Arts and Humanities

African American and African Studies-BA

1. AAAS majors will demonstrate an in-depth knowledge and mastery of substantive information relevant to one area of concentration (African American, African or Diaspora) and an understanding of the interdependent black world.
2. Students identify, critique, and appreciate the intersections between race, class, gender, ethnicity, and sexuality from the historical and existential perspectives of African and African-descended peoples.
3. Students implement interdisciplinary research methods and methodological perspectives applicable to advanced study, community development, and public service.

Ancient History and Classics-BA

1. Students broaden their knowledge of the history of Greece and Rome in its overall development, major events, and the methods used in its scholarly research.
2. Students develop the ability to read a Greek and/or Latin text in its original language and to situate it in its cultural and historical context.
3. Students research topics of Greek or Roman history by using the original documents.
4. Students interpret cultures that are foreign both in place and in time, using the cultures, literatures and religions of Greece and Rome as case studies ("cultural competence").

Arabic-BA

1. Demonstrate intermediate competency in reading, writing, speaking, and listening to Modern Standard Arabic;
2. Demonstrate expanded notions of literacy, navigating distinctions of culture, region, gender, class, access, and other differences; and
3. Critique written, oral, and performative texts, demonstrating facility with literary and cultural theories across historical, social, cultural, and other contexts.

Art-BA

1. Students possess a developed visual sensitivity
2. Students possess the technical skills, perceptual development and understanding of principles of visual organization sufficient to achieve basic visual communication and expressions in one or more media
3. Students possess the ability to make workable connections between concept and media
4. Students possess some familiarity with the works and intentions of major artists and movements of the past and the present, both in the Western and non-Western worlds
5. Students prepare materials for Graduate Studies and Professional Careers

Arts Education-BAE

1. Teacher candidates will acquire content knowledge in the discipline.

2. Teacher candidates will acquire knowledge of instructional strategies as they relate to the 2007 Ohio Modified Multi-age Visual Arts/NASAD standards.
3. Teacher candidates will develop ability to plan instruction.
4. Teacher candidates will demonstrate effectiveness in P-12 student learning.
5. Teacher candidates will develop reflexive understanding of their role in the discipline.
6. Teacher candidates will practice and implement pedagogy through a 14-week internship in Pre-K-12 classroom.

Arts Management-BAM

1. Students identify the issues, problems and policy interventions impacting the contemporary arts and cultural sector
2. Students analyze the purpose, function, and professional decision making in arts and cultural organizations
3. Students understand the professional role and responsibilities of the artist and the cultural worker in society
4. Students practice the principles of entrepreneurship as applied to arts and culture

Chinese-BA

1. Students demonstrate consideration of multiple critical approaches to an issue
2. Students demonstrate sensitivity to cultural diversity based on what they have studied
3. Students demonstrate a knowledge of cultural traditions and behaviors sufficient to situate the material studied in its larger cultural contexts
4. Students demonstrate a critical literacy in media
5. Students demonstrate the ability to interpret materials and behaviors that are presented orally and in writing
6. Students demonstrate the ability to express themselves clearly, orally and in writing

Choral Music-BME

1. Basic Skills and Analysis
    a. Students acquire an understanding of the common elements and organizational patterns of music and their interaction, the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
    b. Students acquire a sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications.
    c. Students acquire the ability to place music in historical, cultural, and stylistic contexts.
2. Performance
    a. Students acquire technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.

   b. Students acquire an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
   c. Students acquire the ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration.
   d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
   e. Students acquire keyboard competency.
   f. Students acquire growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
3. Students acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form.
4. Students acquire basic knowledge of music history and repertories through the present time, including study and experience of musical language and achievement in addition to that of the primary culture encompassing the area of specialization.
5. Students acquire the ability to use technologies current to their area of specialization.
6. Students work on musical problems by combining, as appropriate to the issue, their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; history and repertory; and technology.
7. Students acquire competency in conducting, are able to create accurate and musically expressive performances with various types of performing groups and in general classroom situations.
8. Students develop skills in arranging and adapting music from a variety of sources to meet the needs and ability levels of individuals, school performing groups, and in classroom situations.
9. Students acquire functional performance abilities in keyboard and voice. Functional performance abilities in instruments appropriate to the student's teaching specialization are also essential.
10. Students will be able to apply analytical and historical knowledge to curriculum development, lesson planning, and daily classroom and performance activities.
11. Students acquire vocal and pedagogical skill sufficient to teach effective use of the voice.
12. Students acquire knowledge of content, methodologies, philosophies, materials, technologies, and curriculum development for vocal/choral music.
13. Students acquire experiences in solo vocal performance, as well as in both large and small choral ensembles.
14. Students acquire performance ability sufficient to use at least one instrument as a teaching tool and to provide, transpose, and improvise accompaniments.

15. Students acquire laboratory experience in teaching beginning vocal techniques individually, in small groups, and in larger classes.

Classics-BA

1. Students demonstrate understanding of the literature and cultures of ancient Greece and Rome in their historical setting (“historical competence”)
2. Students research a topic in ancient literatures and cultures by making use of the documents of these cultures ("research competence")
3. Students analyze the role the literatures and cultures of ancient Greece and Rome have played in the history of Western civilization up to the present day ("reception competence")
4. Students interpret cultures that are foreign both in place and in time, using the cultures, literatures and religions of Greece and Rome as case studies (“cultural competence”)

Comparative Studies-BA

1. Students develop the capacity to analyze differences in culture and politics over time.
2. Students develop the capacity to engage and analyze issues of community and social justice.
3. Students develop interdisciplinary thinking and writing skills and understanding of relationships between disciplines.
4. Students develop the ability to read critically and interpret a diverse range of texts, material artifacts, and/or performance traditions.

Composition-BM

1. Musicianship Skills and Analysis.
    a. The student acquires an understanding of the common elements and organizational patterns of music and their interaction.
    b. The student gains the ability to employ their acquired knowledge and understanding in aural, verbal, and visual analyses and the ability to take aural dictation.
    c. The student gains sufficient understanding of, and capability with musical forms, processes, and structures.
    d. The student uses this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications according to the requisites of their specializations.
    e. The student acquires the ability to place music in historical, cultural, and stylistic contexts.
2. Performance
    a. The student acquires the technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.

b. The student gains an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
c. The student will gain the ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular music.
d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation including rehearsal and conducting skills as appropriate to the musical concentration.
e. The student learns keyboard competency.
f. The student grows in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.

3. Composition and Improvisation. The student acquires a rudimentary capacity to create derivative or original music both extemporaneously and in written form; ie the imitation of various musical styles, improvisation.
4. History and Repertory. The student gains basic knowledge of music history and repertories through the present time, including study and experience of musical language and achievement.
5. Technology. The student acquires the ability to use technologies current to their area of specialization.
6. Synthesis. The student begins the lifetime process of working on musical problems using performance capabilities, aural verbal and visual analysis, composition, improvisation, history, repertory and technology as appropriate.
7. Use of concepts, tools techniques and procedures. The student gains the highest possible skill level in the use of basic concepts, tools, techniques and procedures to develop a composition from concept to finished product.
8. Fluency in use of compositional tools. The student acquires fluency in the use of tools needed by composers including keyboard, spoken and written language, conducting, rehearsing analytic techniques and application technologies.
9. Public performance of compositions. The student has the opportunity to hear fully realized performances of their original compositions. Public presentation and critical assessment is an essential experience.

Dance-BFA

1. Expertise in movement practice: Students experience traditional and contemporary performance, dance techniques and somatic practices.
2. Theoretical inquiry: Students acquire and apply skills and knowledge in composition, history, music, production, and lighting.
3. Engage in the creative process: Students conduct in-depth explorations of a specific area of interest through research and creative projects.

English-BA

1. Students exhibit broad knowledge, understanding, and appreciation of literatures written in English, especially the British and American traditions, including main literary-historical periods, major authors, and history of the English language.
2. Students demonstrate high levels of proficiency in oral and written communication and the ability to write persuasively and elegantly using the argumentation, creativity, rhetoric, style, editing, and bibliographic citation appropriate to their areas of concentration.
3. Students display an informed awareness of different critical theories, methodologies and approaches to studying texts; demonstrate skill in using the critical tools and terminologies needed to analyze and assess a range of texts, including those produced by their peers; and the ability to identify the formal properties of texts as well as major literary forms and genres.
4. By graduation, students demonstrate the knowledge, skills, and independent thinking necessary to produce a substantial project appropriate to their concentrations and to be successful in their chosen career paths.

Film Studies-BA

1. Film Studies students learn to recognize formal elements; they acquire and apply tools (terminology, methods) to carry out rigorous formal analysis of film.
2. Film Studies students learn to explain how film has changed over time as an aesthetic form, as an industry, and as a social institution.
3. Film Studies students construct focused knowledge in one area and reflect on its relation to Film Studies as a field of interdisciplinary inquiries about cinema.
4. Film Studies students learn to develop general conclusions by synthesizing specific cases and by utilizing film-studies methods.
5. Film Studies students compose convincing written arguments backed by evidence from films and secondary sources.

French-BA

1. Cultural Awareness: Successful students will be able to discuss important aspects of both high and popular cultures of France and the Francophone world, including history, literature, music and fine arts. They will be able to incorporate this knowledge into their oral presentations and written essays.
2. Comprehension: Successful students will be able to understand the main ideas and many of the cultural references in oral discourse such as radio, TV, and film.
3. Speaking: Successful students will be able to perform the speaking tasks outlined in the ACTFL guidelines for ‘advanced low’ level.
4. Reading Comprehension and Critical Analysis: Successful students will be able to understand, critically interpret, and discuss relatively complex ideas presented in full-length, original texts in a variety of genres such as literary prose, poetry, theater, history narratives, advertisements, and visual texts.

5. Writing and critical expression: Successful students will be able to use the contextual knowledge gained from exposure to the major historical, socio-cultural, and literary periods of French and Francophone cultural history to critically evaluate and write on a number of topics pertaining to the foreign culture and their own. Their level of performance is expected to correspond to the 'advanced low' level in the ACTFL guidelines.

General Music-BME

1. Basic Skills and Analysis
    a. Students acquire an understanding of the common elements and organizational patterns of music and their interaction, the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
    b. Students acquire a sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications.
    c. Students acquire the ability to place music in historical, cultural, and stylistic contexts.
2. Performance
    a. Students acquire technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
    b. Students acquire an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
    c. Students acquire the ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration.
    d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
    e. Students acquire keyboard competency.
    f. Students acquire growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
3. Students acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form.
4. Students acquire basic knowledge of music history and repertories through the present time, including study and experience of musical language and achievement in addition to that of the primary culture encompassing the area of specialization.

5. Students acquire the ability to use technologies current to their area of specialization.
6. Students work on musical problems by combining, as appropriate to the issue, their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; history and repertory; and technology.
7. Students acquire competency in conducting, are able to create accurate and musically expressive performances with various types of performing groups and in general classroom situations.
8. Students develop skills in arranging and adapting music from a variety of sources to meet the needs and ability levels of individuals, school performing groups, and in classroom situations.
9. Students acquire functional performance abilities in keyboard and voice. Functional performance abilities in instruments appropriate to the student's teaching specialization are also essential.
10. Students will be able to apply analytical and historical knowledge to curriculum development, lesson planning, and daily classroom and performance activities.
11. Students acquire musicianship, vocal, and pedagogical skills sufficient to teach general music.
12. Students acquire knowledge of content, methodologies, philosophies, materials, technologies, and curriculum development for general music.
13. Students acquire the ability to lead performance-based instruction.
14. Students acquire laboratory and field experiences in teaching general music.

German-BA

1. Students demonstrate linguistic proficiency in German at the B2 or C1 level of CEFR, they reflect on their own language and gain translation skills.
2. Students demonstrate knowledge of German Linguistics, German History, German Cultural Achievements, and the current German-speaking world.
3. Students demonstrate the ability to undertake critical reading and analysis of texts, to interpret cultural products and events within relevant contexts, and to express ideas and perspectives clearly, cogently and persuasively.
4. Students demonstrate an understanding of differences in verbal and nonverbal communication, recognize cultural differences and similarities, and gain perspective on their own world view and cultural values.
5. Students demonstrate the ability to use sophisticated tools for research and knowledge acquisition, and to evaluate the validity of resources available in the media landscape.

Hebrew-BA

1. Demonstrate intermediate competency in reading, writing, speaking, and listening to Hebrew;
2. Demonstrate familiarity with the historical breadth of Hebrew language and culture from Biblical through modern

3. Demonstrate expanded notions of literacy, navigating distinctions of culture, region, gender, class, access, and other differences; and
4. Critique written, oral, and performative texts, demonstrating facility with literary and cultural theories across historical, social, cultural, and other contexts.

History-BA

1. Students construct an integrated perspective on history and the factors that shape human activity.
2. Students describe and analyze the origins and nature of contemporary issues.
3. Students speak and write critically about primary and secondary historical sources by examining diverse interpretations of past events and ideas in their historical contexts

History of Art-BA

1. Students gain a general familiarity with and knowledge of major art historical monuments
    1.1. Students learn to identify major monuments and discuss their salient features
    1.2. Students learn basic facts related to the works' historical and social context
2. Students acquire a basic understanding of current approaches in art history as well as an acquaintance with the history of the discipline
    2.1. Principally through reading seminal texts in the field, students become aware of the history of the discipline and so also begin to understand its current emphases and values
3. Students learn to look, read, and think critically, as well as to articulate and support sustained arguments
4. Students acquire the fundamental writing and research skills necessary to produce art historical scholarship

Industrial Design-BSD

1. Design Thinking: Students demonstrate abilities to address Design opportunities, including the skills of problem identification, formulation, qualitative and quantitative research, analysis, synthesis, prototyping, user-testing, and evaluation of outcomes.
2. Doing: Students demonstrate competency with tools, technologies, skills and materials in the exploration, creation, and production of products, artifacts, environments, systems, communications and services.
3. Practice: Students demonstrate understanding of basic professional practices, including the ability to communicate, document, organize and lead work productively as team members able to adapt to the evolving role of Design
4. Scope: Students demonstrate understanding of the role and responsibility of Design in context, including the application of ethical concepts of sustainable development, social innovation and human-centered design.
5. Context: Students demonstrate knowledge of established and emerging theory and practice, including critical thinking and an understanding of interdisciplinary relationships in order to recognize and act on opportunities.

6. Role: Students demonstrate the ability to recognize the role of the Designer as the expert practitioner and/or catalyst for collective creativity.

Instrumental Music-BME

1. Basic Skills and Analysis
    a. Students acquire an understanding of the common elements and organizational patterns of music and their interaction, the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
    b. Students acquire a sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications.
    c. Students acquire the ability to place music in historical, cultural, and stylistic contexts.
2. Performance
    a. Students acquire technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
    b. Students acquire an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
    c. Students acquire the ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration.
    d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
    e. Students acquire keyboard competency.
    f. Students acquire growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
3. Students acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form.
4. Students acquire basic knowledge of music history and repertories through the present time, including study and experience of musical language and achievement in addition to that of the primary culture encompassing the area of specialization.
5. Students acquire the ability to use technologies current to their area of specialization.

6. Students work on musical problems by combining, as appropriate to the issue, their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; history and repertory; and technology.
7. Students acquire competency in conducting, are able to create accurate and musically expressive performances with various types of performing groups and in general classroom situations.
8. Students develop skills in arranging and adapting music from a variety of sources to meet the needs and ability levels of individuals, school performing groups, and in classroom situations.
9. Students acquire functional performance abilities in keyboard and voice. Functional performance abilities in instruments appropriate to the student's teaching specialization are also essential.
10. Students will be able to apply analytical and historical knowledge to curriculum development, lesson planning, and daily classroom and performance activities.
11. Students acquire knowledge of and performance ability on wind, string, and percussion instruments sufficient to teach beginning students effectively in groups.
12. Students acquire knowledge of content, methodologies, philosophies, materials, technologies, and curriculum development for instrumental music.
13. Student acquires experiences in solo instrumental performance, as well as in both small and large instrumental ensembles.
14. Students acquire laboratory experience in teaching beginning instrumental students individually, in small groups, and in larger classes.

Interior Design-BSD

1. Design Thinking: Students demonstrate abilities to address Design opportunities, including the skills of problem identification formulation, qualitative and quantitative research, analysis, synthesis, prototyping, user-testing, and evaluation of outcomes.
2. Doing: Students demonstrate competency with tools, technologies, skills and materials in the exploration, creation, and productions of products, artifacts, environments, systems, communications and services.
3. Practice: Students demonstrate understanding of basic professional practices, including the ability to communicate, document, organize and lead work productively as team members able to adapt to the evolving role of Design
4. Scope: Students demonstrate understanding of the role and responsibility of Design in context, including the application of ethical concepts of sustainable development, social innovation and human-centered design.
5. Context: Students demonstrate knowledge of established and emerging theory and practice, including critical thinking and an understanding of interdisciplinary relationships in order to recognize and act on opportunities.
6. Role: Students demonstrate the ability to recognize the role of the Designer as the expert practitioner and/or catalyst for collective creativity.

Islamic Studies-BA

1. Students develop intermediate language proficiency in one language relevant to Islamic studies: Arabic, Turkish or Persian.
2. Students think, analyze, speak, and write critically about sacred texts, drawing on literary and critical theory.
3. Students display knowledge about the history of Muslim societies and develop a foundation for comparative understanding with other societies of the given period, and with Muslim societities today.
4. Students learn to interpret Islamic beliefs and practices within their historical, cultural, social, and political contexts.
5. Students develop an overview grasp of various strands of Muslim thought.
6. Students are able to situate the study of Islam within the discipline of religious studies.

Italian-BA

1. Speaking: Successful students will be able to perform the speaking tasks outlined in the ACTFL guidelines for 'advanced low' level.
2. Cultural Awareness: Students will be able to discuss significant features of Italian high and popular culture, historical and literary movements, Italian music and fine art and incorporate this knowledge into their essays and presentations.
3. Reading Comprehension and Critical Interpretation: Students will be able to understand, critically interpret and discuss relatively complex ideas presented in full-length, original texts in a variety of genres, such as literary prose, poetry, theatre, histories, and linguistics texts.

Japanese-BA

1. Students demonstrate consideration of multiple critical approaches to an issue
2. Students demonstrate sensitivity to cultural diversity based on what they have studied
3. Students demonstrate a knowledge of cultural traditions and behaviors sufficient to situate the material studied in its larger cultural contexts
4. Students demonstrate a critical literacy in media
5. Students demonstrate the ability to interpret materials and behaviors that are presented orally and in writing
6. Students demonstrate the ability to express themselves clearly, orally and in writing

Jazz Studies-BM (Performance and Composition)

1. Musicianship Skills and Analysis.
    a. Students acquire understanding of the common elements and organizational patterns of music and their interaction.
    b. Students acquire the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
    c. Students acquire sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge.
    d. Students gain skills in compositional, performance, analytical, scholarly, and pedagogical applications according to the requisites of their specializations.

2. Performance.
    a. Students acquire technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
    b. Students acquire an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
    c. Students acquire the ability to sight read with fluency demonstrating general musicianship and in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration.
    d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation including rehearsal and conducting skills as appropriate to the musical concentration.
    e. Students acquire keyboard competency.
    f. Students grow in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
3. Composition and Improvisation. Students acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form; ie imitation of various musical styles, and creation of original compositions.
4. History and Repertory. Students acquire basic knowledge of music history and repertories through the present time, including study and experience of musical language and achievement.
5. Technology. Students acquire the ability to use technologies current to their area of specialization.
6. Synthesis. Students begin the lifetime process of acquiring the ability to work on musical problems by combining capabilities in performance, aural, verbal and visual analysis, composition, improvisation, history, repertory and technology.
7. Knowledge of jazz idioms and history.
    a. Students gain comprehensive capabilities in various jazz idioms, including the ability to perform, improvise, compose, arrange, and score.
    b. Students gain knowledge of jazz history and literature, including the cultural sources and influences of jazz.
8. Ability to work as performer/arranger/composer in a variety of idioms and ensembles.
    a. Students gain the ability to work as a performer and composer/arranger with a variety of jazz and studio music idioms.
    b. Students acquire the ability to work in various settings and with various sizes and types of ensembles.

Jewish Studies-BA

1. Students will compare and contrast themes from the canonical works of the Tanach and rabbinic literature.
2. Students will describe significant events in Jewish history from ancient times through contemporary world
3. Students will read and translate select Hebrew texts in the original language
4. Students will develop an appreciation for modern Jewish literature, film, politics and thought
5. Students will apply basic analytical, bibliographical, and communication skills while researching issues in Jewish Studies

Korean-BA

1. Students demonstrate consideration of multiple critical approaches to an issue
2. Students demonstrate sensitivity to cultural diversity based on what they have studied
3. Students demonstrate a knowledge of cultural traditions and behaviors sufficient to situate the material studied in its larger cultural contexts
4. Students demonstrate a critical literacy in media
5. Students demonstrate the ability to interpret materials and behaviors that are presented orally and in writing
6. Students demonstrate the ability to express themselves clearly, orally and in writing

Linguistics-BA

1. Students acquire a broad understanding of the basic areas of linguistics
2. Students strengthen critical analysis and problem solving skills
3. Students further develop skills of oral and written expression
4. Students understand about the relationship between language and society
5. Students understand how new knowledge is created through research
6. Students learn potential career paths for linguistics majors

Medieval and Renaissance Studies-BA

1. Medieval and Renaissance Studies Majors demonstrate a broad, interdisciplinary appreciation of the history and culture of the Medieval and Renaissance world.
2. Students demonstrate skill at critical thinking through the study of diverse disciplines and languages.
3. Students demonstrate skill at utilization of primary and secondary sources.
4. Students demonstrate the capacity to express themselves and to exercise sharpened communication skills in exams, papers, and discussions.

Modern Greek-BA

1. Students cultivate an appreciation of Modern Greek literature (in the original and translation) and culture.

2. Students develop proficiency in the Modern Greek language.
3. Students foster understanding of the Hellenic diaspora and develop a global awareness and the interaction of societies.

Music-BA

1. The student develops the ability to hear, identify, and work conceptually with the elements of music such as rhythm, melody, harmony, structure, timbre, and texture.
2. The student acquires an understanding of, and the ability to read and realize musical notation.
3. The student acquires an understanding of compositional processes, aesthetic properties of style, and the ways these shape, and are shaped by artistic and cultural forces.
4. The student develops an acquaintance with a wide selection of musical literature, the principal eras, genres, and cultural sources.
5. The student acquires the ability to develop and defend musical judgments.
6. The student develops musicianship in performing areas at levels consistent with the goals and objectives of the specific liberal arts degree program being followed.
7. The student develops an understanding of procedures for realizing a variety of musical styles.
8. The student acquires knowledge and/or skills in one or more areas of music beyond basic musicianship appropriate to the individual's needs and interests, and consistent with the purposes of the specific liberal arts degree program being followed.

Music Theory-BM

1. Musicianship Skills and Analysis.
    a. Students acquire understanding of the common elements and organizational patterns of music and their interaction.
    b. Students acquire the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
    c. Students acquire sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge.
    d. Students gain skills in compositional, performance, analytical, scholarly, and pedagogical applications according to the requisites of their specializations.
    e. Students gain the ability to place music in historical, cultural, and stylistic contexts.
2. Performance.
    a. Students acquire technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
    b. Students acquire an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.

    c. Students acquire the ability to sight read with fluency demonstrating general musicianship and in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration.
    d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation including rehearsal and conducting skills as appropriate to the musical concentration.
    e. Students acquire keyboard competency.
    f. Students grow in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
3. Composition and Improvisation. Students acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form; ie imitation of various musical styles, and creation of original compositions.
4. History and Repertory. Students acquire basic knowledge of music history and repertories through the present time, including study and experience of musical language and achievement.
5. Technology. Students acquire the ability to use technologies current to their area of specialization.
6. Synthesis. Students begin the lifetime process of acquiring the ability to work on musical problems by combining capabilities in performance, aural verbal and visual analysis, composition, improvisation, history, repertory and technology.
7. Musical Analysis.
    a. Students gain advanced capabilities in musical analysis including the ability to produce and discuss analytical work from an independent perspective.
    b. Students acquire the ability to compare and evaluate the results of various analytical procedures.
8. Relationships between theory and composition.
    a. Students acquire an understanding of the relationships between theory and composition.
    b. Students gain a basic understanding of the relationships among musical structure, aesthetic effect, and cultural context.
9. Tools of theoretical work. Students gain the ability to use the tools of theoretical work including keyboard skills, spoken and written language, research techniques, and applicable technologies.
10. Independent study. Student opportunities for independent study that culminates in a senior project or thesis is strongly recommended.

Musicology-BM

1. Musicianship Skills and Analysis
    a. Students acquire understanding of the common elements and organizational patterns of music and their interaction.
    b. Students acquire the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
    c. Students acquire sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge.

    d. Students gain skills in compositional, performance, analytical, scholarly, and pedagogical applications according to the requisites of their specializations.
    e. Students gain the ability to place music in historical, cultural, and stylistic contexts.
2. Performance.
    a. Students acquire technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
    b. Students acquire an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
    c. Students acquire the ability to sight read with fluency demonstrating general musicianship and in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration.
    d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation including rehearsal and conducting skills as appropriate to the musical concentration.
    e. Students acquire keyboard competency.
    f. Students grow in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
3. Composition and Improvisation. Students acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form; ie imitation of various musical styles, and creation of original compositions.
4. History and Repertory. Students acquire basic knowledge of music history and repertories through the present time, including study and experience of musical language and achievement.
5. Technology. Students acquire the ability to use technologies current to their area of specialization.
6. Synthesis. Students begin the lifetime process of acquiring the ability to work on musical problems by combining capabilities in performance, aural verbal and visual analysis, composition, improvisation, history, repertory and technology.
7. Use of concepts, tools techniques and procedures.
    a. Students gain the ability to work intellectually with relationships between music and music literature within cultural/historical contexts.
    b. Use of concepts, tools techniques and procedures. Students gain knowledge of a variety of cultures, various historical periods, and the ability to produce and defend scholarly work.
8. Understanding of structure, history and performance practice. Students gain understanding of evolving relationships among musical structure, history, performance practices; the influence of such evolutions on musical and cultural change.
9. Ability to use the tools of scholarship.
    a. Students will effectively use the tools of scholarship including keyboard skills, spoken and written language, research techniques, advanced musical analysis, and applicable technologies.

    b. Students will effectively utilize reading skills in foreign languages as one of the tools of scholarship.
10. Independent study. Students will do an independent study project as a capstone experience.

Performance-BM (BHPSW, Piano, Voice)

1. Basic Skills and Analysis
    a. Students acquire an understanding of the common elements and organizational patterns of music and their interaction, the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
    b. Students acquire sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications.
    c. Students acquire the ability to place music in historical, cultural, and stylistic contexts.
2. Performance
    a. Students acquire technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
    b. Students acquire an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
    c. Students acquire the ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration
    d. Students acquire knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
    e. Students acquire keyboard competency.
    f. Students attain growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.
3. Students acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form.
4. Students acquire basic knowledge of music history and repertories through the present time.
5. Students acquire the ability to use technologies current to their area of specialization.

6. Students solve musical problems by combining, as appropriate to the issue, their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; history and repertory; and technology.

Philosophy-BA

1. Students develop critical thinking about philosophy.
2. Students read, think, and write about the history of philosophy.
3. Students read, think, and write about contemporary philosophical topics.
4. Students learn formal methods in logic.

Portuguese-BA

1. Students develop their critical thinking in the context of the study of the language/linguistics, cultures, and literatures of the Portuguese-speaking world
2. Students possess the critical vocabulary needed for literary and cultural analysis in Portuguese.
3. Students exhibit familiarity with the most significant literary and cultural expressions of Portugal, Brazil, and the Lusophone world.
4. Students write clear, effective, analytical papers in Portuguese
5. Students demonstrate an understanding of the linguistic structure of Portuguese.
6. Students understand the main ideas of most speech in a standard dialects of Portuguese.
7. Students engage in conversations in most informal and some formal settings in Portuguese.

Religious Studies-BA

1. Students attain a broad knowledge of the world's religions.
2. Students will understand some of the methodological challenges facing any scholar of religion.
3. Students will develop an understanding of religion and how to study it comparatively and critically in a range of cultural and historical contexts.
4. Students will develop multi-disciplinary skills to appreciate the role religion plays in social and cultural production (in terms of art, literature, politics, society).

Romance Studies-BA

1. Students develop cross-cultural understanding through a focused program of study in language/linguistics or literature/culture in one field designated as the primary field.
2. Students develop intermediate-high/advanced-low speaking skills in their primary language according to the ACTFL guidelines, intermediate-low skills in a second language, and novice skills in a third language.

3. Students develop multicultural awareness and the ability to move and interact fluidly in an increasingly globalized world. Students develop their ability to analyze arguments and think critically.

Russian-BA

1. Language Proficiency: majors achieve proficiency and confidence needed for effective language use: students perform at a minimum at ACTFL Intermediate Mid level of proficiency.
2. Analytic Skills: Russian majors demonstrate analytic skills needed to discuss, analyze, and conduct research on Russian media, texts and other cultural artifacts.
3. Cultural Appreciation: Russian majors demonstrate a critical understanding and appreciation of Russian literature, culture, history, traditions, etc.
4. Pragmatic Knowledge: Russian majors demonstrate an experiential and pragmatic knowledge of Russian culture that enables them to communicate effectively with various speakers of Russian.
5. Internationalization: Russian majors demonstrate an awareness of international issues and an international outlook.

Sexuality Studies-BA

1. Students develop an understanding of the ways in which ideas about sexuality are normalized within specific discourses and institutions, which consequently produce non-normative sexual “others” who bear the burden of stigma and marginalization.
2. Students acquire an appreciation of and sensitivity to key debates related to the subject of sexuality.
3. Students develop an understanding of the ways in which sexuality is shaped by other social differences such as race, gender, class, dis/ability, religion, nationality, and ethnicity.

Spanish-BA

1. Students develop critical thinking in the context of the study of the language/linguistics, cultures, and literatures of the Spanish-speaking world.
2. Students possess the critical vocabulary needed for literary and cultural analysis in Spanish.
3. Students exhibit familiarity with the most significant literary and cultural expressions of Spain and/or Latin America.
4. Students write clear, effective analytical papers in Spanish.
5. Students demonstrate an understanding of the linguistic structure of Spanish.
6. Students understand the main ideas of most speech in a standard dialect of Spanish.
7. Students engage in conversations in most informal and some formal settings in Spanish.

Studio Art-BFA

1. Students gain functional competence with principles of visual organization, including the ability to work with visual elements in two and three dimensions; color theory and its applications; and drawing
2. Students present work that demonstrates perceptual acuity, conceptual understanding, and technical facility at a professional entry level in their chosen field(s)
3. Students become familiar with the historical achievements, current major issues, processes, and directions of their field(s)
4. Students are afforded opportunities to exhibit their work and to experience and participate in critiques and discussions of their work and the work of others
5. Students prepare materials for Graduate Studies and Professional Careers
6. Students acquire advanced knowledge of the materials, methodologies and critical developments and artistic practices related to a particular media or specialization
7. Students demonstrate skills through the conception, creation and presentation of original works of art

Theatre-BA

1. Appreciate theatre as an art form, which has influence on the social, cultural, and political aspects of societies.
2. Respond as an informed audience member..
3. Understand the context and impact of historical playwrights and productions..
4. Analyze scripts, performances, and productions by applying a variety of theories and research methods.
5. Identify the fundamental skills required for the art and process of performance.
6. Understand the conceptual, aesthetic, and technological practices essential to basic lighting, video, scenic, and costume design.
7. Work collaboratively and communicate professionally with a variety of artists involved in the art of theatrical production.
8. Identify areas of specific interest and pursue avenues for further study or practice.

Visual Communication Design-BSD

1. Thinking: Students acquire abilities to address Design opportunities, including the skills of problem identification, formulation, qualitative and quantitative research, analysis, synthesis, prototyping, user-testing, and evaluation of outcomes.
2. Doing: Students acquire competency with tools, technologies, skills and materials in the exploration, creation, and production of products, artifacts, environments, systems, communications solutions and services.
3. Practice: Students demonstrate understanding of basic professional practices, including the ability to communicate, document, organize and lead work productively as team members able to adapt to the evolving role of Design.
4. Scope: Students demonstrate understanding of the role and responsibility of Design in the local and global context, including the foundational comprehension and application of ethical concepts of sustainable development, social innovation and hum.

5. Context: Students demonstrate knowledge of established and emerging theory and practice, including critical thinking and an understanding of interdisciplinary relationships in order to recognize and act on opportunities.
6. Role: Students acquire the ability to recognize the role of the Designer as the expert practitioner and/or catalyst for collective creativity.

Women's, Gender and Sexuality Studies-BA

1. Student will be able to think critically about gender and women's issues.
2. Student will be able to pursue interdisciplinary inquiries about gender and to pose questions that cut across disciplinary fields.
3. Student will be able to perform women's studies research: develop an argument, organize data and evidence for that argument, and express ideas in writing.

World Literatures-BA

1. Students develop strong critical, analytical, and writing skills.
2. Students understand the importance of literary and cultural theory in the interpretation of literary texts and gain the ability to use theory to analyze texts productively.
3. Students appreciate the complexity of issues related to translation, particularly in regard to highly language-sensitive literary texts, and to the transmission of ideas and values across cultures.
4. Students develop appreciation for the multiplicity and diversity of the world's different cultures and modes of literary and cultural expression.

Natural and Mathematical Sciences

Actuarial Science-BA

1. To supply a strong general background in mathematics, statistics, and relevant concepts from the insurance industry
2. To prepare students to take some of the national actuarial examinations administered by the society of actuaries and the casualty actuarial society

Actuarial Science-BS

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2. To prepare students to take some of the national actuarial examinations administered by the society of actuaries and the casualty actuarial society

Astronomy and Astrophysics-BS

1. Demonstrate a basic mastery of the four fundamental areas of physics;
2. Apply analytical and problem solving skills in the areas of astrophysics, physics, and mathematics.
3. Apply the concepts of data reduction and error analysis to realistic observational and data-mining problems.
4. Communicate physical understanding orally and in writing, in both formal and colloquial professional situations.

Biochemistry-BS

1. Understand the relationship of biochemistry to broader areas of science by demonstrating and understanding of Mendelian, molecular, and population genetics, as well as molecular biology and to discuss evolution, ecology, and organismal biology as a broader context for biochemical processes.
2. Apply chemical, mathematical, and physical concepts to describe biological processes including bioenergetics and thermodynamics, transport processes, chemical and enzyme kinetics along with catalytic mechanisms, biomolecular interactions, and macromolecular stability.
3. Describe and identify the molecular structure, dynamics, biological functions, and mechanisms of the major classes of biological macromolecules such as proteins, nucleic acids, carbohydrates, and lipids as well as the relative merits of the methods used to study each.
4. Apply biochemical concepts to explain basic cellular processes including how enzymes and other biological molecules interact in metabolic pathways to carry out dynamic chemical changes in cells, including an understanding of feedback loops and energy flows, and how these relate to inherited and infectious disease scenarios.
5. Describe the regulation and function of the macromolecular machinery that participates in nucleic acid (DNA and RNA) synthesis, processing and repair; and appreciate how bioinformatics interfaced with systems biology approaches (genomics and proteomics)

is used to delineate genotype-phenotype correlations, a pre-requisite for understanding the diversity of life.

6. Use scientifically valid reasoning to investigate and articulate how biochemical knowledge is acquired through the understanding and application of the scientific method; understanding the theoretical basis, design, and conduct of experimental protocols; interpret and formulate valid conclusions from experimental data; and articulate a research problem and plan.
7. Communicate scientific concepts clearly and concisely, orally and in writing, including knowledge of scientific writing and presentation styles and interpret research seminars and articles from the current literature to demonstrate broader comprehension of research methods in biochemistry.

Biology-BA

1. Explain major biological concepts and discuss how these are connected with various areas of the biological and physical sciences
    1.1. Describe the hierarchal relationship between structure and function at all levels: molecular, cellular, and orgasmic.
    1.2. Diagram, explain, and contrast the major cellular processes in archaea, bacteria, and eukaryotes
    1.3. Differentiate types of biological macromolecules and compare their contributions to cellular structure and function
    1.4. Apply the principles of genetics and describe the flow of genetic information
    1.5. Explain changes in organisms through time by applying the principles of evolutionary biology
    1.6. Demonstrate how relationships among living things are understood through taxonomy and phylogenetic analysis
    1.7. Describe ecological relationships between organisms and their environment
2. Demonstrate problem solving, analytical, and communication skills that will provide the foundation for lifelong learning and career development
    2.1. Apply the scientific process, including designing and conducting experiments and testing hypotheses
    2.2. Use laboratory equipment, employ safe laboratory practices, and adapt tools such as laboratory notebooks and spreadsheets to organize and analyze data associated with scientific processes
    2.3. Retrieve information from the life sciences literature; read, understand, and critically review scientific papers
    2.4. Prepare oral and written reports following a recognized scientific format
    2.5. Develop and awareness of the careers and professions that rely on knowledge of biological sciences
3. Value biology as an integral part of society and everyday life
    3.1. Demonstrate at least one of the following skills with regard to biology and society: communication, argumentation, social responsibility, ethics, and cultural competency

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1. Explain major biological concepts and discuss how these are connected with various areas of the biological and physical sciences
    1.1. Describe the hierarchal relationship between structure and function at all levels: molecular, cellular, and orgasmic.
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    1.5. Explain changes in organisms through time by applying the principles of evolutionary biology
    1.6. Demonstrate how relationships among living things are understood through taxonomy and phylogenetic analysis
    1.7. Describe ecological relationships between organisms and their environment
2. Apply concepts from mathematics and other science disciplines for the analysis of processes in living organisms.
    2.1. Apply quantitative skills in the analysis of biological processes
    2.2. Apply concepts from chemistry in the analysis of biological processes
    2.3. Apply concepts from physics in the analysis of biological processes
3. Demonstrate problem solving, analytical, and communication skills that will provide the foundation for lifelong learning and career development
    3.1. Apply the scientific process, including designing and conducting experiments and testing hypotheses
    3.2. Use laboratory equipment, employ safe laboratory practices, and adapt tools such as laboratory notebooks and spreadsheets to organize and analyze data associated with scientific processes
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    3.4. Prepare oral and written reports following a recognized scientific format
    3.5. Develop and awareness of the careers and professions that rely on knowledge of biological sciences
4. Value biology as an integral part of society and everyday life

Chemistry-BA

1. Students solve state-of-the-art chemistry problems, working both individually and in groups, and these problems will exemplify current disciplinary and interdisciplinary principles as well as modern pedagogical practice
2. Students develop effective skills in oral and written communication of scientific knowledge
3. Students plan experimental procedures, carry out chemical procedures, use laboratory equipment, analyze data and prepare laboratory reports that reinforce current chemical practices

4. Students follow safe practices in the laboratory and demonstrate scientifically ethical practices
5. Students retrieve information from the chemical literature, and become proficient in online database searching
6. Students use modern computer software for graphing, manipulation of symbolic mathematical expressions, and quantum chemical calculations

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Computer and Information Science-BA

1. *Terminology and Approach*: In order to be consistent with our BS-CSE program which is accredited by ABET and hence is constrained by ABET's terminological requirements, we call "goals" as "program objectives". The "associated objectives" are called "program outcomes". Our assessments are all at the program outcomes (i.e., "associated objectives")-level. The assessment of the level to which the outcomes associated with a given program objective (i.e., goal) are achieved is a measure of the extent to which the program objective (i.e., goal) is achieved. Our first program objective (i.e., goal) and its associated outcomes (i.e., "associated objectives") are stated in the next page (as "Goal 2"). Moreover, since our assessments are at the outcomes-level (i.e., "associated objectives"- level), we list the outcomes *along with* the program objectives (i.e., goals) rather than separately.
2. Program Objective (i.e. Goal) I: Graduates of the program will be employed in the computing-related professions, and will be engaged in learning, understanding, and applying new ideas and technologies as computing evolves and new applications emerge. Associated Program Outcomes (i.e., Assoc. Objec): a. An ability to apply knowledge of computing and mathematics including discrete mathematics; b. An ability to design and conduct experiments, as well as to analyze and interpret data; c. An ability to design, implement, and evaluate a software system or component to solve problems either in computing or in related domains; d. An ability to explore the potential

application of computing techniques to solve problems in other domains. e. A recognition of the need for, and an ability to engage in life-long learning and continuing professional development;

3. Program Objective (i.e. Goal) II: Graduates with an interest in, and aptitude for, advanced studies in computing will have completed, or be actively pursuing, graduate studies in computing or related fields. The program outcomes (i.e., "associated objectives") corresponding to this goal are identical to the ones corresponding to the previous goal and hence are not repeated here.
4. Program Objective (i.e. Goal) III: Graduates will be informed and involved members of their communities, and responsible professionals. Associated Program Outcomes (i.e., Assoc. Objec): a. An ability to function on multi-disciplinary teams; b. An understanding of professional, ethical, legal, and social issues and responsibilities; c. An ability to communicate effectively with a range of audiences; d. An ability to analyze the local and global impact of computing on individuals, organizations, and society; e. A knowledge of contemporary issues.

Computer and Information Science-BS

1. *Terminology and Approach*: In order to be consistent with our BS-CSE program which is accredited by ABET and hence is constrained by ABET's terminological requirements, we call "goals" as "program objectives". The "associated objectives" are called "program outcomes". Our assessments are all at the program outcomes (i.e., "associated objectives")-level. The assessment of the level to which the outcomes associated with a given program objective (i.e., goal) are achieved is a measure of the extent to which the program objective (i.e., goal) is achieved. Our first program objective (i.e., goal) and its associated outcomes (i.e., "associated objectives") are stated in the next page (as "Goal 2"). Moreover, since our assessments are at the outcomes-level (i.e., "associated objectives"- level), we list the outcomes *along with* the program objectives (i.e., goals) rather than separately.
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Data Analytics-BS

1. Students will demonstrate an understanding of and ability to apply computer science principles relating to data representation, retrieval, programming and analysis.
2. Students will demonstrate an understanding of and ability to apply mathematical and statistical models and concepts to detect patterns in data, as well as draw inferences and conclusions supported by the data.
3. Students will demonstrate critical thinking skills associated with problem identification, problem solving and decision making, assessing value propositions supported by data, and generating a logical synthesis of information from data.
4. Students will demonstrate the ability to apply knowledge gained from one area to problems and data in another.
5. Students will demonstrate the ability to communicate findings and their implications, and to apply them effectively in organizational settings.

Earth Sciences-BA

1. Students critically read and evaluate Earth Science literature.
2. Students present Earth Science information in a clear and logical manner, both orally and in writing.
3. Students apply knowledge of Earth Science data to understand the dynamic physical, chemical, and biological processes of the Earth and its history.
4. Students identify Earth Science problems and develop solutions.
5. Students will develop the necessary knowledge and skills for admission to graduate school or employment following graduation.
6. Students will be able to apply knowledge of modern applications from chemistry, physics, biology, mathematics, statistics, and computing to the solution of geological problems.
7. Group class projects in major classes
8. Modules on ethics added to some courses

Earth Sciences-BS

1. Students critically read and evaluate Earth Science literature.

2. Students present Earth Science information in a clear and logical manner, both orally and in writing.
3. Students apply knowledge of Earth Science data to understand the dynamic physical, chemical, and biological processes of the Earth and its history.
4. Students apply knowledge of appropriate techniques, field methods, field mapping, and numerical methods to measure, portray, analyze, and interpret Earth Science data in specific subdisciplines.
5. Students identify Earth Science problems and develop solutions.
6. Students apply knowledge of modern applications from chemistry, physics, biology, mathematics, statistics, and computing to the solution of Earth Science problems.

Evolution and Ecology-BS

1. Students are able to describe the processes that underlie evolution and their manifestation in the natural world
2. Students are able to explain ecological concepts, methods of study, and the interactions among organisms and between organisms and their environment
3. Students are able to understand organismal diversity and functioning at all levels, from the molecular and cellular to the whole organism, as well as the interplay between organismal functioning and ecological and evolutionary processes
4. Students participate in the process of discovery by conducting experimental and observational studies, synthesizing results with the primary literature, and communicating their questions, hypotheses, observations, and experiences to others.
5. Students demonstrate proficiency in mathematics, statistics, computer modeling, and the use of computers, as these topics relate to biology
6. Students know the theoretical framework of evolution, ecology and organismal biology and understand science as a process, including the history of science as it relates to these three disciplines within biology.
7. Students are aware of current issues in biology, especially those that have significant ethical and societal implications, and will be able to communicate scientific concepts and processes.

Mathematics-BA

1. Math majors will learn conceptual frameworks needed to study higher mathematics, including an introduction to mathematical reasoning, and an understanding of how to read and write proofs.
2. Math majors will acquire basic mastery of core areas of mathematics, including calculus, analysis and algebra.
3. Math majors will develop powerful mathematical problem solving skills.
4. Math majors will learn to communicate mathematical understanding effectively.
5. Math majors will become proficient in chosen tracks within the major.

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2. Math majors will acquire basic mastery of core areas of mathematics, including calculus, analysis and algebra
3. Math majors will develop powerful mathematical problem solving skills.
4. Math majors will learn to communicate mathematical understanding effectively.
5. Math majors will become proficient in chosen tracks within the major.

Microbiology-BA

1. Students acquire the ability to interrelate and apply the fundamental concepts of chemistry, physics and mathematics to the functions of living cells.
2. Students understand the chemical properties of biological molecules and how these molecules function in the molecular mechanisms underlying physiological processes in microbial cells.
3. Students understand evolutionary processes, the diversity of microorganisms, and how microorganisms impact their environment, including their roles in human health and disease.
4. Students acquire the ability to design experiments to test hypotheses, perform analyses, interpret and analyze data, and present scientific information in written and oral formats.
5. Students acquire the ability to appraise scientific data presented in the popular press for accuracy and scientific merit and understand issues and ethical conflicts associated with applications of biotechnology.

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5. Students acquire the ability to appraise scientific data presented in the popular press for accuracy and scientific merit and understand issues and ethical conflicts associated with applications of biotechnology.

Molecular Genetics-BS

1. Undergraduate molecular genetics majors acquire a basic mastery of fundamental concepts of biology, chemistry, mathematics, physics, and the scientific method
2. Undergraduate molecular genetics majors acquire a basic mastery of fundamental areas of molecular genetics, including transmission genetics, the central dogma, regulation of gene expression, quantitative and population genetics, genomics, recombinant DNA and biotechnology, and cell and developmental biology.
3. Undergraduate molecular genetics majors develop analytical and problem solving skills in areas of genetics and molecular biology.
4. Undergraduate molecular genetics majors acquire a basic mastery of experimental techniques and approaches in genetics and molecular biology.
5. Undergraduate molecular genetics majors acquire a basic mastery of data analysis and statistical approaches used in genetics.
6. Undergraduate molecular genetics majors effectively communicate their understanding of genetics and molecular biology both orally and in writing.
7. Undergraduate majors participate in academic research and/or outreach activities that are consistent with their interests and postgraduate plans.
8. Undergraduate majors acquire expertise relevant to their chosen area of specialization.

Physics-BS

1. Undergraduate Physics majors will acquire a basic mastery of the four fundamental areas of physics: classical mechanics, electromagnetism, quantum mechanics, and thermodynamics. Relevant courses include Physics 261, 555, 631, and 621.
2. Undergraduate Physics majors have developed powerful analytic and problem solving skills.
3. Undergraduate Physics majors have acquired a basic mastery of experimental physics.
4. Undergraduate Physics majors have acquired a basic mastery of data reduction and error analysis.
5. Undergraduate Physics majors are able to effectively communicate their physical understanding both professionally and colloquially.
6. Undergraduate majors are apprised of and encouraged to participate in academic research, industrial research, and/or outreach.

Zoology-BA

1. Students are able to describe the processes that underlie evolution and their manifestation in the natural world.
2. Students are able to explain ecological concepts, methods of study, and the interactions among organisms and between organisms and their environment.
3. Students are able to understand organismal diversity and functioning at all levels, from the molecular and cellular to the whole organism, as well as the interplay between organismal functioning and ecological and evolutionary processes.

4. Students participate in the process of discovery by conducting experimental and observational studies, synthesizing results with the primary literature, and communicating their questions, hypotheses, observations, and experiences to others.
5. Students demonstrate proficiency in mathematics, statistics, computer modeling, and the use of computers, as these topics relate to biology.
6. Students know the theoretical framework of evolution, ecology and organismal biology and understand science as a process, including the history of science as it relates to these three disciplines within biology.
7. Students are aware of current issues in biology, especially those that have significant ethical and societal implications, and will be able to communicate scientific concepts and processes.

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7. Students are aware of current issues in biology, especially those that have significant ethical and societal implications, and will be able to communicate scientific concepts and processes.

Social and Behavioral Sciences

Anthropological Sciences-BS

1. Students acquire foundational knowledge in each of the three major sub-disciplines within the major (physical anthropology, cultural anthropology and archaeology).
2. Students achieve mastery of core concepts in each of the three sub-disciplines within the major (physical anthropology, cultural anthropology, and archaeology). In doing so, they will acquire rigorous and empirically oriented skills.
3. Students accumulate breadth of knowledge by completing elective coursework in each of the three sub-disciplines within the major (physical anthropology, cultural anthropology and archaeology).
4. Students achieve in depth knowledge in one (or more) field by choosing at least two additional courses in any sub-discipline (physical anthropology, cultural anthropology and archaeology) within the major.

Anthropology-BA

1. Students acquire foundational knowledge in each of the three major sub-disciplines within the major (physical anthropology, cultural anthropology and archaeology).
2. Students achieve mastery of core concepts in each of the three major sub-disciplines within the major (physical anthropology, cultural anthropology and archaeology). In so doing, they will acquire rigorous and empirically oriented skills.
3. Students accumulate breadth of knowledge by completing elective coursework in each of the three sub-disciplines within the major (physical anthropology, cultural anthropology and archaeology)
4. Students achieve in depth knowledge in one (or more) field by choosing at least two additional courses in any sub discipline (physical anthropology, cultural anthropology or archaeology) within the major.

Atmospheric Sciences-BS

1. Students acquire the theoretical basis for fundamental atmospheric processes and systems.
2. Students are introduced to the computational and other corms of technology used in the atmospheric sciences.
3. Students learn to communicate atmospheric science concepts and methods clearly and concisely.
4. Students develop the ability to solve problems faced by atmospheric scientists.

Communication-BA

1. To offer students knowledge of the principles of communication within a social science framework and to foster an understanding of the role of communication in society
    1.1. Students should have an understanding of the principles of communication
    1.2. Students should be exposed to systematic trends in the development of core concepts related to communication

1.3. Students should be able to apply critical thinking and analytical skills to systematically evaluate communication problems and processes

2. To train students in the practice of communication
   2.1. Students graduating from the program should demonstrate basic competency in oral communication
   2.2. Students graduating from the program should demonstrate basic competency in written communication
3. To prepare students for jobs in the field of communication
   3.1. Encourage each student to complete an internship before graduation
   3.2. To facilitate knowledge transfer from the laboratory to the community, students will be encouraged to participate in independent research with the faculty

Criminology and Criminal Justice-BA

1. Students obtain comprehensive knowledge of the field of criminology.
2. Students acquire a grasp of the theoretical perspectives and concepts of the discipline.
3. Students are able to understand and evaluate research methods, designs, and statistical procedures and have opportunities to conduct research.
4. Students are provided with a strong foundation for seeking employment or graduate or professional training.
5. Honors students are able to engage in original research, write a senior thesis, and successfully compete for national scholarships and admission to leading graduate programs.

Economics-BA

1. Students demonstrate substantive knowledge of economics and public policy issues
2. Students will demonstrate their analytic and quantitative abilities, including their mathematics and statistical ability and logical thinking skills
3. Students develop their written communication skills
4. Students will be prepared for graduate training and/or employment

Economics-BS

1. Students demonstrate substantive knowledge of economics and public policy issues
2. Students demonstrate analytic and quantitative abilities, including their mathematics, statistics, and logical thinking skills
3. Students develop their communication skills
4. Students will be prepared for graduate training and/or employment

Geographic Information Science-BS

1. Students acquire fundamental concepts of geographic information sciences.
2. Students achieve proficiency with methods of geographic information sciences.
3. Students can represent complex technical information orally, visually, or in writing.

4. Students can apply geographic information science concepts and methods in experimental and/or research settings.

Geography-BA

1. Geography BA: Students acquire fundamental concepts of geography.
2. Geography BA: Students achieve familiarity with methods used in geography.
3. Geography BA: Students can communicate geographical concepts and methods orally, visually, or in writing.
4. Geography BA: Students can apply geographical concepts and methods in experimental and/or research settings.

Geography-BS

1. Geography BS: Students acquire fundamental concepts of geography.
2. Geography BS: Students achieve familiarity with methods used in geography.
3. Geography BS: Students can communicate geographical concepts and methods orally, visually, or in writing.
4. Geography BS: Students can apply geographical concepts and methods in experimental and/or research settings.

Globalization Studies-BA

1. Show an ability to analyze and draw conclusions about international events and developments employing multiple analytical perspectives.
2. Demonstrate proficiency in a foreign language appropriate to their specialization.
3. Show an understanding of the diversity of cultures, ideas and practices across the world.
4. Students are prepared for diverse types of employment and/or graduate-level education programs.

International Studies-BA

1. Show an ability to analyze and draw conclusions about international events and developments employing multiple analytical perspectives.
2. Demonstrate proficiency in a foreign language appropriate to their specialization.
3. Show an understanding of the diversity of cultures, ideas and practices across the world.
4. Students are prepared for diverse types of employment and/or graduate-level education programs.

International Studies-BS

1. Students show an ability to analyze and draw conclusions about international events and developments employing multiple analytical perspectives.
2. Students demonstrate analytical and quantitative abilities, including mathematical and logical skills, appropriate to their specialization in International Studies.
3. Students show an understanding of the diversity of cultures, ideas and practices across the world.

4. Students are prepared for entry into diverse types of employment and/or graduate-level educational programs.

Journalism-BA

1. To offer students' knowledge of the principles of journalism within a social science framework and to foster an understanding of the role of public affair journalism in society.
    1.1. Students should have an understanding of the core concepts and principles of the role of media in society.
    1.2. Students training to become journalists should be able to apply critical thinking and analytical skills to systematically evaluate problems and processes.
2. To train students in the practice of journalism.
    2.1. Students graduating from the program should demonstrate basic competency in journalistic skills of reporting and editing.
    2.2. Students graduating from the program should demonstrate improved ability to integrate knowledge from different fields.
3. To prepare students for jobs in media and journalism.
    3.1. Encourage each student in our program to complete an internship before graduation.
    3.2. To facilitate knowledge transfer from the laboratory to the community, students will be encouraged to participate in independent research projects with the faculty.

Neuroscience-BS

1. Students acquire a strong foundational background in core disciplines of neuroscience.
2. Students acquire statistical skills.
3. Students acquire advanced knowledge of molecular/cellular neuroscience, systems/behavioral neuroscience, or cognitive/computational neuroscience.
4. Students engage in critical reading of the primary scientific literature in advanced courses.

Political Science-BA

1. Acquire basic knowledge across the four major fields of political science—American politics, comparative politics, international relations, and political theory
2. Gain deeper knowledge of the scholarly literature in one of the four major fields
3. Become familiar with debates about theories, research methods, and substantive issues, and learn to engage and assess contributions to the literature
4. Develop analytic and critical thinking skills that will enable them to rigorously evaluate competing arguments and to appraise value-based claims

Political Science-BS

1. Students acquire a fundamental understanding of the theories, research methods, and substantive issues that guide the study of politics.
2. Students gain basic knowledge across three of the four major fields of Political Science: American Politics, Comparative Politics, International Relations, and Political Theory.
3. Students develop advanced knowledge of the methods of research design and data analysis as used in the discipline of Political Science.
4. Students display analytic and critical thinking skills that will enable them to rigorously evaluate competing arguments and to appraise value-based claims.

Psychology-BA

1. Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology
2. Students will understand and apply basic research methods in psychology, including research design, data analysis, and interpretation, and have opportunities to apply them in research endeavors
3. Students will respect and use critical thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes
4. Students understand the ethical issues involved in the research and practice of psychology
5. Students are able to write and communicate effectively in the discipline
6. Students will emerge from the major with realistic ideas about how to implement their psychological knowledge, skills, and values in occupational pursuits in a variety of settings

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Social Sciences Air Transportation-BA

1. Students acquire and apply foundational knowledge from the introductory courses in the core of the major to explain flight performance as well as federal and international aviation laws and policies.

2. Students acquire and apply statistical skills to critically evaluate data and research findings in the literature (e.g. geospatial data analyses).
3. Students apply quantitative skills to understand the management and operations of aviation-specific organizations, such as aircraft manufacturers, airlines, airports, and the air traffic management system.
4. Students comprehend and critically assess the social, political, economic, and/or physical structures of air transportation systems to explain individual and organizational behaviors.
5. Students know aviation regulations and policies and are able to anticipate their ramifications under different scenarios.
6. Students comprehend the structure of industry and communications flows and are able to pinpoint sources of and remedies for administrative disagreements.
7. Students are able to demonstrate how knowledge of advanced aircraft performance has implications for decision-making by management for airports, airlines, and aviation service providers.

Sociology-BA

1. Students develop comprehensive knowledge of discipline
2. Students understand theories and concepts
3. Students understand/apply methods and statistics
4. Students are prepared for employment and/or graduate school
5. Honors students achieve goals 1-4 at a heightened level

Speech and Hearing Science-BA

1. Develop a foundation of knowledge in the discipline
2. Acquire basic research & data analysis skills
3. Acquire some advanced knowledge in the discipline
4. Practice discipline specific writing skills
5. Develop the laboratory skills needed to advance knowledge in the discipline

World Politics-BA

1. Students acquire a fundamental understanding of the theories, research methods, and substantive issues that guide the study of political institutions and processes around the world at the national, cross-national and international levels.
2. Students gain basic knowledge in the areas of foreign policy and security, political institutions and processes, political economy and development, and international theory.
3. Students develop advanced knowledge of the scholarly literature in one of these areas.
4. Students display the analytic and critical thinking skills that are needed to rigorously evaluate competing arguments and to appraise value-based claims.