfer	71
Center for the Arts in Society	78	International Education, Office	75
Class Standing	61	Internships	62
CMARC	74	ISURG Grants	81
Communication	82	J	
Computer Clusters	79	K	
Computer Store	79	Kaleidoscope	77
Counseling and Psychological Services	74	L	
Cross-Registration	62	Leave of Absence	71
Curriculum		Lectures and Events	77
BHA Gen Ed	10	M	
BSA Core	27	Meeting of the Minds	78
BCSA Core	38	Mission (Vision, Values)	8
Concentrations-CFA, BHA/BSA	18	N	
Concentrations-CFA, BCSA	45	O	
Concentrations-H&SS	16	Office of International Education	75
Concentrations-MCS	33	Overloads	61
Concentrations-SCS	44	P	
D		Photographic Processing	79
Deans' List	70	Pittsburgh Filmmakers	63
Directory	4	Post Office	79
Disabilities	70	Q	
Drop from Program	66, 67, 69	R	
Dropping Classes	61	Registration	61
E		S	
Electronic Information	82	SAC Meetings	77
E-Mail	82	Scholarships	76
		School Suspension	69
		Security	76, 80
		Social Media	82
		Student Affairs	75
		Student Information Desk	80
		Students	55
		STUDIO for Creative Inquiry	78
		Study Abroad	69, 75
		SURF Grants	81
		SURG Grants	81
		T	
		Transcripts	64
		Transfer Credit	64
		U	
		Undergraduate Research Projects	63
		Undergraduate Research Office	76
		University Bookstore	80
		University Code	72
		University Information	74
		University Suspension	69
		V	
		Vision (Mission, Values)	8
		W	
		Warning (Academic)	65, 66, 68
		Wats:on? Festival	77
		Withdrawal	71
		Work Study	81
		X	
		Y	
		Z	

Index, Continued

Privacy Policy	70
Probation (Academic)	65, 67, 68
Public Computer Clusters	79
Q	
R	
Registration	61
S	
SAC Meetings	77
Scholarships	76
School Suspension	69
Security	76, 80
Social Media	82
Student Affairs	75
Student Information Desk	80
Students	55
STUDIO for Creative Inquiry	78
Study Abroad	69, 75
SURF Grants	81
SURG Grants	81
T	
Transcripts	64
Transfer Credit	64
U	
Undergraduate Research Projects	63
Undergraduate Research Office	76
University Bookstore	80
University Code	72
University Information	74
University Suspension	69
V	
Vision (Mission, Values)	8
W	
Warning (Academic)	65, 66, 68
Wats:on? Festival	77
Withdrawal	71
Work Study	81
X	
Y	
Z	

BXA Intercollege Degree Programs

College of Fine Arts
Office of the Dean, MMCH 107
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213-3890

Tel: 412.268.8326 / 412.268.1745

Fax: 412.268.1537

www.cmu.edu/interdisciplinary