CSUCI Summary of Program Learning Outcomes for Academic Programs, Fall 2023

- Anthropology, B.A.

1. Summarize the major theories, concepts, terminologies, and approaches to anthropology;
2. Explain the role of evolution by natural selection and adaptation to the natural environment in the development of humans
3. Demonstrate a knowledge of human diversity and cultural interactions and a commitment to honoring that diversity;
4. Assess how the anthropological perspective can be applied in a variety of contemporary settings.
5. Apply the concepts of ethnocentrism and cultural relativism to modern problems;
6. Describe and discuss in an informed manner the ethical issues specific to anthropology;
7. Demonstrate knowledge within the several sub-fields of anthropology, emphasizing cultural anthropology, archaeology, and biological anthropology, having had elective opportunities to pursue specific interests; and
8. Apply techniques and methods used in collecting and analyzing anthropological information.

- Applied Physics, B.S.

1. Demonstrate understanding of the general principles of physics;
2. Demonstrate quantitative problem-solving skills;
3. Integrate the scientific method into problem-solving and experimentation;
4. Demonstrate critical thinking in the context of physics; and
5. Demonstrate understanding of physics literature such as textbooks, laboratory manuals, and publications geared toward undergraduates.

- Art, B.A. Art Studio Emphasis

1. Demonstrate methods of critical analysis through the analysis, interpretation, and evaluation of works of art;
2. Demonstrate informed understanding and appreciation of the role of art in contemporary society as well as throughout history;
3. Create and express personal ideas and opinions through artwork in response to diverse range of global events;
4. Explore the integration of traditional art techniques and materials with emerging art technologies;
5. Develop communication skills needed to articulate their conscious artistic intentions, and express coherent aesthetics;
6. Demonstrate familiarity with high-tech tools while working with emerging digital art technologies;
7. Demonstrate their preparation for professional artistic practice through the refinement of artistic concept, narrative and technique;

8. Complete in-depth work in specific media and demonstrate advanced competency in artistic production; and
9. Analyze a diverse range of career opportunities in their selected artistic discipline.

- Biology, B.S. - 120 units **and** Biology, B.A. - 120 units

1. Explain the basic structures and fundamental processes of life at molecular, cellular and organismal levels;
2. Identify the evolutionary processes that lead to adaptation and biological diversity;
3. Describe the relationship between life forms and their environments and ecosystems;
4. Collect, organize, analyze, interpret and present quantitative and qualitative data and incorporate them into the broader context of biological knowledge;
5. Effectively apply current technology and scientific methodologies for problem solving;
6. Find, select and evaluate various types of scientific information including primary research articles, mass media sources and world-wide web information; and
7. Communicate effectively in written and oral forms.

- Biotechnology & Bioinformatics, MS

Biotechnology

1. Work in cross-disciplinary teams to address questions of relevance to the biotechnology industry through the design and implementation of databases that integrate computational biology and empirical analyses
2. Explain techniques used to make biological inferences from protein and nucleic acid sequences
3. Identify biologically relevant problems in biotechnology, biomedical, and agricultural research
4. Outline the state and federal regulatory processes that govern the biotechnology industry
5. Explain fundamental principles which underlie modern techniques in biotechnology
6. Demonstrate proficiency in performing fundamental molecular biology techniques

Bioinformatics

7. Work in cross-disciplinary teams to address questions of relevance to the biotechnology industry through the design and implementation of databases that integrate computational biology and empirical analyses
8. Explain techniques used to make biological inferences from protein and nucleic acid sequences
9. Identify biologically relevant problems in biotechnology, biomedical, and agricultural research
10. Outline the state and federal regulatory processes that govern the biotechnology industry

11. Explain fundamental principles which underlie modern techniques in biotechnology
12. Demonstrate basic skills in programming, design and management of bioinformatics databases

- Business, B.S.

1. Prepare students for employment in a variety of public and private organizations.
2. Prepare students for further study in graduate or professional schools.
3. Demonstrate critical thinking skills by identifying, evaluating, synthesizing, and presenting issues related to accounting, economics, finance, information systems, management, and marketing.
4. Demonstrate communication skills by writing excellent reports and papers and making effective oral presentations in English.
5. Demonstrate collaboration skills by working effectively with others in group settings - both inside and outside the classroom.
6. Demonstrate personal conduct that reflects an ethical understanding of complex business, economic and social issues.
7. Demonstrate basic competencies in the academic disciplines related to regional, national and global business and economics.

- Master of Business Administration, M.B.A.

1. Demonstrate high proficiency in critical thinking, oral and written communication, personal ethical conduct and collaboration skills.
2. Demonstrate orally and in writing analytical and integrative skills in making business decisions.
3. Demonstrate an understanding of the global operating environment of business.
4. Produce written innovative and integrative business plans, including plans that adapt to uncertain and unpredictable environments;
5. Demonstrate an understanding of relevant disciplines.
6. Demonstrate leadership skills in a variety of situations and settings.

- Chemistry, B.A - 120 units and Chemistry, B.S. - 120 units

1. Explain the fundamental concepts of Chemistry;
2. Evaluate a problem and appropriately apply the fundamental concepts of Chemistry to the problem;
3. Formulate hypotheses and devise and perform experiments to test a hypothesis as individuals and in a team;
4. Explain key concepts in chemistry effectively through oral and written communication; and

5. Interpret and evaluate the chemical literature.

- Chicana/o Studies, B.A.

1. Demonstrate knowledge of the history and culture of people of Mexican and Latin American origins in the United States, specifically within the region of Southern California.
2. Analyze the literary, performativity, artistic and visual expressions of Chicanas/os and Latinas/os.
3. Distinguish variations within Chicana/o communities in respect to class, culture, ethnicity, gender, race, and sexuality.
4. Identify and discuss the major theoretical and conceptual questions informing Chicana/o Studies over time.
5. Summarize, explain, and apply social science methods for analyzing social, political, and economic phenomena relevant to the multicultural populations such as demographic trends, public policy, judicial systems, segregation, business practices, public health concerns, etc.
6. Effectively demonstrate competence in oral, written, and/or visual media to present research findings.

- Communication, B.A.

1. Create and analyze both oral and written messages;
2. Collaborate with others in culturally diverse groups;
3. Analyze and create solutions to interpersonal, organizational, and community conflict;
4. Apply communication theory to specific content areas of health, environmental, or organizational settings;
5. Evaluate and explain human communication processes by using a variety of research methods;
6. Apply communication competencies in a community engagement/service learning environment.

- Computer Science, B.S.

1. Demonstrate critical thinking and problem solving skills by identifying, evaluating, analyzing and presenting fundamental software solutions and their applications;
2. Demonstrate the knowledge of current computing practices and broad technology use in industry and society, including a working knowledge of software development techniques;
3. Be cognizant of emerging new technologies and industrial practices connected to the computer industry;

4. Demonstrate communication, research and cooperation skills by working effectively with others in interdisciplinary group settings - both inside and outside the classroom; and
5. Demonstrate a sense of exploration that enables them to pursue rewarding careers in high-tech and bio-tech industries with life-learning.

- Computer Science, M.S.

1. Demonstrate critical thinking, problem solving, and advanced computational skills by identifying, evaluating, analyzing, synthesizing, and presenting fundamental and advanced mathematical and computer science issues and their applications.
2. Demonstrate the knowledge of current computing practices and broad technology use in industry and education, including a working knowledge of software development techniques in various settings.
3. Be knowledgeable of emerging new technologies and industrial practices connected to the computer industry and demonstrate understanding of computing technologies in society.
4. Demonstrate cooperation skills by working effectively with others in interdisciplinary group settings – both inside and outside the classroom.
5. Demonstrate independent working and thinking skills by completing a graduate project and/or master thesis.
6. Demonstrate a sense of exploration that enables them to pursue rewarding careers in high-tech industries, bio-tech industries, finance, businesses, education systems, military and local and federal government
7. Demonstrate flexibility, transferability and adaptability of their life-learning skills that are so important n fast changing national and international economy.

- Dance Studies, B.A.

1. Develop an embodied practice for lifelong engagement with dance as a function of education, community, cultural knowledge, social justice, equity, history, ritual, and performance;
2. Adapt various somatic, breathing, kinesthetic, and mindful strategies necessary for building a life connected to dance practice;
3. Integrate the practice and embodied knowledge of dance to a range of 21st century skills such as communication, collaboration, critical thinking, digital/media literacy, creativity, and global awareness;
4. Reflect on dance as the primal form of human communication through which traditions and cultures are preserved and shared; and
5. Analyze dance as a continually evolving form acknowledging the origins, contributions, and confluences of African, Latin, Asian, European, and the Indigenous peoples of North and South America, and how race and racism, class, gender, sexuality, religion, spirituality, national origin, immigration status, ability, tribal citizenship, sovereignty, language, age, economics, and/or technology have shaped the way people move.

CSUCI Summary of Program Learning Outcomes for Academic Programs, Fall 2023

- Early Childhood Studies, B.A.

1. Students are qualified to teach in and administer programs serving young children (with and without disabilities) from birth through eight and their families;
2. Students actively engage children in their learning;
3. Students are able to teach all subjects in their area of specialty and link content to pedagogy;
4. Students acknowledge and support diversity of languages and cultures in and among children and families;
5. Students meet the diverse needs of all children including those with special needs; and
6. Students are reflective and deliberative practitioners, integrating research, theory, and effective practices into their teaching.

- Economics, B.A.

1. Apply economic perspective and reasoning to everyday situations and current events.
2. Explain and contrast different economic theories and their assumptions.
3. Synthesize economic research in their writing, identifying strengths and weaknesses.
4. Formulate and support arguments through the use of data and quantitative reasoning.
5. Earn employment or pursue postgraduate education commensurate with their degree.

- Education, M.A.

1. Demonstrate knowledge of current research, theory, and best practices in education and chosen area of specialization
2. Demonstrate an in-depth knowledge of research on serving all students particularly related to students with diversity of ability, language, culture, socio-economic status, and gender
3. Demonstrate skills in creating equitable classrooms, groups and programs.
4. Demonstrate knowledge of assessment and assessment design
5. Advocate effectively for children, families and service delivery systems in chosen area of specialization
6. Effectively engage families in education
7. Analyze policies related to schooling, school wide reforms and proven practices
8. Demonstrate knowledge of legal developments and their ramifications
9. Communicate and establish collaboration among peers, school and community
10. Lead and conduct professional development in area of expertise
11. Act as mentor for other professionals

12. Design, conduct, and present a Masters thesis or project

- English, B.A. - 120 units

1. Express original and creative ideas in writing and speech;
2. Practice effective editing, including appropriate use of English grammar and usage conventions;
3. Analyze a diversity of texts, ideas, and problems from multiple perspectives (multicultural, interdisciplinary, international, experiential, theoretical and/or educational);
4. Find, evaluate, and synthesize scholarship, research, and information from a variety of sources and disciplines;
5. Articulate an accurate perception of their performance in the program.

- Environmental Science & Resource Management, B.S.

1. Identify the scientific, social scientific, and humanistic aspects of environmental issues;
2. Identify, locate, evaluate, synthesize, and present current research and information on environmental issues;
3. Define environmental problems from the perspectives of both environmental science and resource management;
4. Identify possible causes and propose solutions to environmental problems from the perspectives of both environmental science and resource management;
5. Evaluate proposed solutions to environmental problems from the perspectives of both environmental science and resource management;
6. Use the methodologies of the natural and social sciences to formulate testable hypotheses concerning environmental problems and issues;
7. Collect, organize, analyze, interpret, and present quantitative and qualitative data; and
8. Make use of current, technological tools in the collection, organization, analysis, and interpretation of data.

- Global Studies, B.A. - 120 units

1. Demonstrate knowledge and understanding of the interdisciplinary nature of contemporary global issues, processes, and systems (e.g., issues such as environmental justice, immigration or poverty, processes such as the economic and political interdependency among nations, and systems such as global governance bodies).
2. Analyze global issues from multiple viewpoints.
3. Acquire the communication skills needed to work effectively in a global and multicultural context.
4. Engage in communicative activities in a second language (other than English) at an intermediate level (following ACTFL language proficiency guidelines).

5. Engage as active citizens in a global society.

- Health Science, B.S. - 120 units

1. Identify issues and trends in health care delivery systems and public health areas and implement solutions to better health care services to individuals and ethnically and culturally diverse populations.
2. Analyze the nature, transmission, pathologic processes, prevention, and control of human diseases from a public health perspective.
3. Demonstrate an understanding of health care information systems that affect service delivery with agencies and in the public.
4. Demonstrate an understanding of the aging population and the ability to apply knowledge and skills in gerontology in fields from disease prevention and life extension to policy planning and social reform.
5. Apply research skills in organizational and personal health settings, and in health education practice.
6. Integrate and apply current management concepts and skills in areas of health care personnel, organizations and agencies, emphasizing problem-solving techniques and group communication skills.

- History, B.A.

1. Show good understanding and knowledge of the history of North America;
2. Show good understanding and knowledge of global history in other regions of the world;
3. Demonstrate good knowledge and problem-solving skills in analyzing contemporary and historical events;
4. Demonstrate good communication skills in oral and written forms; and
5. Command good skills in historical research, analysis, and presentations.

- Information Technology, B.S.

1. Demonstrate critical thinking and problem solving skills by identifying, evaluating, analyzing and presenting fundamental software solutions and their applications;
2. Demonstrate the knowledge of current computing practices and broad technology use in industry and society, including a working knowledge of software development techniques;
3. Be cognizant of emerging new technologies and industrial practices connected to the computer industry;
4. Demonstrate communication, research and cooperation skills by working effectively with others in interdisciplinary group settings - both inside and outside the classroom; and
5. Demonstrate a sense of exploration that enables them to pursue rewarding careers in high-tech and bio-tech industries with life-learning.

CSUCI Summary of Program Learning Outcomes for Academic Programs, Fall 2023

- Liberal Studies, B.A.

1. Synthesize content knowledge, ideas, and approaches from integrative perspectives across disciplines to examine societal issues;
2. Demonstrate the capacity to lead others in addressing issues of public concern;
3. Examine societal issues from multiple cultural perspectives;
4. Evaluate societal issues in the context of international perspectives;
5. Analyze oral or written communication for accuracy of content, logic of argument, and clarity of reasoning.

- Mathematics B.S.

1. Demonstrate critical thinking and problem solving skills;
2. Demonstrate the ability to use advanced mathematical methods by identifying, evaluating, classifying, analyzing, and synthesizing abstract concepts and numerical data in various contexts and situations;
3. Demonstrate knowledge of current mathematical applications, computing practices, and technology in science, industry, or education;
4. Demonstrate the ability to use modern software and engage in abstract thinking and common mathematical practices connected to mathematical, as well as scientific or industrial, problems;
5. Propose, evaluate, and convey novel solutions to mathematical, as well as scientific, educational, industrial, or business, problems;
6. Demonstrate cooperation skills by working effectively with others in interdisciplinary group settings, both inside and outside the classroom; and
7. Demonstrate a sense of exploration that enables students to pursue lifelong learning and currency in their careers in mathematics, statistics, education, high-tech and biotech industries.

- Mathematics, M.S.

1. Demonstrate critical thinking, problem solving, and advanced mathematical skills by identifying, evaluating, analyzing, synthesizing and presenting fundamental and advanced mathematical and computer science issues and their applications.
2. Demonstrate the knowledge of current mathematical theories and broad technology use in industry, including a working knowledge of software development techniques in an industrial setting.
3. Be knowledgeable of emerging new technologies and industrial practices connected to the computer industry and demonstrate understanding of computing technologies in society.
4. Demonstrate cooperation skills by working effectively with others in interdisciplinary group settings – both inside and outside the classroom.
5. Demonstrate independent working and thinking skills by completing a graduate project and/or master thesis.

6. Demonstrate a sense of exploration that enables them to pursue rewarding careers in high-tech industries, bio-tech industries, businesses, education systems, military and local and federal government
7. Demonstrate flexibility, transferability and adaptability of their life-learning skills that are so important n fast changing national and international economy.

- Mechatronics Engineering, B.S.

1. Demonstrate critical thinking and problem solving skills by identifying, evaluating, analyzing, synthesizing and presenting fundamental engineering and technical issues and their applications.
2. Demonstrate the knowledge of current engineering practices and broad technology used in industry, including a working knowledge of software, hardware, robotics, automation and other engineering techniques.
3. Be cognizant of emerging new technologies and industrial practices connected to engineering and demonstrate understanding of the role of various technologies in society.
4. Demonstrate cooperation skills by working effectively with others in interdisciplinary group settings - both inside and outside the classroom.
5. Demonstrate technical and presentation skills and a sense of exploration that enables them to pursue rewarding careers in high-tech and engineering industries.

- Nursing, B.S.

1. Complete a liberal education that creates a critical thinker who demonstrates intellectual curiosity, rational inquiry, and the ability to problem solve.
2. Demonstrate knowledge, skills, and attitudes in leadership, quality improvement, and patient safety in order to provide high quality healthcare.
3. Integrate evidence of current best practice in the professional nurse as provider of care, teacher, patient advocate, designer/coordinator of care, and member of the profession in a variety of settings.
4. Demonstrate knowledge, skills, and attitudes regarding information technology, information systems and communication devices that support safe nursing practice.
5. Identify and participate in the change techniques in healthcare policy, finance and regulatory environments, including local, state, national, and global healthcare trends.
6. Identify and evaluate population health issues by focusing on health promotion, disease and injury prevention across and throughout the life span including assisting individuals, families, groups, communities, and populations.
7. Practice core values within an ethical and legal framework for the nursing profession.
8. Plan and provide culturally competent nursing care to patients at various levels including individuals, families, groups, communities, and populations across the life span and the continuum of healthcare environments and populations.

9. Demonstrate effective communication skills conveying accurate information in oral, written, and presentation formats.

- Nursing, M.S.N

1. Utilize knowledge from sciences, humanities, and nursing to promote health, prevent disease, advocate and collaborate with interprofessional colleagues to provide health care to individuals, families, groups, and populations.
2. Use organizational and systems frameworks; ethical decision-making; and effective working relationships to identify and address current healthcare and educational issues.
3. Effectively integrate and communicate using written, oral, and electronic methods with clients, colleagues, and other stakeholders.
4. Utilize leadership models and ethical decision-making skills to improve the quality of care provided in a variety of settings.
5. Translate, integrate, and apply evidence-based practice and principles of quality improvement in a variety of care and educational settings.
6. Integrate doctrines of cultural congruence into nursing interventions when working with individuals, families, groups and/or populations.

- Performing Arts, B.A.

1. Perform in one or more of the Performing Arts emphases of dance, music, and theatre;
2. Demonstrate critical thinking through analysis, interpretation, and evaluation of written, visual, and audio texts in an interdisciplinary context;
3. Understand and appreciate the roles of the performing arts in contemporary as well as historical cultures and societies.
4. Work collaboratively with people from a diverse range of artistic and cultural backgrounds;
5. Express themselves effectively in written, physical, and spoken forms in response to a variety of personal, local, global, and historical events; and
6. Apply multiple theoretical perspectives to their own

- Political Science, B.A.

1. Write clearly and with purpose on issues of international and domestic politics and public policy;
2. Participate as a civically engaged member of society;
3. Analyze political and policy problems and formulate policy options;

4. Use electronic and traditional library resources to research key local, state, national and international policy issues and present results;
5. Demonstrate competency with basic tools underlying modern social science research including competency in statistics and qualitative analysis;
6. Demonstrate critical thinking, including the ability to form an argument, detect fallacies, and martial evidence, about key issues of public policy and politics;
7. Discuss the major theories and concepts of political science and its subfields; and
8. Deliver thoughtful and well articulated presentations of research findings

- Psychology, B.A.

1. Students should be familiar with the major theoretical approaches, findings and historical trends in psychology;
2. Students should understand and be able to use major research methods in psychology, including design, data analysis and interpretation;
3. Students should have an understanding of applications of psychology to personal, social and organizational issues;
4. Students should demonstrate information competence and the ability to use computers and other technology for multiple purposes;
5. Students should use and respect skeptical inquiry, critical thinking, and the scientific approach to understand behavior;
6. Students should have an understanding of the complexity of cultural diversity;
7. Students should be able to express themselves effectively in written and oral communication; and
8. Students should understand themselves and others in a cultural context and develop interpersonal skills for diverse settings over the lifespan.

- Sociology, B.A.

1. Understanding the role of evidence in the social sciences and how to conduct both quantitative and qualitative sociological research;
2. Effective communication, written and oral, about the field of sociology;
3. Substantive knowledge of core research areas and theoretical and methodological controversies in sociology and the ability to think critically about them;
4. Understanding the history and evolution of the discipline of sociology; and
5. Preparedness for professional or graduate study beyond the B.A. degree, or for entry into a career in the social sciences.

- Spanish, B.A.

CSUCI Summary of Program Learning Outcomes for Academic Programs, Fall 2023

1. Achieve intermediate-high to advanced language proficiency in speaking, listening, reading and writing (proficiency levels are defined by the American Council on the Teaching of Foreign Languages).
2. Demonstrate a reasonable understanding of the ways of thinking (ideas, beliefs, attitudes, values, philosophies), behavioral practices (patterns of social interactions), and cultural products (for example, art, history, literature) of the Spanish-speaking world.
3. Demonstrate a basic understanding of various linguistic features of the Spanish language (for example, general dialectal differences and the influence of English on U.S. Spanish).