

Language Arts and Communication, students are able to choose and apply appropriate communication strategies based on consideration of audience and purpose.

- Upon completion of the AA in Liberal Arts & Sciences: Language Arts and Communication, students are able to recognize and appreciate the value of a multicultural world and of diversity in its many forms.

Required Core: Select at least 18 Units from Below with at least 3 Units from 2 Disciplines (18-22 units)

ASL 1A (American Sign Language I)	3
ASL 1B (American Sign Language II)	3
ASL 2A (American Sign Language III)	3
ASL 2B (American Sign Language IV).....	3
CMST 1 (Fundamentals of Public Speaking)	3
CMST 2 (Oral Interpretation of Literature)	3
CMST 3 (Group Communication)	3
CMST 4 (Introduction to Communication Studies).....	3
CMST 5 (Readers Theater).....	3
CMST 10 (Interpersonal Communication).....	3
CMST 11 (Intercultural Communication).....	3
CMST 46 (Argumentation and Debate)	3
CMST 48 (Activities in Forensics)	1 - 4
ENG 1A (Critical Reading and Composition)	3
ENG 1AEX (Critical Reading and Composition Expanded)	4
ENG 4 (Critical Thinking and Writing about Literature)	3
ENG 7 (Critical Thinking and Writing Across Disciplines)	3
ENG 11 (Introduction to Creative Writing).....	3
ENG 12A (Craft of Writing Fiction).....	3
ENG 12B (Craft of Writing Fiction: Intermediate).....	3
ENG 12C (Craft of Writing Fiction: Advanced).....	3
ENG 13A (The Craft of Writing Poetry: Beginning)	3
ENG 13B (The Craft of Writing Poetry: Intermediate).....	3
ENG 19A (Journal of Arts, Literature, and Academic Writing A).....	3
ENG 19B (Journal of Arts, Literature, and Academic Writing B).....	3
ENG 20 (Studies in Shakespeare).....	3
ENG 32 (U.S. Women's Literature).....	3
ENG 35 (Modern American Literature)	3
ENG 41 (Modern World Literature)	3
ENG 42 (Literature of the African Diaspora in America)	3
ENG 44 (Literature of the American West)	3
ENG 45 (Studies in Fiction)	3
ESL 23 (Advanced Grammar)	3
ESL 24 (Advanced Reading and Composition I).....	6
ESL 25 (Advanced Reading and Composition II)	6
ESL 26 (Advanced Editing).....	3
FREN 1A (Beginning French).....	5
FREN 1B (Elementary French)	5
FREN 2A (Intermediate French I)	4
FREN 2B (Intermediate French II)	4
MSCM 1 (Introduction to Reporting and Newswriting).....	3
MSCM 7 (Introduction to Public Relations).....	3
MSCM 16A (Express College Newspaper A)	3
MSCM 16B (Express College Newspaper B).....	3
MSCM 16C (Express College Newspaper C).....	3
MSCM 16D (Express College Newspaper D)	3
MSCM 17 (Express Editorial Board).....	1
MSCM 19A (Journal of Arts, Literature, and Academic Writing A) .3	

MSCM 19B (Journal of Arts, Literature, and Academic Writing B) .3	
MSCM 34A (Naked Magazine: College Magazine A)	3
MSCM 34B (Naked Magazine: College Magazine B).....	3
MSCM 35 (Multimedia Reporting)	3
MSCM 72 (Introduction to Photojournalism)	3
PHTO 72 (Introduction to Photojournalism)	3
SPAN 1A (Beginning Spanish).....	5
SPAN 1B (Elementary Spanish)	5
SPAN 2A (Intermediate Spanish I)	4
SPAN 2B (Intermediate Spanish II)	4
SPAN 21 (Spanish for Spanish Speakers I)	5
SPAN 22 (Spanish for Spanish Speakers II)	5
SPAN 23 (Introduction to Hispanic Literature)	3

Total Units in the Area of Emphasis 18-22

In addition to the Required Courses in the Area of Emphasis, students must complete a General Education pattern in order to earn a degree: see the Las Positas College General Education Pattern for Associate of Arts (AA) Degree, California State University General Education-Breadth, or the Intersegmental General Education Transfer Curriculum (for CSU) patterns for listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program, the optional course(s) taken, and the GE pattern selected. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

AA – Liberal Arts & Sciences: Mathematics and Science

About the Degree

The Liberal Arts & Sciences: Mathematics and Science AA courses emphasize the natural sciences, which examine the physical universe, its life forms and its natural phenomena. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.

Program Outcomes

- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to apply mathematical and scientific ideas to analyze real-world situations.
- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to read, write, listen to, and speak about mathematical and scientific ideas with understanding.
- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to use appropriate technology and/or tools to enhance their scientific thinking and understanding.
- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to use scientific

reasoning to solve problems or conduct research, and assess the reasonableness of their results.

Required Core: Select at least 18 Units from Below with at least 6 Units from Science and 3 Units from Mathematics (18-21 units)

Mathematics

CS 17 (Discrete Mathematical Structures)4
 MATH 1 (Calculus I).....5
 MATH 2 (Calculus II)5
 MATH 3 (Multivariable Calculus).....5
 MATH 5 (Ordinary Differential Equations).....3.5
 MATH 7 (Elementary Linear Algebra)3.5
 MATH 10 (Discrete Mathematical Structures).....4
 MATH 27 (Number Systems for Educators).....3
 MATH 30 (College Algebra for STEM)4
 MATH 33 (Finite Mathematics)4
 MATH 34 (Calculus for Business and Social Sciences).....5
 MATH 39 (Trigonometry).....4
 MATH 40 (Statistics and Probability)4
 MATH 47 (Mathematics for Liberal Arts)3

Science

ANTR 1 (Biological Anthropology)3
 ANTR 1L (Biological Anthropology Lab)1
 ANTR 2L (Archaeology Field Lab)1
 ANTR 13 (Introduction to Forensic Anthropology)3
 ASTR 10 (Introduction to Astronomy: The Solar System)3
 ASTR 20 (Introduction to Astronomy: Stars and the Universe).....3
 ASTR 30L (Introduction to Astronomy Lab)1
 BIO 1A (General Botany)5
 BIO 1B (General Zoology)5
 BIO 1C (Cell and Molecular Biology)5
 BIO 7A (Human Anatomy)5
 BIO 7B (Human Physiology)5
 BIO 7C (Microbiology)5
 BIO 10 (Introduction to the Science of Biology)4
 BIO 20 (Contemporary Human Biology).....3
 BIO 30 (Introduction to College Biology).....4
 BIO 40 (Humans and the Environment).....3
 BIO 50 (Anatomy and Physiology).....4
 BIO 60 (Marine Biology)4
 BIO 70 (Field Biology)3
 CHEM 1A (General College Chemistry I).....5
 CHEM 1B (General College Chemistry II).....5
 CHEM 12A (Organic Chemistry I)5
 CHEM 12B (Organic Chemistry II).....5
 CHEM 30A (Intro and Applied Chemistry I).....4
 CHEM 30B (Introductory and Applied Chemistry II)4
 CHEM 31 (Intro to College Chemistry)4
 EVST 5 (Energy and Sustainability)3
 GEOG 1 (Introduction to Physical Geography).....3
 GEOG 1L (Introduction to Physical Geography Laboratory)1
 GEOG 8 (Introduction to Atmospheric Science)3
 GEOG 12 (Geography of California)3
 GEOL 1 (Physical Geology)3
 GEOL 1L (Physical Geology Laboratory).....1
 GEOL 2 (Historical Geology with Lab)4

GEOL 5 (Environmental Geology: Hazards & Disasters).....3
 GEOL 7 (Environmental Geology: Resources, Use Impact & Pollution).....3
 GEOL 12 (Introduction to Oceanography).....3
 GEOL 12L (Intro to Oceanography Lab).....1
 PHYS 1A (General Physics I)5
 PHYS 1B (General Physics II)5
 PHYS 1C (General Physics III).....5
 PHYS 1D (General Physics IV)3
 PHYS 2A (Introduction to Physics I)4
 PHYS 2B (Introduction to Physics II)4
 PHYS 10 (Descriptive Physics)3
 PHYS 10L (Descriptive Physics Lab)1
 PSYC 4 (Brain, Mind, and Behavior)3

Total Units in the Area of Emphasis 18-21

In addition to the Required Courses in the Area of Emphasis, students must complete a General Education pattern in order to earn a degree: see the Las Positas College General Education Pattern for Associate of Arts (AA) Degree, California State University General Education-Breadth, or the Intersegmental General Education Transfer Curriculum (for CSU) patterns for listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program, the optional course(s) taken, and the GE pattern selected. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

AA – Liberal Arts & Sciences: Social and Behavioral Sciences

About the Degree

The Liberal Arts & Sciences: Social and Behavioral Sciences AA courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

Program Outcomes

- Upon completion of the AA in Liberal Arts & Sciences: Social and Behavioral Sciences, students are able to apply basic social scientific methods to investigate the relationships among individuals, cultures, and societies.
- Upon completion of the AA in Liberal Arts & Sciences: Social and Behavioral Sciences, students are able to describe the major concepts, theoretical perspectives, empirical findings, and historical trends in the social science disciplines.
- Upon completion of the AA in Liberal Arts & Sciences: Social and Behavioral Sciences, students are able to identify the major ideas, values, beliefs, and experiences that have shaped human history and cultures.

Required Core: Select at least 18 Units from

**Below with at least 3 Units from
3 Disciplines (18-20 Units)**

AJ 50 (Intro to Admin of Justice)	3
AJ 54 (Investigative Reporting)	3
AJ 55 (Intro to Correctional Science)	3
AJ 56 (Fundamentals of Crime and Delinquency)	3
AJ 59 (Child Abuse in the Community)	3
AJ 60 (Criminal Law)	3
AJ 61 (Evidence)	3
AJ 63 (Criminal Investigation)	3
AJ 64 (Patrol Procedures)	3
AJ 66 (Juvenile Procedures)	3
AJ 68 (Police Ethics and Leadership)	3
AJ 69 (Sex Crime Investigation)	3
AJ 70 (Community Relations)	3
AJ 74 (Gangs and Drugs)	3
AJ 89 (Family Violence)	3
ANTR 1 (Biological Anthropology)	3
ANTR 2 (Introduction to Archaeology)	3
ANTR 3 (Cultural Anthropology)	3
ANTR 4 (Language and Culture)	3
ANTR 5 (Cultures of the U.S. in Global Perspective)	3
ANTR 6 (Anthropology of Sex and Gender)	3
ANTR 7 (Native American Cultures of North America)	3
ANTR 8 (World Prehistory In Archaeological Perspective)	3
ANTR 12 (Magic/Religion/Witchcraft/Healing)	3
ANTR 13 (Introduction to Forensic Anthropology)	3
ECE 10 (Introduction to Education)	4
ECE 40 (Social and Emotional Foundations for Early Learning)	3
ECE 54 (Child Health, Safety and Nutrition)	3
ECE 56 (Child Growth and Development)	3
ECE 60 (Introduction to the Young Child With Exceptional Needs)	3
ECE 61 (Literature for the Young Child)	3
ECE 62 (Child, Family and Community)	3
ECE 74 (Child Guidance)	2
ECE 79 (Teaching in a Diverse Society)	3
ECON 1 (Principles of Microeconomics)	3
ECON 2 (Principles of Macroeconomics)	3
ECON 5 (Economic History of the United States)	3
ECON 10 (General Economics)	3
ENG 32 (U.S. Women's Literature)	3
ENG 44 (Literature of the American West)	3
GEOG 2 (Cultural Geography)	3
GEOG 5 (World Regional Geography)	3
GEOG 12 (Geography of California)	3
GS 1 (Introduction to Global Studies)	3
GS 2 (Global Issues)	3
HIST 1 (Western Civilization to 1600)	3
HIST 2 (Western Civilization Since 1600)	3
HIST 3 (World History to 1500)	3
HIST 4 (World History since 1500)	3
HIST 7 (US History Through Reconstruction)	3
HIST 8 (US History Post-Reconstruction)	3
HIST 14 (History and American Cultures of California)	3
HIST 25 (American Indian History)	3
HIST 28 (History of American West)	3
HIST 32 (U.S. Women's History)	3
HEA 1 (Introduction to Personal Health)	3
HEA 3 (Women's Health)	3
HEA 7 (Introduction to Public Health)	3
HEA 11 (Health and Social Justice)	3
MSCM 5 (Introduction to Mass Communications)	3
MSCM 31 (Introduction to Media)	3
POLI 7 (Introduction to American Government)	4
POLI 12 (Introduction to California State and Local Government)	3
POLI 20 (Comparative Government)	3
POLI 25 (Introduction to Political Theory)	3
POLI 26 (Introduction to Gender, Sexuality, and Politics)	3
POLI 30 (International Relations)	3
PCN 3 (Theories And Concepts Of Counseling: An Introduction)	3
PCN 5 (Introduction to Social Work and Human Services)	3
PCN 13 (Multicultural Issues in Contemporary America)	3
PSYC 1 (General Psychology)	3
PSYC 3 (Introduction to Social Psychology)	3
PSYC 4 (Brain, Mind, and Behavior)	3
PSYC 6 (Abnormal Psychology)	3
PSYC 10 (Psychology of Human Sexuality)	3
PSYC 12 (Life-Span Psychology)	3
PSYC 13 (Psychology of Women)	3
PSYC 15 (Abnormal Child Psychology)	3
PSYC 17 (The Psychology of Sleep and Dreams)	3
PSYC 21 (Introduction to Cross-Cultural Psychology)	3
PSYC 25 (Research Methods)	4
PSYC 27 (Introduction to Cognitive Science)	3
SOC 1 (Principles of Sociology)	3
SOC 3 (Cultural and Racial Minorities)	3
SOC 4 (Marriage and Family Relations)	3
SOC 5 (Introduction to Global Studies)	3
SOC 6 (Social Problems)	3
SOC 7 (Sociology of Sexuality)	3
SOC 11 (Sociology of Gender)	3
SOC 12 (Popular Culture)	3
SOC 13 (Research Methods)	4
WMST 1 (Introduction to Women's Studies)	3
WMST 2 (Global Perspective of Women)	3
Total Units in the Area of Emphasis	18-20

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LIBRARY STUDIES

Library Studies are for students doing research projects, transferring to a four-year college, or wanting to locate sources of information in a more efficient manner. These classes teach the research process, including location, evaluation, and citation of sources from the library catalog, the library databases, and the web. Students transferring to a four-year college will be expected to have these research skills.

Library Studies Courses (LIBR)

LIBR 1 WORKING WITH SOURCES 1 UNIT

Introduction to using sources as supporting documentation in a college level research project. Teaches the skills needed to successfully find, evaluate, use, cite, and document information using library and open web sources. Focus on identifying appropriate sources and proper use of sources. Students will learn to distinguish between source types, how to avoid plagiarism, and how to use sources in their research projects. 18 hours lecture. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

LIBR 4 COLLEGE RESEARCH TECHNIQUES 0.5 UNITS

Introduction to basic research techniques in a college library. Focus is on use of the library catalog, search strategies, organization of materials in the library including reference, faculty reserves, circulating books, audiovisuals, use of reference materials, evaluation of relevant resources, recognition of plagiarism, and bibliographic citation of books, audiovisuals, and magazines and journals. 9 hours lecture. Transfer: CSU, UC*. *LIBR 4, 5, 6, 7, and 8 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: P/NP

LIBR 5 COLLEGE RESEARCH AND DATABASES 0.5 UNITS

Introduction to research techniques in a college library using general research databases. Focus on campus and remote use of multi-disciplinary research databases, search strategies, distinction between scholarly journals and popular magazines, evaluation of relevant resources, recognition of plagiarism, and bibliographic citation of articles from magazine, journal, and newspaper databases. 9 hours lecture. Transfer: CSU, UC*. *LIBR 4, 5, 6, 7, and 8 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: P/NP

LIBR 6 RESEARCH IN SPECIAL SUBJECTS 0.5 UNITS

Introduction to college library research techniques in a specific subject area. Focus on campus and remote use of subject databases, emphasis on discipline specific physical and electronic resources, search strategies, evaluation of relevant resources, distinction between scholarly journals and popular magazines, discussion of plagiarism, and bibliographic citation of materials. 9 hours lecture. Transfer: CSU, UC*. *LIBR 4, 5, 6, 7, and 8 combined: maximum UC credit,

one course.

Degree Applicable, Credit Grading Option: P/NP

LIBR 7 THE OPEN WEB AND SEARCH ENGINES 0.5 UNITS

Introduction to research techniques in a college library using search engines to find materials on the open web. Focus on use of the open web for research purposes, including web search strategies, appropriate search engines and directories, evaluation techniques for web resources, recognition of plagiarism, and bibliographic citation of web resources. 9 hours lecture. Transfer: CSU, UC*. *LIBR 4, 5, 6, 7, and 8 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: P/NP

LIBR 8 RESEARCH AND INFORMATION LITERACY 2 UNITS

Introduction to research techniques using college library resources. Teaches the skills needed to successfully find, evaluate, and document information in print, electronic, and Internet formats. Covers plagiarism, the ethical and legal aspects of information use, and the critical thinking skills necessary for successful college research. 36 hours lecture. Transfer: CSU, UC*. *LIBR 4, 5, 6, 7, and 8 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: OP

LIBR 29 INDEPENDENT STUDY, LIBRARY STUDIES 0.5-2 UNITS

For course information, see "Independent Studies". 27-108 hours laboratory.

MARKETING

Marketing consists of activities that direct the flow of goods and services from producer to consumer. This may include product development, retail management, distribution, advertising, and personal selling. This broad field offers many employment opportunities and the course offerings at Las Positas College provides students a solid foundation and preparation for entry level marketing positions. Students may pursue courses, degrees and certificates to upgrade skills and prepare them for work or transfer to a four-year college or university.

Programs of Study

Degrees:

- AA – Marketing

Certificates of Achievement:

- Retailing

AA – Marketing

About the Degree

The Associate in Arts in Marketing is a general business degree for

those who want to pursue entry-level jobs in marketing. In addition to advertising and promotion, the field of marketing involves everything from researching whether a new product is needed, to labeling, packaging, transportation, warehousing, merchandising and sales. Entry-level marketing positions exist in manufacturing, service firms, wholesalers, retailers, advertising agencies, consulting firms and private and public non-profit organizations. This degree provides students with an understanding of business operations, including determining the demand for products and services to be offered by a firm and the identification of appropriate target markets to construct a detailed marketing plan. Courses prepare students for studying business at most universities. This program fulfills typical lower-division requirements at baccalaureate institutions. Counselors will assist students in preparing a comprehensive Student Education Plan that will prepare them to transfer to the university of their choice. Counselors will also advise students on the general education plan that best prepares them for future transfer.

Career Opportunities

Entry-level jobs exist in manufacturing, service firms, wholesalers, retailers, advertising agencies, consulting firms and private and public non-profit organizations.

Program Outcomes

- Upon completion of the AA in Marketing, students are able to compare and contrast the processes used to determine the (1) demand for products and services to be offered by a firm and the (2) identification of appropriate target markets.
- Upon completion of the AA in Marketing, students are able to construct a detailed marketing plan, which includes all aspects of the marketing mix.
- Upon completion of the AA in Marketing, students are able to demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Upon completion of the AA in Marketing, students are able to detail available pricing strategies and prepare comparisons of strategies to achieve a firm's market objectives.

Required Core: (19 Units)

BUSN 18 (Business Law).....	4
BUSN 40 (Introduction to Business).....	3
BUSN 55 (Business Mathematics).....	3
CIS 50 (Introduction to Computing Information Technology)	3
MKTG 50 (Introduction to Marketing)	3
MKTG 61 (Professional Selling)	3

List A: Select One Course from Each Area

Area 1

BUSN 1A (Financial Accounting).....	4
BUSN 51 (Accounting for Small Businesses).....	3

Area 2

BUSN 48 (Human Relations in Organizations).....	3
BUSN 52 (Business Communications).....	3
BUSN 53 (Business Correspondence).....	3

Area 3

ECON 2 (Principles of Macroeconomics)	3
ECON 10 (General Economics)	3

Area 4

MKTG 56 (Marketing Strategies)	3
MKTG 64 (Introduction to Advertising).....	3

Area 5

BUSN 56 (Introduction to Management)	3
WRKX 94 (Occupational Work Experience/Internship)	1-3
WRKX 95 (General Work Experience)	1-3

Total Units for the Major 32-35

The Associate Degree is conferred upon those students who complete the required 60 or more semester units of the degree pattern with a grade-point average of 2.0 or better, of which 12 units must be earned at Las Positas College. In addition, students must complete a General Education pattern in order to earn a degree: see the Las Positas College General Education Pattern for Associate of Arts (AA) Degree, California State University General Education-Breadth, or the Intersegmental General Education Transfer Curriculum (for CSU) patterns for listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program, the optional course(s) taken, and the GE pattern selected. Elective units are degree applicable. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

Certificate of Achievement Retailing

About the Certificate

The Certificate of Achievement in Retailing provides a detailed focus on the retailing efforts of products and services with the objective of meeting and exceeding consumer's expectations and engaging consumers for the long term. This certificate provides students with the knowledge needed in the various retail marketing environments. Students learn the fundamentals of marketing goods and services in the B2C and B2B environments. This certificate provide students with essential knowledge concerning retailing, including effective operations, retail structure, non-store retailing, and upcoming trends. The Retailing Certificate is designed for individuals with career interests in the retail management field or those seeking to enhance existing knowledge and skills.

Career Opportunities

Retail is a growing fast paced, and diverse industry with many opportunities for career advancement. Careers are available in all areas of business. Opportunities for retailing professionals are growing exponentially due to the rapidly expanding retail platforms. The Bureau of Labor Statistics indicates that the field employs over 42 million people and is responsible for 1 in 4 jobs in the United States. Projections indicate the field will be viable over the next 20 years. Career options include positions in merchandising, independent small retailer management, online engagement specialists, display

positions, and others.

Program Outcomes

- Upon completion of the Certificate of Achievement in Retailing, students are able to compare and contrast the various pricing strategies.
- Upon completion of the Certificate of Achievement in Retailing, students are able to determine the demand for products and services offered by a firm and identify potential customers.
- Upon completion of the Certificate of Achievement in Retailing, students are able to develop pricing strategies with the goal of maximizing the firm's profits and/or market share while ensuring customer satisfaction.
- Upon completion of the Certificate of Achievement in Retailing, students are able to explain promotional mixes and effective strategies for each.
- Upon completion of the Certificate of Achievement in Retailing, students are able to identify distinctions between distribution channels.
- Upon completion of the Certificate of Achievement in Retailing, students are able to identify the primary business operations, business organizational options, and business procedures.
- Upon completion of the Certificate of Achievement in Retailing, students are able to list resources and strategies for monitoring trends which help identify the need for new products and services.
- Upon completion of the Certificate of Achievement in Retailing, students are able to summarize measures that can be taken by individuals and organizations to correct organizational dysfunctions.

Required Core: (19 Units)

BUSN 48 (Human Relations in Organizations).....	3
CIS 55 (Integrating Office Applications)	4
MKTG 50 (Introduction to Marketing)	3
MKTG 56 (Marketing Strategies)	3
MKTG 61 (Professional Selling)	3
MKTG 64 (Introduction to Advertising).....	3

List A: Select One (3 Units)

BUSN 52 (Business Communications).....	3
CMST 1 (Fundamentals of Public Speaking)	3

List B: Select One (3-6 Units)

WRKX 94 (Occupational Work Experience/Internship)	3 - 6
WRKX 95 (General Work Experience)	3 - 6

Total Units 25-28

Marketing Courses (MKTG)

MKTG 50 INTRODUCTION TO MARKETING 3 UNITS

Marketing as a value exchange process involving all societal members;

an overview of product development, pricing, placement, and promotion; Target markets including the demographic and behavioral dimensions of markets; analyses of marketing placement and pricing strategies and the social, cultural, economic, competitive and legal factors affecting marketing mix decisions. Strongly Recommended: ENG 1A with a minimum grade of C. 54 hours lecture. AA/AS GE. Transfer: CSU; CSU GE: D7.

Degree Applicable, Credit Grading Option: OP

MKTG 56 MARKETING STRATEGIES 3 UNITS

Current marketing trends, strategies, and techniques. Introduction to online and social media marketing. The promotional process and techniques in the development of effective content creation and branding. Advanced theories, principles, and practices of customer service, customer loyalty, and the customer experience. 54 hours lecture. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MKTG 60 RETAIL STORE MANAGEMENT 3 UNITS

Profitably starting and managing a retail business. Operational strategies regarding site identification and selection, buying alternatives, pricing options, merchandising strategies, staffing, financial, cash and risk management, point of sale considerations, and information systems. Strongly Recommended: BUSN 53 with a minimum grade of C, MKTG 50 with a minimum grade of C. 54 hours lecture. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MKTG 61 PROFESSIONAL SELLING 3 UNITS

Principles and techniques involved in selling products, ideas, and/or services. Focus is on building relationships with others, identifying the reasons a purchase decision may be made. Includes buying motives, communication options, developing commonalities, sales call planning, ethics, follow-up contacts, and customer service. Interactions for face-to-face and online encounters; professional and technical products; consultants; and anyone wanting to improve their interactions with others. 54 hours lecture. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MKTG 64 INTRODUCTION TO ADVERTISING 3 UNITS

An examination of the major aspects of modern advertising and its position as one of the components of integrated marketing communications. This course explores the expanding options of advertising media. Key areas explored include the social and economic role of advertising, research, planning of the media campaign, media planning, strategy selection and integration with other elements of the marketing mix. This course provides an introduction to the fundamentals of advertising with emphasis on conceptual process and development, and basic advertising methodologies and techniques. Emphasis is on the application of advertising principles, planning, and design. Strongly Recommended: MKTG 50 with a minimum grade of C. 54 hours lecture. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MASS COMMUNICATIONS

The Mass Communications program provides students with a broad understanding of the principles, roles, techniques, and effects of media in society. Students use these principles to produce media for student media outlets, including the newspaper, the radio station, the journalistic magazine, the literary magazine, and related multimedia forums. Students who earn a degree or certificate in Mass Communications may enter the workforce or transfer to a four-year school. The program includes two degrees and two certificates, allowing students to select the career or transfer pathway best suited to their educational goals.

Programs of Study

Degrees:

- AA-T – Journalism
- AA – Journalism and Media Studies

Certificates of Achievement:

- Journalism

Career Opportunities

The Mass Communications degree program provides specific hands-on training that will prepare students for immediate job entry, especially involving broadcast technology. Mass Communications majors often successfully pursue careers in media, such as reporting, public relations, print production, copy editing, broadcasting, videography, and photography.

AA-T – Journalism

About the Degree

The Associate in Arts in Journalism for Transfer is based on the Transfer Model Curriculum for Journalism. Upon successful completion of the program requirements, students will have guaranteed admission to some California State University (CSU) campuses. The Associate in Arts in Journalism for Transfer provides students with a broad understanding of the principles, roles, techniques, and effects of media in society as well as experience in the application of these principles to the student media. The broad-based focus of the program serves to hone and refine students' reading, writing, speaking, cultural literacy, and critical thinking skills, enabling them to succeed in an academic environment or in the workplace and providing specific hands-on skills.

Completion Requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or CA State University General Education – Breadth Requirements.
 - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

Associate Degrees for Transfer (ADT's) also require that students must earn a "C " (or "P") or better in all courses required for the major or area of emphasis.

Career Opportunities

The information on the Labor Market Index web site indicates that three areas, Editors, Reporters and Correspondents, and Writers and Authors, are especially well-served by a Mass Communications degree. In recent years, social media and online media have provided career opportunities for many Mass Communications graduates.

Program Outcomes

- Upon completion of the AA-T in Journalism, students are able to develop a broad understanding of the principles, roles, techniques, and effects of media in society.
- Upon completion of the AA-T in Journalism, students are able to gain experience in production of the student media.
- Upon completion of the AA-T in Journalism, students are able to prepare for careers in media and related fields.

Required Core: (9 Units)

MSCM 1 (Introduction to Reporting and Newswriting).....	3
MSCM 5 (Introduction to Mass Communications).....	3
MSCM 16A (Express College Newspaper A)	3

List A: Select One (3 Units)

MSCM 35 (Multimedia Reporting).....	3
MSCM 7 (Introduction to Public Relations).....	3
MSCM 72 (Introduction to Photojournalism) or PHTO 72 (Documentary Photography)	3
MSCM 16B (Express College Newspaper B).....	3

List B: Select Two (6-7 Units)

ECON 1 (Principles of Microeconomics) or ECON 2 (Principles of Macroeconomics)	3
ENG 1A (Critical Reading and Composition)	3
ENG 7 (Argumentation Writing and Critical Thinking)	3
MATH 40 (Statistics and Probability)	4
MSCM 31 (Introduction to Media)	3
PHIL 2 (Ethics)	3
PHIL 6 (Introduction to Logic).....	3
SOC 1 (Principles of Sociology)	3

Total Units for the Major 18-19

Additional General Education and Elective Units 41-42

Total Units 60

See the Las Positas College California State University General Education-Breadth or the Intersegmental General Education Transfer

Curriculum (for CSU) patterns for a listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program and the optional course(s) taken. Elective units are CSU transferable. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

AA – Journalism and Media Studies

About the Certificate

The Associate of Arts in Journalism and Media Studies is designed to provide students a broad understanding of the principles of journalism and media as well as experience in the application of these principles to the campus media, including the newspaper, the journalistic magazine, and the literary magazine, all of which include multimedia components. Classes can be applied to meet transfer requirements at four-year institutions and for entry into careers in media, such as reporting, public relations, print production, copyediting, broadcasting, videography, and photography.

Career Opportunities

Students who graduate with the Associate of Arts in Journalism and Media Studies can enter careers in media, such as reporting, public relations, print production, copyediting, broadcasting, videography, and photography. Some career paths may require additional experience or study.

Program Outcomes

- Upon completion of the AA in Journalism and Media Studies, students are able to demonstrate an understanding of different aspects of the role of media in society through research and writing.
- Upon completion of the AA in Journalism and Media Studies, students are able to participate in the creation of student media, following a timeline for production, editing and formatting content, and publishing and distributing.

Required Core: (12 Units)

MSCM 1 (Introduction to Reporting and Newswriting).....	3
MSCM 16A (Express College Newspaper A)	3
MSCM 35 (Multimedia Reporting)	3
MSCM 72 (Introduction To Photojournalism) or PHTO 72 (Introduction To Photojournalism)	3

List A: Select One (3 Units)

MSCM 5 (Introduction to Mass Communications).....	3
MSCM 31 (Introduction to Media)	3

List B: Select Three (9 Units)

MSCM 7 (Introduction to Public Relations).....	3
MSCM 16B (Express College Newspaper B).....	3
MSCM 16C (Express College Newspaper C)	3
MSCM 16D (Express College Newspaper D)	3
MSCM 19A (Journal of Arts, Literature, and Academic Writing A) or ENG 19A (Journal of Arts, Literature, and Academic Writing A)	3
MSCM 19B (Journal of Arts, Literature, and Academic Writing B) or	

ENG 19B (Journal of Arts, Literature, and Academic Writing B).....	3
MSCM 34A (Naked Magazine: College Magazine A)	3
MSCM 34B (Naked Magazine: College Magazine B).....	3

Total Units for the Major 24

The Associate Degree is conferred upon those students who complete the required 60 or more semester units of the degree pattern with a grade-point average of 2.0 or better, of which 12 units must be earned at Las Positas College. In addition, students must complete a General Education pattern in order to earn a degree: see the Las Positas College General Education Pattern for Associate of Arts (AA) Degree, California State University General Education-Breadth, or the Intersegmental General Education Transfer Curriculum (for CSU) patterns for listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program, the optional course(s) taken, and the GE pattern selected. Elective units are degree applicable. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

Certificate of Achievement Journalism

About the Certificate

The Las Positas College Certificate of Achievement in Journalism provides specific hands-on training that will prepare students for immediate job entry, especially involving broadcast and technology. The certificate has a broad-based focus that services to hone and refine students' reading, writing, speaking, cultural literacy, and critical thinking skills, enabling them to succeed in an academic environment or in the workplace.

Career Opportunities

The Certificate of Achievement in Journalism provides a solid foundation and preparation for entry-level careers in reporting, public relations, print production, copyediting, broadcasting, videography, photography, and media technology.

Program Outcomes

- Upon completion of the Certificate of Achievement in Journalism, students are able to demonstrate an understanding of different aspects of the role of media in society through research and writing.
- Upon completion of the Certificate of Achievement in Journalism, students are able to participate in the creation of student media, following a timeline for production, editing and formatting content, and publishing and distributing.
- Upon completion of the Certificate of Achievement in Journalism, students are able to recognize, acquire, produce, and distribute content for the weekly college newspaper, The Express, demonstrating increasing understanding of standards of journalism and design.

Required Core: (12 Units)

MSCM 1 (Introduction to Reporting and Newswriting).....	3
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MSCM 16A (Express College Newspaper A)3
 MSCM 35 (Multimedia Reporting).....3
 MSCM 72 (Introduction to Photojournalism) or
 PHTO 72 (Introduction to Photojournalism).....3

List A: Select Three (9 Units)

MSCM 7 (Introduction to Public Relations).....3
 MSCM 34A (Naked Magazine: College Magazine A)3
 MSCM 19A (Journal of Arts, Literature, and Academic Writing A) or
 ENG 19A (Journal of Arts, Literature, and Academic
 Writing A)3
 MSCM 19B (Journal of Arts, Literature, and Academic Writing B) or
 ENG 19B (Journal of Arts, Literature, and Academic
 Writing B).....3
 WRKX 95 (General Work Experience)3
 GDDM 64 (InDesign I).....3

List B: Select One (3 Units)

MSCM 5 (Introduction to Mass Communications).....3
 MSCM 31 (Introduction to Media)3

Total Units 24

**Mass Communication Courses
(MSCM)**

MSCM 1 INTRODUCTION TO REPORTING AND NEWSWRITING 3 UNITS

An introduction to gathering, synthesizing/ organizing, and writing news in journalistic style across multiple platforms. Includes role of the journalist, analysis of exemplary journalistic models, and related legal and ethical issues. Students will report and write based on their original interviews and research to produce news content. Experiences may include covering speeches, meetings, and other events, writing under deadline and use of AP Style. Strongly Recommended: Eligibility for ENG 1A. 54 hours lecture. AA/AS GE. Transfer: CSU; C-ID# JOUR 110.

Degree Applicable, Credit Grading Option: OP

MSCM 5 INTRODUCTION TO MASS COMMUNICATIONS 3 UNITS

Survey of mass communication and the interrelationships of media with society, including history, structure, and trends in a digital age. Discussion of theories and effects, economics, technology, law and ethics, global media, media literacy, and social issues, including gender and cultural diversity. Strongly Recommended: Eligibility for ENG 1A. 54 hours lecture. AA/AS GE. Transfer: CSU, UC*; CSU GE: D7; IGETC: 4G; C-ID# JOUR 100. *MSCM 5 and 31 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: OP

MSCM 7 INTRODUCTION TO PUBLIC RELATIONS 3 UNITS

Introduction to the principles, history, development, and professional practice of modern public relations. Includes concepts of planning and executing effective communication strategies, including

message design and distribution, for any organization. Strongly Recommended: Eligibility for ENG 1A. 54 hours lecture. Transfer: CSU; C-ID# JOUR 150.

Degree Applicable, Credit Grading Option: OP

MSCM 16A EXPRESS COLLEGE NEWSPAPER A 3 UNITS

An applied course in which students practice and refine beginning journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions of the student newspaper, the Express. The focus of study is on basic news, feature, and opinion stories. Students are introduced to concepts related to photojournalism, business management, graphic arts, design, social media, and leadership and editing skills. The course includes ethical, practical, and legal issues in journalism. Strongly Recommended: Eligibility for ENG 1A/1AEX. 18 hours lecture, 108 hours laboratory. Transfer: CSU; C-ID# JOUR 130.

Degree Applicable, Credit Grading Option: OP

MSCM 16B EXPRESS COLLEGE NEWSPAPER B 3 UNITS

An applied course in which students practice and refine intermediate journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions of the student newspaper, the Express. Focus is on in-depth news, feature and opinion stories. Students develop intermediate abilities in photojournalism, business management, graphic arts, design, social media, and leadership and editing skills. The course includes ethical, practical, and legal issues in journalism. Prerequisite: MSCM 16A with a minimum grade of C. Strongly Recommended: Eligibility for ENG 1A/ENG 1AEX. 18 hours lecture, 108 hours laboratory. Transfer: CSU; C-ID# JOUR 131.

Degree Applicable, Credit Grading Option: OP

MSCM 16C EXPRESS COLLEGE NEWSPAPER C 3 UNITS

An applied course in which students practice and refine advanced journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions of the student newspaper, the Express. Focus is on leadership, editing the work of others, improving writing and multimedia skills, and improving the Express. Enhanced leadership role includes outreach to the community and representation as journalist and leader at events. Students develop advanced abilities in writing, photojournalism, business management, graphic arts, design, social media, and leadership and editing skills. Students will produce newscasts, an infographics, and reader surveys. The course includes ethical, practical, and legal issues in journalism. Students should serve in a leadership role. Prerequisite: MSCM 16B with a minimum grade of C. 18 hours lecture, 108 hours laboratory. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MSCM 16D EXPRESS COLLEGE NEWSPAPER D 3 UNITS

An applied capstone course in which students practice and refine advanced journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions

of the student newspaper, the Express. Focus is on completing a portfolio project, exploring career opportunities in the field, leading others, editing the work of others, improving writing and multimedia skills, and improving the Express. Students work to develop advanced abilities in writing, photojournalism, business management, graphic arts, design, social media, leadership, and editing skills. The course includes ethical, practical, and legal issues in journalism. Student assumes a leadership role and create workshops to benefit other staff members. Prerequisite: MSCM 16C with a minimum grade of C. 18 hours lecture, 108 hours laboratory. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MSCM 17 EXPRESS EDITORIAL BOARD 1 UNIT

The roles and responsibilities of leaders on the college newspaper, the Express. Practical experience participating in editorial board meetings, setting policy for the newspaper, and leading in the decision-making process for issue planning, budgeting, and the development of the newspaper. Enrollment is limited to student leaders on the Express. Strongly Recommended: Eligibility for ENG 1A. 18 hours lecture. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MSCM 19A JOURNAL OF ARTS, LITERATURE, AND ACADEMIC WRITING A 3 UNITS

Creation of a literary-style student magazine. Practical training in the managing, editing, formatting, and printing of a literary magazine. Enrollment constitutes the staff of the magazine. Cross listed with ENG 19A. A student who has successfully completed ENG 19A cannot enroll in MSCM 19A. 36 hours lecture, 54 hours laboratory. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MSCM 19B JOURNAL OF ARTS, LITERATURE, AND ACADEMIC WRITING B 3 UNITS

Creation of a literary-style student magazine. Practical intermediate-level training in the managing, editing, formatting, and printing of a literary supplement and/or magazine with a focus on the production process, including copy editing, design, layout, proofreading, working with the printer, and digital and print distribution. Enrollment constitutes the staff of the magazine. A student who has completed ENG 19B cannot enroll in MSCM 19B. Prerequisite: MSCM 19A with a minimum grade of C or ENG 19A with a minimum grade of C. 36 hours lecture, 54 hours laboratory. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MSCM 29 INDEPENDENT STUDY, MASS COMMUNICATIONS 0.5-2 UNITS

For course information, see "Independent Studies". 27-108 hours laboratory.

MSCM 31 INTRODUCTION TO MEDIA 3 UNITS

A survey of radio, television, film, and multimedia and their impact on culture and society; includes economics, technological development, programming, ratings, legal aspects, and social

control of broadcasting in America, and cross-cultural, international comparisons. Strongly Recommended: Eligibility for ENG 1A. 54 hours lecture. AA/AS GE. Transfer: CSU, UC*; CSU GE: D7; IGETC: 4G. *MSCM 5 and 31 combined, max UC credit, one course.

Degree Applicable, Credit Grading Option: OP

MSCM 34A NAKED MAGAZINE: COLLEGE 3 UNITS MAGAZINE A

Creation of a journalistic-style student magazine. Emphasis is placed on developing content, writing in-depth magazine articles, producing photographs and other visual elements, correlating copy and visuals, laying out pages in the production process, copy editing, promoting advertising, managing the business-side of the magazine, and exploring ethical issues. Strongly Recommended: Eligibility for ENG 1A. 36 hours lecture, 54 hours laboratory. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MSCM 34B NAKED MAGAZINE: COLLEGE 3 UNITS MAGAZINE B

Leadership in the creation and promotion of a journalistic-style student magazine, including development of skills in areas of social media and multimedia. Emphasis is placed on practicing and refining intermediate-level journalism skills while developing content, writing in-depth magazine articles, producing photographs and other visual elements, correlating copy and visuals, laying out pages in the production process, copy editing, promoting advertising, managing the business-side of the magazine, and exploring ethical issues. Prerequisite: MSCM 34A with a minimum grade of C. Strongly Recommended: Eligibility for ENG 1A. 36 hours lecture, 54 hours laboratory. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MSCM 35 MULTIMEDIA REPORTING 3 UNITS

This course will provide an introduction to multimedia storytelling with a journalism emphasis. Techniques that will be explored include use of video, photos, audio, animation, and text to convey interactive news and feature stories through the Internet and other electronic media. It also will include techniques in digital research, critical thinking, and synthesis. It will introduce the legal and ethical issues in the recording of sources. Emphasis is placed upon the methods and techniques of multimedia reporting, including scripting, storyboarding, camera use, lighting, sound, and editing with video editing software such as Adobe Premiere Pro. 18 hours lecture, 108 hours laboratory. Transfer: CSU, UC*; C-ID# JOUR 120. *MSCM 35, MSCM 72, and PHTO 72 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: OP

MSCM 72 INTRODUCTION TO PHOTOJOURNALISM 3 UNITS

This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, the Internet, and other mass communications media. Understanding and applying photojournalistic and basic technical and visual skills in the making of successful reportage photographs.

Consideration of the work of major 20th and 21st century photojournalists. Course is cross listed with PHTO 72. Student will receive credit for taking either MSCM 72 or PHTO 72. Strongly Recommended: PHTO 50 with a minimum grade of C and/or PHTO 56 with a minimum grade of C and/or GDDM 53 with a minimum grade of C. 27 hours lecture, 81 hours laboratory. Transfer: CSU, UC*; C-ID# JOUR 160. *MSCM 35, MSCM 72, PHTO 72 combined: maximum UC credit, one course.

Course Material Fees May Apply

Degree Applicable, Credit Grading Option: OP

MATHEMATICS

Mathematics is one of the oldest intellectual disciplines, yet it has never lost its relevance; we are continually finding new and exciting applications in fields as diverse as biology and counter-terrorism. Mathematical methods play a pivotal role in bioinformatics, cryptography, computer graphics, analysis of large-scale networks, cyber security and operations research, as well as in computer science, engineering, business, and the natural, physical and social sciences. Applications of mathematics can be found in many vocational disciplines such as carpentry, electronics, automotive technology and welding.

The Mathematics department at Las Positas College offers a wide range of courses in a variety of formats designed to meet the needs of a diverse student population. Whatever your educational goals, we have the courses you need to succeed. We offer a full lower-division curriculum which prepares students for transfer to four-year institutions, as well as basic skills and associate degree applicable courses.

Programs of Study

Degrees:

- AS-T – Mathematics

Career Opportunities

The Associate of Science Degree in Mathematics for Transfer is intended to provide an option for students who plan to complete a bachelor's degree in a similar major at a CSU campus, or pursue a teaching career, since teachers of mathematics are always in demand. The study of mathematics can prepare students for a variety of technical and scientific careers. The problem-solving and communication skills acquired are valuable in business, industry, and everyday life, and mathematics is an essential component of any engineering or science degree.

Mathematics courses can be taken in a variety of modes including "traditional" lecture, hybrids of on-campus and online, and in the Math Emporium. For more information about these modes, and which fits your learning style, please see www.LasPositasCollege.edu/Math

Math Emporium

The Math Emporium consists of courses offered in an independent study/self-accelerated mode. In the Math Emporium, a math

instructor, an instructional assistant, and a peer tutor are available to answer questions. Students attend at a specified time to work through the material at their own pace. The instructor will not hold formal class-wide lectures. Each student completes homework and lab assignments as they work independently through the material. Students must take and pass a chapter exam before moving on to the next chapter. These courses are designated in the schedule by an "X" followed by the section number (e.g. Math 107 – X01 indicates that this is a Pre-Algebra course offered as part of the Math Emporium).

These courses work well for students with the following characteristics:

- I am a self-motivated, dedicated, and organized student.
- I need a quick brush up on my algebra skills.
- I can learn the material using my textbook, online supports, video lectures and classroom support staff.

Students may complete any of the following courses in the Math Emporium Mode:

- MATH 52A, 52B – Technical Intermediate Algebra for Automotive Technology
- MATH 53A, 53B – Technical Intermediate Algebra for Welding
- MATH 55 – Intermediate Algebra
- MATH 72A, 72B, 72C, 72D – Technical Elementary Algebra
- MATH 107 – Pre-Algebra
- MATH 110 – Elementary Algebra

AS-T – Mathematics

About the Degree

The Las Positas College Mathematics program offers courses that lead to an Associate of Science in Mathematics for Transfer degree. The major requirements for the Associate of Science in Mathematics for Transfer degree align with the Intersegmental Transfer Model Curriculum (TMC) for Mathematics. Students will have guaranteed admission to a California State University (CSU) campus upon successful completion of the program requirements. Students should consult with a counselor to determine whether this degree is the best option for their transfer goals. General education requirements should be selected carefully based on the intended transfer institution.

Completion Requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
 - The Intersegmental General Education Transfer Curriculum (IGETC) or CA State University General Education – Breadth Requirements.
 - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

Associate Degrees for Transfer (ADT's) also require that students must earn a "C" (or "P") or better in all courses required for the major or area of emphasis.

Career Opportunities

The Associate of Science in Mathematics for Transfer degree is intended to provide an option for students who plan to complete a bachelor's degree in a similar major at a CSU campus, or pursue a teaching career, since teachers of mathematics are always in demand. They study of mathematics can prepare students for a variety of technical and scientific careers. The problem-solving and communication skills acquired are valuable in business, industry, and everyday life, and mathematics is an essential component of any engineering or science degree.

Program Outcomes

- Upon completion of the Mathematics AS-T, students are able to demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.
- Upon completion of the Mathematics AS-T, students are able to learn mathematics through modeling real-world situations.
- Upon completion of the Mathematics AS-T, students are able to read, write, listen to, and speak mathematics with understanding.
- Upon completion of the Mathematics AS-T, students are able to use appropriate technology to enhance their mathematical thinking and understanding, solve mathematical problems, and judge the reasonableness of their results.
- Upon completion of the Mathematics AS-T, students are able to use mathematical reasoning and, when appropriate, a general problem solving process to solve problems.

Required Core: (15 Units)

MATH 1 (Calculus I).....	5
MATH 2 (Calculus II)	5
MATH 3 (Multivariable Calculus).....	5

List A: Select One (3.5 Units)

MATH 5 (Ordinary Differential Equations).....	3.5
MATH 7 (Elementary Linear Algebra)	3.5

List B: Select One (3.5-5 Units)

Any List A course not already used.....	3.5
CS 1 (Computing Fundamentals I)	4
MATH 40 (Statistics and Probability)	4
PHYS 1A (General Physics I)	5

Total Units for the Major 22-23.5

Additional General Education and Elective Units... 36.5-38

Total Units 60

See the Las Positas College California State University General Education-Breadth or the Intersegmental General Education Transfer Curriculum (for CSU) patterns for a listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program and the optional course(s) taken. Elective units are CSU transferable. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

Mathematics Courses (MATH)

MATH 1 CALCULUS I 5 UNITS

An introduction to single-variable differential and integral calculus including: functions, limits and continuity; techniques and applications of differentiation and integration; the Fundamental Theorem of Calculus; areas and volumes of solids of revolution. Prerequisite: MATH 30 with a minimum grade of C, MATH 39 with a minimum grade of C. 90 hours lecture. AA/AS GE. Transfer: CSU, UC*; CSU GE: B4; IGETC: 2A; C-ID# MATH 211, MATH 900 S (if taken with MATH 2). *MATH 1, 33, and 34 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: GR

MATH 2 CALCULUS II 5 UNITS

Continuation of single-variable differential and integral calculus. Topics covered include: inverse and hyperbolic functions; techniques of integration; polar and parametric equations; infinite sequences, series, power series and Taylor series; applications of integration. Primarily for mathematics, physical science and engineering majors. Prerequisite: MATH 1 with a minimum grade of C. 90 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: B4; IGETC: 2A; C-ID# MATH 221, MATH 900 S (if taken with MATH 1).

Degree Applicable, Credit Grading Option: GR

MATH 3 MULTIVARIABLE CALCULUS 5 UNITS

Vector valued functions, functions of several variables, partial differentiation, multiple integration, change of variables theorem, scalar and vector fields, gradient, divergence, curl, line integral, surface integral, Green's Stokes' and divergence theorem, applications. Prerequisite: MATH 2 with a minimum grade of C. 90 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: B4; IGETC: 2A; C-ID# MATH 230.

Degree Applicable, Credit Grading Option: GR

MATH 5 ORDINARY DIFFERENTIAL EQUATIONS 3.5 UNITS

Introduction to differential equations including the conditions under which a unique solution exists, techniques for obtaining solutions, and applications. Techniques include generation of series solutions, use of Laplace Transforms, and the use of eigenvalues to solve linear systems. Generation of exact solutions, approximate solutions, and graphs of solutions using MATLAB. Prerequisite: MATH 3 with a minimum grade of C. 54 hours lecture, 27 hours laboratory. AA/AS GE. Transfer: CSU, UC; CSU GE: B4; IGETC: 2A; C-ID# MATH 240.

Degree Applicable, Credit Grading Option: GR

MATH 7 ELEMENTARY LINEAR ALGEBRA 3.5 UNITS

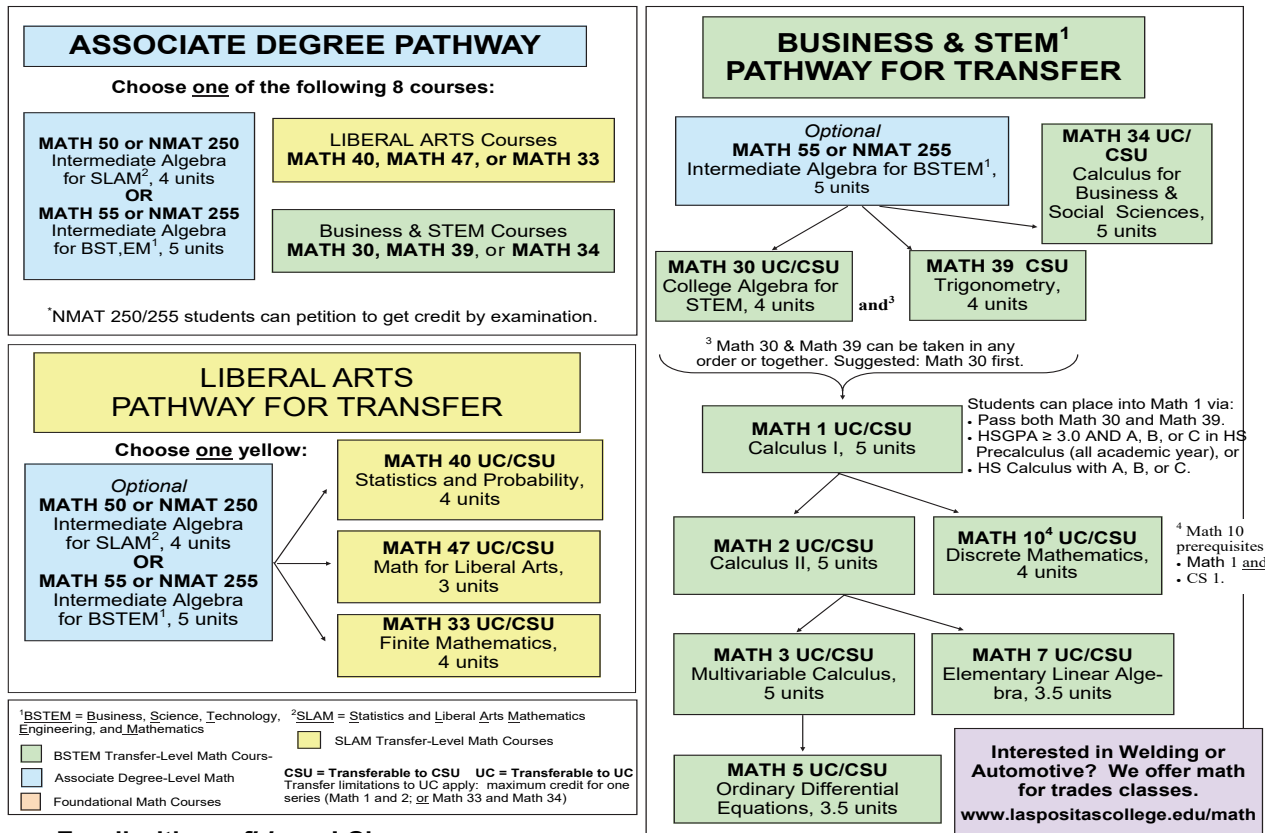
An introduction to linear algebra including: techniques and theory needed to solve and classify systems of linear equations using Gaussian elimination and matrix algebra; properties of vectors in n-dimensions; generalized vector spaces, inner product spaces, basis, norms, orthogonality; eigenvalues, eigenspaces; and linear transformations. Selected applications of linear algebra, including the

Mathematics Pathways for YOUR Academic Goal!

Achieve your goals efficiently and successfully with NEW pathways and support options at LPC!

Beginning Fall 2019, students are encouraged to enroll directly into a transfer-level course. Students should consider their academic goal, past achievements, and experiences.

Students are also strongly encouraged to take advantage of the many resources available to support them at LPC.



Enroll with confidence! Choose one or more.

MATH JAM BOOTCAMP COURSES

Award-winning, 1-week before the semester starts, & tuition-free!
Offered the week before the Fall and Spring semesters. Innovative learning interventions help you prepare for upcoming mathematic courses. Proven to increase student success and retention rates!

<p>NMAT 261 Math Jam for Prealgebra</p> <p>NMAT 263 Math Jam for Intermediate Algebra</p> <p>NMAT 265 Math Jam for BSTEM (Business & STEM Math)</p>	<p>NMAT 262 Math Jam for Elementary Algebra</p> <p>NMAT 264 Math Jam for SLAM (Statistics, Liberal Arts Math)</p> <p>MATH 66,67,68* Math Jam for Calculus I, II, III *1 credit unit</p>
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CONCURRENT SUPPORT COURSES

NEW! Jam all semester long with RECOMMENDED support during the semester. Offered tuition-free (noncredit) or for credit. Aligned with your math course and designed with innovative strategies to provide math and learning support while taking your math class.

<p>NMAT 200C or MATH 100C Concurrent Support for SLAM (Statistics, Liberal Arts Math)</p> <p>MATH 66C,67C,68C Concurrent Support for Calculus I, II & III (1 lab unit)</p>	<p>NMAT 201C or MATH 101C Concurrent Support for BSTEM (Business, STEM)</p> <p>NMAT 255C or MATH 55C Concurrent Support for Intermediate Algebra</p> <p>NMAT 210C or MATH 110C Concurrent Support for Elementary Algebra</p>
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ASSOCIATE'S DEGREE and FOUNDATIONAL LEVEL COURSES

Solidify your math understanding before enrolling in Intermediate Algebra or transfer level. We offer credit and tuition-free (noncredit) foundational and associate degree level math courses to meet your learning needs.

MATH 55 5 units or **NMAT 255**
Intermediate Algebra for BSTEM¹

MATH 50 4 units or **NMAT 250**
Intermediate Algebra for SLAM²

MATH 110 4 units or **NMAT 210**
Elementary Algebra

MATH 107 4 units or **NMAT 207**
Prealgebra

For more information about pathway and support options that are right for you, visit: www.LasPositasCollege.edu/Math

use of MATLAB™ to solve problems involving advanced numerical computation. Prerequisite: MATH 2 with a minimum grade of C. 54 hours lecture. 27 hours laboratory. AA/AS GE. Transfer: CSU, UC; CSU GE: B4; IGETC: 2A; C-ID# MATH 250.

Degree Applicable, Credit Grading Option: GR

MATH 10 DISCRETE MATHEMATICAL STRUCTURES 4 UNITS

Designed for majors in mathematics and computer science, this course provides an introduction to discrete mathematical structures used in Computer Science and their applications. Course content includes: Propositional and predicate logic; rules of inference; quantifiers; elements of integer number theory; set theory; methods of proof; induction; combinatorics and discrete probability; functions and relations; recursive definitions and recurrence relations; elements of graph theory and trees. Applications include: analysis of algorithms, Boolean algebras and digital logic circuits. Students who have completed, or are enrolled in, CS 17 may not receive credit. Prerequisite: MATH 1 with a minimum grade of C (May be taken concurrently), CS 1 with a minimum grade of C (May be taken concurrently). 72 hours lecture, 18 hours laboratory. AA/AS GE. Transfer: CSU, UC; CSU GE: B4; IGETC: 2A; C-ID# COMP 152.

Degree Applicable, Credit Grading Option: GR

MATH 27 NUMBER SYSTEMS FOR EDUCATORS 3 UNITS

This course focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. Prerequisite: MATH 50 with a minimum grade of C or MATH 55 with a minimum grade of C or NMAT 255 with a minimum grade of C or NMAT 250 with a minimum grade of C. 54 hours lecture. AA/AS GE. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: GR

MATH 29 INDEPENDENT STUDY, MATHEMATICS 0.5-2 UNITS

For course information, see "Independent Studies". 27-108 hours laboratory.

MATH 30 COLLEGE ALGEBRA FOR STEM 4 UNITS

College algebra core concepts relating to Science, Technology, Engineering and Mathematics (STEM) and Business fields are explored, such as: polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; and analytic geometry. Multiple representations, applications and modeling with functions are emphasized throughout. May not receive credit if Mathematics 20 or 45 have been completed. Prerequisite: MATH 55 with a minimum grade of C or MATH 55B with a minimum grade of C or NMAT 255 with a minimum grade of C. 72 hours lecture, 18 hours laboratory. AA/AS GE. Transfer: CSU, UC; CSU GE: B4, IGETC: 2A; C-ID# MATH 151.

Degree Applicable, Credit Grading Option: GR

MATH 33 FINITE MATHEMATICS 4 UNITS

Linear functions, systems of linear equations and inequalities, exponential and logarithmic functions and applications, matrices, linear programming, mathematics of finance, sets and Venn diagrams, combinatorial techniques and an introduction to probability. Applications in business, economics and social sciences. Prerequisite: MATH 50 with a minimum grade of C or MATH 55 with a minimum grade of C or MATH 55B with a minimum grade of C or NMAT 250 with a minimum grade of C or NMAT 255 with a minimum grade of C. 72 hours lecture. AA/AS GE. Transfer: CSU, UC*; CSU GE: B4; IGETC: 2A; C-ID# MATH 130. *MATH 1, 33, and 34 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: GR

MATH 34 CALCULUS FOR BUSINESS AND SOCIAL SCIENCES 5 UNITS

Functions and their graphs; limits of functions; differential and integral calculus of algebraic, exponential and logarithmic functions. Applications in business, economics, and social sciences and use of graphing calculators. Partial derivatives and the method of LaGrange multipliers. Prerequisite: MATH 55 with a minimum grade of C or MATH 55B with a minimum grade of C or NMAT 255 with a minimum grade of C. 90 hours lecture. AA/AS GE. Transfer: CSU, UC*; CSU GE: B4; IGETC: 2A; C-ID# MATH 140. *MATH 1, 33, and 34 combined: maximum UC credit, one course.

Degree Applicable, Credit Grading Option: GR

MATH 39 TRIGONOMETRY 4 UNITS

Trigonometry includes definitions of the trigonometric functions and their inverses, graphs of the trigonometric functions and their inverses, trigonometric equations, trigonometric expressions and identities, including proofs, an introduction to vectors, polar coordinates and complex numbers. Applications include solving right triangles and solving triangles using the law of sines and the law of cosines. Prerequisite: MATH 55B with a minimum grade of C or MATH 55 with a minimum grade of C or NMAT 255 with a minimum grade of C. 72 hours lecture, 18 hours laboratory. AA/AS GE. Transfer: CSU; CSU GE: B4; C-ID# MATH 851.

Degree Applicable, Credit Grading Option: GR

MATH 40 STATISTICS AND PROBABILITY 4 UNITS

Descriptive statistics, including measures of central tendency, dispersion and position; elements of probability; confidence intervals; hypothesis tests; two-population comparisons; correlation and regression; goodness of fit; analysis of variance; applications in various fields. Introduction to the use of a computer software package to complete both descriptive and inferential statistics problems. Prerequisite: MATH 55 with a minimum grade of C or MATH 55B with a minimum grade of C or MATH 50 with a minimum grade of C or NMAT 250 with a minimum grade of C or NMAT 255 with a minimum grade of C. 72 hours lecture, 18 hours laboratory. AA/AS GE. Transfer: CSU, UC; CSU GE: B4; IGETC: 2A; C-ID# MATH 110.

Degree Applicable, Credit Grading Option: GR

MATH 47 MATHEMATICS FOR LIBERAL 3 UNITS

ARTS

An introduction to a variety of mathematical concepts for students interested in liberal arts. Intended to cultivate an appreciation of the significance of mathematics in daily life and help develop students' mathematical reasoning. Topics include personal finance, logic, and exponential growth. Prerequisite: MATH 55 with a minimum grade of C or MATH 55B with a minimum grade of C or MATH 50 with a minimum grade of C or NMAT 250 with a minimum grade of C or NMAT 255 with a minimum grade of C. 54 hours lecture, 18 hours laboratory. AA/AS GE. Transfer: CSU, UC; CSU GE: B4; IGETC: 2A.

Degree Applicable, Credit Grading Option: GR

MATH 50 INTERMEDIATE ALGEBRA FOR SLAM 4 UNITS

This is an Intermediate Algebra course for students interested in fields of study that require Statistics or Liberal Arts Mathematics (SLAM). Intermediate algebra concepts will be explored in the context of the function. Function concepts covered include: distinction between functions and relations, domain and range, function notation, multiple representation of functions, behavior of functions, operations with functions (including composition), one-to-one functions, and invertible functions. Types of functions considered: polynomial, rational, radical, exponential and logarithmic functions. The course includes an introduction to probability, counting and quantitative data. Standards for mathematical practice, applications of functions, and modeling with functions are emphasized throughout. Strongly Recommended: MATH 110 with a minimum grade of C or MATH 110B with a minimum grade of C or NMAT 210 with a minimum grade of C. 54 hours lecture, 54 hours laboratory. AA/AS GE.

Degree Applicable, Credit Grading Option: OP

MATH 52A TECHNICAL INTERMEDIATE ALGEBRA FOR AUTOMOTIVE TECHNOLOGY A 1.5 UNITS

This course provides a survey of algebraic processes with an emphasis on applications in the automotive trades. Topics covered include, but are not limited to: algebraic expressions; quadratic functions; and functions. This course may not be used as a prerequisite for any transfer level course. Prerequisite: MATH 72D with a minimum grade of C. 27 hours lecture. AA/AS GE.

Degree Applicable, Credit Grading Option: OP

MATH 52B TECHNICAL INTERMEDIATE ALGEBRA FOR AUTOMOTIVE TECHNOLOGY B 1.5 UNITS

This course provides a survey of algebraic and geometric processes with an emphasis on applications in the automotive trades. Topics covered include, but are not limited to: plane geometry; linear regression, financial mathematics, and measures of central tendency. This course is not intended as a prerequisite for any transfer level course. Prerequisite: MATH 52A with a minimum grade of C. 27 hours lecture. AA/AS GE.

Degree Applicable, Credit Grading Option: OP

MATH 53A TECHNICAL INTERMEDIATE ALGEBRA FOR WELDING A 2 UNITS

ALGEBRA FOR WELDING A

This course provides a survey of algebraic processes with an emphasis on applications in welding. Topics covered include, but are not limited to: algebraic expressions, plane geometry, the geometry of solids, and triangle trigonometry. This course may not be used as a prerequisite for any transfer level course. Prerequisite: MATH 72C with a minimum grade of C or MATH 72D with a minimum grade of C. 36 hours lecture. AA/AS GE.

Degree Applicable, Credit Grading Option: OP

MATH 53B TECHNICAL INTERMEDIATE ALGEBRA FOR WELDING B 1 UNIT

This course provides a survey of algebraic processes with an emphasis on applications in welding. Topics covered include, but are not limited to: quadratic equations, functions, and mathematical models. This course may not be used as a prerequisite for any transfer level course. Prerequisite: MATH 72D with a minimum grade of C and MATH 53A with a minimum grade of C. 18 hours lecture. AA/AS GE.

Degree Applicable, Credit Grading Option: OP

MATH 55 INTERMEDIATE ALGEBRA FOR BSTEM 5 UNITS

Intermediate Algebra concepts, in the service of Business, Science, Technology, Engineering and Math fields (BSTEM), will be explored in this course including: an introduction to functions; linear and absolute value functions; absolute value equations and inequalities; compound linear inequalities; rational expressions, functions and equations; radical expressions, functions and equations; rational exponents; complex numbers; quadratic functions and equations; inverse of a function; exponential and logarithmic functions; properties of logarithms; exponential and logarithmic equations; conic sections; and systems of equations and inequalities. Multiple representations, applications and modeling with functions are emphasized throughout. Strongly Recommended: MATH 110 with a minimum grade of C, MATH 110B with a minimum grade of C, or NMAT 210 with a minimum grade of C. 90 hours lecture. AA/AS GE.

Degree Applicable, Credit Grading Option: OP

MATH 55C CONCURRENT SUPPORT FOR INTERMEDIATE ALGEBRA 1 UNIT

This course is concurrent support for Intermediate Algebra. The course is designed to provide additional, formal support to students who are currently taking an Intermediate Algebra. It includes a review of arithmetic, algebraic and geometric concepts that are relevant to their Intermediate Algebra course, study strategies that promote understanding and improve performance, and more in-depth investigation of core concepts that are difficult for students to master. Embedded are learning skills such as growth mindset, brain research, time management, study skills, test taking, math anxiety and more. Corequisite: MATH 55 or NMAT 255 or MATH 50 or NMAT 250. 54 hours laboratory.

Degree Applicable, Credit Grading Option: P/NP

MATH 66 MATH JAM FOR CALCULUS I 0.5-1 UNITS

Math Jam for Calculus I is a credit course for students preparing for Calculus I. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning basic skills and transfer-level material with the goal of preparing them to be successful in their upcoming class. It is strongly recommended that students taking this course are enrolled in a calculus course. 27- 54 hours laboratory.

Degree Applicable, Credit Grading Option: P/NP

**MATH 66C CONCURRENT SUPPORT FOR 1 UNIT
CALCULUS I**

This course offers structured support to students who are concurrently enrolled in Calculus I. The support course includes material to prepare students for the rigor of the calculus course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic, geometric and trigonometric concepts, and more in-depth investigation of core concepts in their concurrent math course. Corequisite: MATH 1. 54 hours laboratory.

Degree Applicable, Credit Grading Option: P/NP

**MATH 67 MATH JAM FOR 0.5 UNITS
CALCULUS II**

Math Jam for Calculus II is a credit course for students preparing for Calculus II. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning basic skills and transfer-level material with the goal of preparing them to be successful in their upcoming class. It is strongly recommended that students taking this course are enrolled in a calculus course. 27 hours laboratory.

Degree Applicable, Credit Grading Option: P/NP

**MATH 67C CONCURRENT SUPPORT FOR 1 UNIT
CALCULUS II**

This course offers structured support to students who are concurrently enrolled in Calculus II. The support course includes material to prepare students for the rigor of the calculus course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic, geometric and trigonometric concepts, and more in-depth investigation of core concepts in their concurrent math course. Corequisite: MATH 2. 54 hours laboratory.

Degree Applicable, Credit Grading Option: P/NP

**MATH 68 MATH JAM FOR 0.5 UNITS
CALCULUS III**

Math Jam for Calculus III is a credit course for students preparing for Calculus III. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning basic skills and transfer-level material with the goal of preparing them to be successful in their upcoming class. It is strongly recommended that students taking this course are enrolled in a calculus course. 27 hours laboratory.

Degree Applicable, Credit Grading Option: P/NP

**MATH 68C CONCURRENT SUPPORT FOR 1 UNIT
CALCULUS III**

This course offers structured support to students who are concurrently enrolled in Calculus III. The support course includes material to prepare students for the rigor of the calculus course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic, geometric and trigonometric concepts, and more in-depth investigation of core concepts in their concurrent math course. Corequisite: MATH 3. 54 hours laboratory.

Degree Applicable, Credit Grading Option: P/NP

**MATH 72A TECHNICAL ELEMENTARY 1 UNIT
ALGEBRA A**

This course provides a survey of computational and elementary algebraic processes with an emphasis on applications in the automotive and welding trades. Topics covered include, but are not limited to: computations with real numbers, ratios, and proportions. This course cannot be used as a prerequisite for Math 50 Core Intermediate Algebra or Math 55 Intermediate Algebra. 18 hours lecture.

Degree Applicable, Credit Grading Option: OP

**MATH 72B TECHNICAL ELEMENTARY 1 UNIT
ALGEBRA B**

This course provides a survey of computational and elementary algebraic processes with an emphasis on applications in the automotive and welding trades. Topics covered include, but are not limited to: linear equations, the rectangular coordinate system, and linear equations in two variables. This course cannot be used as a prerequisite for Math 50 Core Intermediate Algebra or Math 55 Intermediate Algebra. Prerequisite: MATH 72A with a minimum grade of C. 18 hours lecture.

Degree Applicable, Credit Grading Option: OP

**MATH 72C TECHNICAL ELEMENTARY 1 UNIT
ALGEBRA C**

This course provides a survey of computational and elementary algebraic processes with an emphasis on applications in the automotive and welding trades. Topics covered include, but are not limited to: percentages and measurement. This course cannot be used as a prerequisite for Math 50 Core Intermediate Algebra or Math 55 Intermediate Algebra. Prerequisite: MATH 72A with a minimum grade of C or MATH 72B with a minimum grade of C. 18 hours lecture.

Degree Applicable, Credit Grading Option: OP

**MATH 72D TECHNICAL ELEMENTARY 1 UNIT
ALGEBRA D**

This course provides a survey of computational and elementary algebraic processes with an emphasis on applications in the automotive and welding trades. Topics covered include, but are not limited to: the rectangular coordinate system, linear equations in two variables, and systems of linear equations. This course cannot be used as a prerequisite for Math 50 Core Intermediate Algebra or Math 55 Intermediate Algebra. Prerequisite: MATH 72B with a minimum grade of C and MATH 72C with a minimum grade of C. 18 hours lecture.

Degree Applicable, Credit Grading Option: OP

**MATH 100C CONCURRENT SUPPORT 1 UNIT
FOR SLAM MATHEMATICS**

Concurrent Support for SLAM Math is for students interested in disciplines that require Statistics and Liberal Arts Mathematics (SLAM) courses. This course offers structured support to students who are concurrently enrolled in a first-level transfer course, such as Statistics and Mathematics for Liberal Arts, and Finite Mathematics. The support course includes material to prepare students for the rigor of the transfer math course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic and geometric concepts, and more in-depth investigation of core concepts in their concurrent math course. Corequisite: MATH 40 or MATH 47 or MATH 33. 54 hours laboratory.

Non-Degree Applicable, Credit Grading Option: P/NP

**MATH 101C CONCURRENT SUPPORT 1 UNIT
FOR BSTEM MATHEMATICS**

Concurrent Support for BSTEM Mathematics is for students interested in Business, Science, Technology, Engineering and Mathematical fields. This course offers structured support to students who are concurrently enrolled in a first-level transfer course, such as College Algebra, Trigonometry, and Business Calculus. The support course includes material to prepare students for the rigor of the transfer math course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic and geometric concepts, and more in-depth investigation of core concepts in their concurrent math course. Corequisite: MATH 30 or MATH 39 or MATH 34. 54 hours laboratory.

Non-Degree Applicable, Credit Grading Option: P/NP

MATH 107 PRE-ALGEBRA 4 UNITS

This course is intended to serve as a bridge between arithmetic and Elementary Algebra. It includes a review of arithmetic, operations involving signed integers, fractions, and decimals, variables and variable expressions, simple linear equations and their graphs, percent and proportion, introduction to statistics, geometry and measurement, and application problems. 54 hours lecture, 54 hours laboratory.

Non-Degree Applicable, Credit Grading Option: OP

MATH 110 ELEMENTARY ALGEBRA 4 UNITS

Elementary algebra concepts, including: real numbers and their properties; algebraic expressions; integer exponents; operations with polynomial expressions; linear and quadratic equations; linear inequalities and set notation; graphs of linear equations and inequalities; slope; systems of linear equations and inequalities; and modeling with linear and quadratic equations. Strongly Recommended: MATH 107 with a minimum grade of C or MATH 107B with a minimum grade of C or NMAT 207 with a minimum grade of C. 72 hours lecture.

Non-Degree Applicable, Credit Grading Option: OP

**MATH 110C CONCURRENT SUPPORT 1 UNIT
FOR ELEMENTARY ALGEBRA**

This course is concurrent support for Elementary Algebra. The course is designed to provide additional, formal support to students who are currently taking an Elementary Algebra. It includes a review

of arithmetic, algebraic and geometric concepts that are relevant to their Elementary Algebra course, study strategies that promote understanding and improve performance, and more in-depth investigation of core concepts that are difficult for students to master. Embedded are learning skills such as growth mindset, brain research, time management, study skills, test taking, math anxiety and more. Corequisite: MATH 110 or NMAT 210. 54 hours laboratory.

Non-Degree Applicable, Credit Grading Option: P/NP

MATH 156 GEOMETRY 3.5 UNITS

Topics include congruence, similarity, right triangles, trigonometry, circles, expressing geometric properties with equations, geometric measurement and dimension, modeling with geometry, conditional probability and the rules of probability, and using probability to make decisions. Prerequisite: MATH 110 with a minimum grade of C or NMAT 210 with a minimum grade of C. 54 hours lecture, 27 hours laboratory.

Non-Degree Applicable, Credit Grading Option: OP

MUSIC

The LPC Music Program offers a nurturing and personalized educational environment for all students who wish to pursue their passions in performance, composition, theory, music business, music technology, or music education. The program is designed to appeal to a broad range of incoming students, from relative beginners to experienced artists that wish to ultimately move into music as a profession. Students are encouraged to consult music faculty and LPC counselors for guidance when planning their transfer pathways to a four-year institution in this major.

Programs of Study

Degrees:

- AA-T – Music
- AA – Music

Certificates of Achievement:

- Commercial Music: Music Business
- Commercial Music: Music Technology Fundamentals
- Commercial Music: Piano Teaching Fundamentals
- Commercial Music: Scoring For Film and Multimedia
- Commercial Music: Teaching Beginning Piano
- Commercial Music: Teaching Intermediate Piano
- Jazz Studies

Career Opportunities

Career opportunities in Music with further study include but are not limited to: Performer, Music Educator, Composer, Engineer, Mixer, Mastering Engineer, Sound Designer, Music Supervisor, Accompanist, Arranger, Orchestrator, Musicologist, Music Editor, Music Therapist, Music Attorney, Publisher, Booking Agent, Tour Manager, Music Librarian, Music Theorist, Piano Tuner, Music Journalist, Entrepreneur.

AA-T – Music

About the Department

A student earning the Associate in Arts in Music for Transfer Degree will utilize the theoretical elements of music to improve performance; perform music with regard to good use of pitch, tone, balance and expression; read and memorize music; improvise (as appropriate) and interpret music. Courses in the Music Department are designed to fulfill the needs of music majors, professional musicians, and those whose interest is avocational or recreational. Completion of the Associate in Arts in Music for Transfer Degree will provide a streamlined pathway for transfer to a CSU campus with a Music or similar major. Students are encouraged to contact a counselor and consult the Catalog for guidance when planning to transfer to a four-year institution in this major. Although not required to receive the AA-T in Music, the LPC Music department strongly recommends that its AA-T students complete MUS 1 – Music Literature and piano courses MUS 21A and 21B in preparation for piano placement exams. Students entering the BA in Music will be required to take placement exams in music theory and piano and audition on their major instrument.

Completion Requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or CA State University General Education – Breadth Requirements.
 - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.

Associate Degrees for Transfer (ADT's) also require that students must earn a "C" (or "P") or better in all courses required for the major or area of emphasis.

Program Outcomes

- Upon completion of the AA-T in Music, students are able to adhere to recognized standards of professionalism in a rehearsal setting.
- Upon completion of the AA-T in Music, students are able to analyze, rehearse, and perform music in a variety of genres at a high level.
- Upon completion of the AA-T in Music, students are able to play or sing on pitch in a section and ensemble as directed by a conductor.
- Upon completion of the AA-T in Music, students are able to utilize their knowledge of music theory and music history to analyze, interpret, and gain appreciation for musical works across a variety of genres.

Required Core: (12 Units)

MUS 8A (Music Theory and Musicianship 1)	4
MUS 8B (Music Theory and Musicianship 2)	4
MUS 10A (Music Theory and Musicianship 3)	4

Applied Music: Must take Four Semesters (4 Units)

MUS 38 (Applied Lessons)	4
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Large Ensemble: Select Four (4-8 Units)

MUS 12 (Wind Ensemble)	1
MUS 14 (Jazz Workshop)	1
MUS 15 (Jazz Ensemble)	1
MUS 16 (Philharmonic Orchestra)	1
MUS 17A (Jazz Combo 1)	1
MUS 17B (Jazz Combo 2)	1
MUS 44 (Concert Choir)	1
MUS 45 (Chamber Choir)	2
MUS 46 (Vocal Jazz Ensemble)	2

List A: (4 Units)

MUS 10B (Music Theory and Musicianship 4)	4
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Total Units for the Major 24-28

Additional General Education and Elective Units 32-36

Total Units 60

See the Las Positas College California State University General Education-Breadth or the Intersegmental General Education Transfer Curriculum (for CSU) patterns for a listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program and the optional course(s) taken. Elective units are CSU transferable. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

AA – Music

About the Degree

The Associate of Arts in Music offers a secure foundation for further study in music, and is designed to prepare students to transfer to many four year colleges. Courses in the Music Department will fulfill the needs of music majors, professional musicians, and those whose interest is recreational. Students who obtain this degree will have completed the common core of lower division courses, including piano courses required for a CSU baccalaureate degree in Music, as well as most UCs and private institutions.

Career Opportunities

Examples of careers for the music major include the following: Accompanist, Acoustician, Adjudicator/Clinician, Agent, Arranger Arts, Entertainment and Contract Attorney, Arts Journalist/Reviewer, Arts/Personnel Management, Arts Marketing and Sales, Audio Production, Composer, Conductor, Copyist/Transcriber, Copyright Consultant, Cruise Ship Entertainer, Curator (Arts, Instruments and Manuscripts), Editor, Film/T.V./Video Game Composer, Foley Artist, Fundraiser/Grant Writer, Instrument

Designer and Builder, Instrument Manufacturer, Intellectual Property Rights Attorney, Keyboard Technician/Piano Tuner, Lyricist, Music-Consultant, Music Librarian, Music Psychologist, Music Store Owner, Music Theoretician, Music Therapist, Musical Theater/Pit Musician, Musicologist, Organ Builder/Tuner/Technician, Part Preparer, Performer, Producer, Proofreader, Music Educator, Music Publisher, Recording Session Musician, Songwriter, Sound and Stage Technician, Sound Designer, Sound Engineer, Tour/Road Manager.

Program Outcomes

- Upon completion of the AA in Music, students are able to adhere to recognized standards of professionalism in a rehearsal setting.
- Upon completion of the AA in Music, students are able to apply theoretical and analytical tools to musical compositions and performance practices.
- Upon completion of the AA in Music, students are able to play or sing on pitch in a section and ensemble as directed by a conductor.
- Upon completion of the AA in Music, students are able to develop a general overview of music history and stylistic developments to inform performance and analysis.

Required Core: (22 Units)

MUS 8A (Music Theory and Musicianship 1)	4
MUS 8B (Music Theory and Musicianship 2)	4
MUS 10A (Music Theory and Musicianship 3)	4
MUS 10B (Music Theory and Musicianship 4)	4
MUS 21A (Beginning Piano)	1
MUS 21B (Beginning Piano: Intermediate).....	1
MUS 38* (Applied Lessons)	4

List A: Select from Below (4 Units)

MUS 1 (Introduction to Music)	3
MUS 3 (World Music).....	3
MUS 4 (Jazz in American Culture)	3
MUS 5 (American Cultures in Music)	3
MUS 18A (Jazz/Pop Piano 1)	1
MUS 18B (Jazz/Pop Piano 2)	1
MUS 19 (Studies in Music Composition).....	3
MUS 23A (Elementary Voice I).....	1
MUS 23B (Elementary Voice II)	1
MUS 20A (Elementary Guitar)	1
MUS 20B (Study of Guitar)	1
MUS 31 (Study of Piano)	1
MUS 34 (Music in Film).....	3
MUS 35 (Intro to Music Technology)	3
MUS 37 (Music Industry Career Development)	3
MUS 47 (College Productions-Music).....	1-4

List B: Select from Below (4 Units)

MUS 12 (Wind Ensemble)	1
MUS 14 (Jazz Workshop).....	1
MUS 15 (Jazz Ensemble)	1
MUS 16 (Philharmonic Orchestra)	1
MUS 17A (Jazz Combo 1)	1

MUS 17B (Jazz Combo 2).....	1
MUS 44 (Concert Choir)	1
MUS 45 (Chamber Choir).....	2
MUS 46 (Vocal Jazz Ensemble).....	2

Total Units for the Major 30

The Associate Degree is conferred upon those students who complete the required 60 or more semester units of the degree pattern with a grade-point average of 2.0 or better, of which 12 units must be earned at Las Positas College. In addition, students must complete a General Education pattern in order to earn a degree: see the Las Positas College General Education Pattern for Associate of Arts (AA) Degree, California State University General Education-Breadth, or the Intersegmental General Education Transfer Curriculum (for CSU) patterns for listing of areas and courses. Double counting courses in GE and the major is permissible. The number of units that may be double counted will depend on the entry point to the degree program, the optional course(s) taken, and the GE pattern selected. Elective units are degree applicable. Consult with an adviser or a counselor to plan the courses necessary to achieve your academic goal.

** To be taken four times*

Certificate of Achievement
Commercial Music: Music Business

About the Certificate

This program is designed for students who wish to learn or enhance their skills in the music business and become prepared for a career in music business. Students will gain a solid foundation in essential areas such as music theory, promotion, publishing, marketing, licensing, contracts, accounting, music technology, and entrepreneurship.

Career Opportunities

Typical career options include booking agent, personal manager, business manager, concert promotion, studio owner/manager, music legal services, publicity writer/ public relations, tour management, music retail, music publishing and distribution, and music licensing.

Program Outcomes

- Upon completion of the Certificate of Achievement in Commercial Music: Music Business, students are able to analyze and evaluate standard contracts and legal procedures in the music industry.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Business, students are able to develop a variety of approaches for marketing and promoting musical ensembles.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Business, students are able to develop strategies to solve challenges of self employment in the music industry.

Required Core: (18 Units)

BUSN 58 (Small Business Management)	3
MKTG 61 (Professional Selling)	3

MUS 4 (Jazz in American Culture)	3
MUS 5 (American Cultures in Music)	3
MUS 6 (Basic Music Skills)	2
MUS 21A (Beginning Piano)	1
MUS 37 (Music Industry Career Development)	3

List A: Select One (3 Units)

MUS 1 (Introduction to Music)	3
MUS 19 (Studies in Music Composition).....	3
MUS 35 (Intro to Music Technology)	3

Total Units 21

**Certificate of Achievement
Commercial Music: Music Technology
Fundamentals**

About the Certificate

The Certificate of Achievement in Commercial Music: Music Technology Fundamentals is designed for students who wish to learn or enhance their skills in the music technology and become proficient in industry standard software and equipment such as Logic, ProTools, Sibelius, and a variety of microphones. Completion of the program will give students the fundamental knowledge and hands-on experience needed to pursue a career in the field.

Career Opportunities

Careers in Music Technology include recording engineer, producer, sound technician, foley artist, live sound engineer, mastering engineer, recording mixer, music editor, sound designer, DJ/remixer.

Program Outcomes

- Upon completion of the Certificate of Achievement in Commercial Music: Music Technology Fundamentals, students are able to demonstrate advanced techniques using a Digital Audio Workstation program with MIDI and live audio capability.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Technology Fundamentals, students are able to present completed audio projects using recorded live audio with appropriate editing, mixing, and mastering techniques.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Technology Fundamentals, students are able to present completed audio projects using recorded live audio with appropriate editing, mixing, and mastering techniques.

Required Core: (9 Units)

MUS 6 (Basic Music Skills)	2
MUS 21A (Beginning Piano)	1
MUS 35 (Intro to Music Technology)	3
MUS 36 (Intermediate Music Technology)	3

List A: Select One (1-2 Units)

MUS 12 (Wind Ensemble)	1
MUS 14 (Jazz Workshop)	1
MUS 17A (Jazz Combo 1)	1
MUS 44 (Concert Choir)	1
MUS 45 (Chamber Choir).....	2
MUS 46 (Vocal Jazz Ensemble).....	2

Total Units 10-11

**Certificate of Achievement
Commercial Music: Piano Teaching
Fundamentals**

About the Certificate

The fully online Certificate of Achievement in Commercial Music: Piano Teaching Fundamentals is designed to provide current or prospective piano teachers with the pedagogical skills and business acumen they will require to succeed in a career as a piano teacher for a wide array of students.

Career Opportunities

Career opportunities include, but are not limited to: Private Piano Teacher for students of all ages and skill levels, piano teacher based in a music studio, music school owner/operator, and group piano teacher.

Program Outcomes

- Upon completion of the Certificate of Achievement in Commercial Music: Piano Teaching Fundamentals, students are able to teach a series of effective piano lessons tailored to a specific student's strengths and weaknesses.
- Upon completion of the Certificate of Achievement in Commercial Music: Piano Teaching Fundamentals, students are able to create a business plan for a successful independent piano teaching studio.
- Upon completion of the Certificate of Achievement in Commercial Music: Piano Teaching Fundamentals, students are able to utilize a variety of piano teaching methods and approaches in a private or group lesson.

Required Core: (10 Units)

BUSN 58 (Small Business Management)	3
MUS 25 (Teaching Beginning Piano)	2
MUS 27 (Teaching Intermediate Piano).....	2
MUS 37 (Music Industry Career Development)	3

Total Units 10

**Certificate of Achievement
Commercial Music: Scoring for Film
and Multimedia**

About the Certificate

The Certificate of Achievement in Commercial Music: Scoring for Film and Multimedia program is designed for students who wish to learn or enhance their skills in the art of composition for film or other visual media, and become prepared for a career in music business. Students will gain a well-rounded knowledge of essential areas such as composition, music technology, music theory, keyboard skills, film music history, and entrepreneurship.

Career Opportunities

Film Composer, ADR, Production sound mixer, Sound Designer, Music Editor, Music Supervisor, Copyist, Orchestrator, Composer’s Assistant, Video Game Music Composer, Synth/MIDI Programmer

Program Outcomes

- Upon completion of the Certificate of Achievement in Commercial Music: Scoring for Film and Multimedia, students are able to conceptualize, compose, and produce musical cues for visual media.
- Upon completion of the Certificate of Achievement in Commercial Music: Scoring for Film and Multimedia, students are able to communicate and collaborate with a director, conduct an effective spotting session, and revise cues according to feedback.
- Upon completion of the Certificate of Achievement in Commercial Music: Scoring for Film and Multimedia, students are able to heighten the action on screen using themes, syntactic matching, orchestration and timbral changes.

Required Core: (18 Units)

MUS 19 (Studies in Music Composition).....	3
MUS 22A (Scoring for Film and Multimedia 1)	3
MUS 22B (Scoring for Film and Multimedia 2)	3
MUS 35 (Intro to Music Technology)	3
MUS 36 (Intermediate Music Technology)	3
MUS 37 (Music Industry Career Development)	3

List A: Select One (3-4 Units)

MUS 8A (Music Theory and Musicianship 1)	4
MUS 34 (Music in Film)	3

List B: Select One (1 Unit)

MUS 18A (Jazz/Pop Piano 1)	1
MUS 21A (Beginning Piano)	1

Total Units 22-23

**Certificate of Achievement
Commercial Music: Teaching
Beginning Piano**

About the Certificate

The Certificate of Achievement in Commercial Music: Teaching Beginning Piano provides those who are current or prospective piano teachers with practical courses focused on the art of teaching

beginning students of all ages, a core music theory and technique background, and essential entrepreneurship skills they will need to succeed in self-employment and/or working for a music school. This certificate includes classes from the business department in addition to the music department.

Career Opportunities

Career opportunities include, but are not limited to: Private Piano Teacher for beginning students of all ages, piano teacher based in a music studio, music school owner/operator, and group piano teacher.

Program Outcomes

- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Beginning Piano, students are able to develop, market, and maintain a private piano teaching studio.
- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Beginning Piano, students are able to present new pieces to their students by explaining the form, compositional technique, style and mood of the piece, as well as the intent of the composer.
- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Beginning Piano, students are able to solve common teaching issues using a variety of approaches.

Required Core: (13 Units)

MUS 8A (Music Theory and Musicianship 1)	4
MUS 8B (Music Theory and Musicianship 2)	4
MUS 18A (Jazz/Pop Piano 1)	1
MUS 25 (Teaching Beginning Piano)	2
MUS 38 (Applied Lessons)	2

List A: Select Two (5-6 Units)

BUSN 58 (Small Business Management)	3
MKTG 61 (Professional Selling)	3
MUS 26 (Methods/Materials/Piano Teachers)	2

Total Units 18-19

**Certificate of Achievement
Commercial Music: Teaching
Intermediate Piano**

About the Certificate

The Certificate of Achievement in Commercial Music: Teaching Intermediate Piano provides students who are current or prospective piano teachers with practical courses focused on the art of teaching intermediate students of all ages, a core music theory and technique background, and essential entrepreneurship skills they will need to succeed in self-employment and/or working for a music school. This certificate includes classes from the business department in addition to the music department.

Career Opportunities

Career opportunities include, but are not limited to: Private Piano Teacher for beginning through intermediate students of all ages, piano teacher based in a music studio, music school owner/operator, and group piano teacher.

Program Outcomes

- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Intermediate Piano, students are able to choose appropriate methods and repertoire for the intermediate student.
- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Intermediate Piano, students are able to present new pieces to their students by explaining the form, compositional technique, style and mood of the piece, as well as the intent of the composer.

Required Core: (14 Units)

MUS 10A (Music Theory and Musicianship 3)	4
MUS 10B (Music Theory and Musicianship 4)	4
MUS 18A (Jazz/Pop Piano 1)	1
MUS 27 (Teaching Intermediate Piano)	2
MUS 28 (Keyboard Skills)	1
MUS 38 (Applied Lessons)	2

List A: Select Two (6 Units)

BUSN 58 (Small Business Management)	3
MKTG 61 (Professional Selling)	3
MUS 1 (Introduction to Music)	3

Total Units 20

Certificate of Achievement Jazz Studies

About the Certificate

The Certificate of Achievement in Jazz Studies provides creative and innovative training in all styles of jazz for students who wish to become working professionals. Concentrations of study include performance, theory, ear training, history, improvisation, music industry studies, and keyboard skills. Students are provided many opportunities to hone their skills in ensemble settings, individual practice, and The program maintains an active articulation agreement with the California Jazz Conservatory in Berkeley, for those students who wish to go on to earn a BM in Jazz Studies.

Career Opportunities

Opportunities include but are not limited to: Jazz Performance, Jazz Accompaniment, Jazz Arranging Jazz Education, Jazz History, Jazz Journalism, Ensemble Direction, and Music Entrepreneurship.

Program Outcomes

- Upon completion of the Certificate of Achievement in Jazz Studies, students are able to perform, arrange, and compose jazz literature.
- Upon completion of the Certificate of Achievement in Jazz Studies, students are able to analyze and interpret harmonic,

melodic, and formal elements of solos by jazz improvisation masters.

- Upon completion of the Certificate of Achievement in Jazz Studies, students are able to rehearse and practice effectively.

Required Core: (18 Units)

MUS 4 (Jazz in American Culture)	3
MUS 8A (Music Theory and Musicianship 1)	4
MUS 8B (Music Theory and Musicianship 2)	4
MUS 18A (Jazz/Pop Piano 1)	1
MUS 37 (Music Industry Career Development)	3
MUS 38* (Applied Lessons)	2
MUS 48 (Improvisation Lab)	1

List A: Select Two (2-3 Units)

MUS 14 (Jazz Workshop)	1
MUS 15 (Jazz Ensemble)	1
MUS 17A (Jazz Combo 1)	1
MUS 17B (Jazz Combo 2)	1
MUS 46 (Vocal Jazz Ensemble)	2

Total Units 20-21

* Must take two semesters of Applied Lessons

Music Courses (MUS)

MUS 1 INTRODUCTION TO MUSIC 3 UNITS

Music for enjoyment and understanding through informed listening, analysis, evaluation and discernment of musical elements, forms, and repertoire. Attendance at concerts and listening to a variety of music may be required. 54 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; IGETC: 3A; C-ID# MUS 100.

Degree Applicable, Credit Grading Option: OP

MUS 3 WORLD MUSIC 3 UNITS

The study of the folk and art music of world cultures. Includes the traditional music of Sub-Saharan Africa, Middle East, China, Japan, Indonesia, India, Latin America, Europe, and Native American. Attendance at world music concerts is required. 54 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; IGETC: 3A.

Degree Applicable, Credit Grading Option: OP

MUS 4 JAZZ IN AMERICAN CULTURE 3 UNITS

History, trends and influences of the phenomenon of jazz through integration of the cultures of (but not limited to) European-American and the Latin-American communities. Required listening, reading and concert attendance will guide the student to value jazz as a form of self expression and improve the ability to listen and understand the various eras in jazz from pre-Dixieland to present day. 54 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; IGETC: 3A.

Degree Applicable, Credit Grading Option: GR

MUS 5 AMERICAN CULTURES IN MUSIC 3 UNITS

Music in twentieth century United States through the study

of contributions of three selected groups from the following: African-Americans, Latin-Americans, Asian-Americans, European-Americans, and Native Americans. Emphasis on understanding diverse styles, and on integrating these styles into American music. Concert, religious, and folk-pop music will be included. 54 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; IGETC: 3A.

Degree Applicable, Credit Grading Option: OP

MUS 6 BASIC MUSIC SKILLS 2 UNITS

Essentials of music through notation, times elements, melody, harmony, and tonality, texture, dynamics and knowledge of the keyboard. Sight singing and ear training. 36 hours lecture. Family: Music Harmony amd Musicianship Elementary. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; C-ID# MUS 110.

Degree Applicable, Credit Grading Option: OP

MUS 8A MUSIC THEORY AND MUSICIANSHIP 1 4 UNITS

Elements of diatonic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present. Includes keys, modes, scales, tonality, intervals, solfeggio, consonance/dissonance, rhythmic organization, chord structures, chord and interval recognition, melodic and rhythmic dictation, voice leading principles, non-chord tones, four-part voice leading with selected primary and secondary chords, and figured bass realization. Strongly Recommended: MUS 6 with a minimum grade of C, MUS 21A with a minimum grade of C. 63 hours lecture, 27 hours laboratory. Family: Music Harmony amd Musicianship Elementary. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; IGETC 3A; C-ID# MUS 120, MUS 125.

Degree Applicable, Credit Grading Option: OP

MUS 8B MUSIC THEORY AND MUSICIANSHIP 2 4 UNITS

Continues diatonic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present, continues solfeggio, chord recognition, melodic and rhythmic dictation, voice leading involving four-part choral writing, and figured bass realization. Introduces harmonic dictation, cadential elaboration, non-dominant seventh chords, and an introduction to secondary/applied chords and modulation. Prerequisite: MUS 8A with a minimum grade of C. Strongly Recommended: MUS 21A with a minimum grade of C. 54 hours lecture, 54 hours laboratory. Family: Music Harmony amd Musicianship Elementary. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; IGETC: 3A; C-ID# MUS 130, MUS 135.

Degree Applicable, Credit Grading Option: OP

MUS 10A MUSIC THEORY AND MUSICIANSHIP 3 4 UNITS

This course incorporates the concepts from the Mus 8 series. In addition, through analysis and composition, the course will include: introduction to chromatic harmony; secondary/applied chords; modulation; borrowed chords; introduction to Neapolitan and augmented-sixth chords. Mus 10A also applies and develops the rhythmic, melodic, and harmonic materials of the musicianship portion of Mus 8 series through ear training, sight singing, analysis, and dictation. Prerequisite: MUS 8B with a minimum grade of C.

54 hours lecture, 54 hours laboratory. Family: Music Harmony amd Musicianship Intermediate. Transfer: CSU, UC; C-ID# MUS 140, MUS 145.

Degree Applicable, Credit Grading Option: OP

MUS 10B MUSIC THEORY AND MUSICIANSHIP 4 4 UNITS

This course incorporates the concepts from Music 10A. In addition, through analysis and composition, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th century techniques such as: Impressionism, tone rows, set theory, pandiatonicism and polytonalism, meter and rhythm. This course also applies and develops the rhythmic, melodic, and harmonic materials of MUS 10A through ear training, sight singing, analysis, and dictation. Prerequisite: MUS 10A with a minimum grade of C. 54 hours lecture, 54 hours laboratory. Family: Music Harmony amd Musicianship Intermediate. Transfer: CSU, UC; C-ID# MUS 150, MUS 155.

Degree Applicable, Credit Grading Option: OP

MUS 11 COMMERCIAL MUSIC COMBO 1 UNIT

For instrumentalists and vocalists who want experience in performing and interpreting small-group commercial music literature. Emphasis will be on articulations, stylistic differences, composition, arranging, and common performance practices. Enrollment by audition only. Strongly Recommended: MUS 18A with a minimum grade of C, MUS 6 with a minimum grade of C. 54 hours laboratory. Transfer: CSU. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 12 WIND ENSEMBLE 1 UNIT

Wind ensemble repertoire of all styles and periods. Emphasis on group participation and public performance. Attendance at all scheduled performances required. Enrollment is subject to a standardized audition demonstrating musical ability and technical proficiency suitable to the course level. 72 hours laboratory. Family: Music Band. AA/AS GE. Transfer: CSU, UC; C-ID# MUS 180. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 13 HISTORY OF ROCK & ROLL 3 UNITS

A cultural survey of original American music traditions, forms and trends influenced by cultural, socio-economic, socio-political and economic changes including blues, jazz, early rock, the "British invasion," rap, hip hop culture, Latino rock, heavy metal, jazz-rock fusion, electronic, modern rock, and pop. 54 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: C1; IGETC: 3A.

Degree Applicable, Credit Grading Option: OP

MUS 14 JAZZ WORKSHOP 1 UNIT

Reading, preparation and performance of contemporary Jazz music. Opportunity to apply improvisation techniques in a group setting. 54 hours laboratory. Family: Music Jazz Instrumental. AA/AS GE. Transfer: CSU, UC; C-ID# MUS 180. Number of times course may

be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 15 JAZZ ENSEMBLE 1 UNIT

This course is for the study, rehearsal, and public performance of standard jazz ensemble literature, with an emphasis on the development of skills needed to perform within an ensemble. New literature will be studied each term so that different technical and artistic issues are addressed. Opportunities to arrange and compose for the ensemble as well as to conduct. Opportunity to apply improvisation techniques in a group setting. 54 hours laboratory. Family: Music Jazz Instrumental. Transfer: CSU, UC; C-ID# MUS 180. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 16 PHILHARMONIC ORCHESTRA 1 UNIT

This course is for the study, rehearsal, and public performance of the standard Classical orchestra literature, with an emphasis on the development of skills needed to perform within an ensemble. Different literature is studied each semester so that different technical, historical and artistic issues are addressed. Attendance at all scheduled performances is required. Audition required. 54 hours laboratory. Family: Music Orchestra/Symphony. Transfer: CSU, UC; C-ID# MUS 180. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 17A JAZZ COMBO 1 1 UNIT

For instrumentalists who want experience in performing and interpreting small-group literature. The music literature will cover important aspects of Jazz band development and works of all styles and periods. Emphasis will be on articulations, stylistic differences, composition, arranging, and common performance practices of the various periods of music. Enrollment by audition only. Strongly Recommended: MUS 18A with a minimum grade of C, MUS 6 with a minimum grade of C. 54 hours laboratory. Family: Music Jazz Combo. Transfer: CSU, UC; C-ID# MUS 180, MUS 185. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 17B JAZZ COMBO 2 1 UNIT

For intermediate/advanced instrumentalists who want to continue what they learned in 17A by performing, composing, and arranging small-group literature. Enrollment by audition only. Prerequisite: MUS 17A with a minimum grade of C. 54 hours laboratory. Family: Music Jazz Combo. Transfer: CSU, UC; C-ID# MUS 180, MUS 185. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 18A JAZZ/POP PIANO 1 1 UNIT

Voicing, chords, and guidelines for interpretation of lead sheets in a variety of genres for the contemporary pianist. Emphasis on improvisation, accompaniment, bass lines, grooves, and reharmonization. Strongly Recommended: MUS 21A with a minimum grade of C. 54 hours laboratory. Family: Music Jazz/Pop Piano. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 18B JAZZ/POP PIANO 2 1 UNIT

Building on the content offered in Music 18A, this course offers more advanced voicings, chords, and guidelines for interpretation of lead sheets in a variety of genres for the contemporary pianist. The student learns chords and chord progressions used in jazz and popular music styles as applied to the keyboard, focusing on chromatic seventh chords and sequences, chord extensions and advanced rhythmic concepts. Prerequisite: MUS 18A with a minimum grade of C. 54 hours laboratory. Family: Music Jazz/Pop Piano. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 19 STUDIES IN MUSIC COMPOSITION 3 UNITS

Presents a technical and historical analysis of works in various music languages. Students will compose individual pieces to be performed by college-based music ensembles. Strongly Recommended: MUS 8A with a minimum grade of B. 54 hours lecture. Family: Music Composition. AA/AS GE. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 20A ELEMENTARY GUITAR 1 UNIT

Beginning guitar using a combination of folk and classic approaches to playing technique, utilizing basic scales and chords in first position, and music notation. Strongly Recommended: MUS 6 with a minimum grade of C. Family: Music Guitar. 54 hours laboratory. AA/AS GE. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 20B STUDY OF GUITAR 1 UNIT

Development of skills and knowledge from Music 20A. Emphasis on playing techniques and performance. Designed for the intermediate and advanced performer. Prerequisite: MUS 20A with a minimum grade of C. 54 hours laboratory. Family: Music Guitar. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 20C ADVANCED GUITAR 1 UNIT

Development of skills and knowledge from Music 20B. Emphasis on advanced playing techniques and performance. Designed for the advanced performer. Prerequisite: MUS 20B with a minimum grade of C. 54 hours laboratory. Family: Music Guitar. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 21A BEGINNING PIANO 1 UNIT

Group instruction in piano for the absolute beginner with emphasis on developing technique, reading music, and performing. Strongly Recommended: MUS 6 with a minimum grade of C. 54 hours laboratory. Family: Music Piano. AA/AS GE. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 21B BEGINNING PIANO: INTERMEDIATE 1 UNIT

Development of skills learned in Music 21A. Emphasis on further development of technique and performance. Prerequisite: MUS 21A with a minimum grade of C. 54 hours laboratory. Family: Music Piano. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 22A SCORING FOR FILM AND MULTIMEDIA 1 3 UNITS

Applications and techniques of composition and sound effects for film and other visual media. Musical and technical elements of producing digital audio tracks are covered. Strongly Recommended: MUS 35 with a minimum grade of C. 54 hours lecture. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 22B SCORING FOR FILM AND MULTIMEDIA 2 3 UNITS

Building on material covered in Scoring for Film and Multimedia 1, students will continue to hone compositional technique for film and other visual media. Upon successful completion of this course, students will be prepared to enter the film music industry with necessary skill sets to succeed. Prerequisite: MUS 22A with a minimum grade of C. Strongly Recommended: MUS 36 with a minimum grade of C. 54 hours lecture. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 23A ELEMENTARY VOICE I 1 UNIT

Group singing with emphasis on solo performance. Tone production, Breathing, diction, and interpretation in regard to song literature. Strongly Recommended: MUS 6. 54 hours laboratory. Family: Music Voice. AA/AS GE. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 23B ELEMENTARY VOICE II 1 UNIT

Development of skills learned in Music 23A. Emphasis on further development of vocal production and performance. Prerequisite: MUS 23A with a minimum grade of C. 54 hours laboratory. Family: Music Voice. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 25 TEACHING BEGINNING PIANO 2 UNITS

Principles of successful piano teaching with emphasis upon development of technique and reading ability in beginner level students; private and group piano teaching methods; personal development as teacher and musician. Observation of piano lessons or classes and supervised practice teaching of private or class piano students may be required. Intended for pianists with intermediate or advanced skills. Strongly Recommended: MUS 21B with a minimum grade of C. 36 hours lecture. Family: Music Piano Pedagogy. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MUS 26 METHODS/MATERIALS/PIANO TEACHERS 2 UNITS

Examination of various methods for use in teaching piano; setting up a teaching studio and maintaining the business; finding and selecting supplementary literature; preparing for recitals and other special events. Intended for pianists with intermediate or advanced skills who are engaged in the teaching of piano or who would like to prepare to teach. Strongly Recommended: MUS 21B with a minimum grade of C. 36 hours lecture. Family: Music Piano Pedagogy. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MUS 27 TEACHING INTERMEDIATE PIANO 2 UNITS

Principles of successful piano teaching with emphasis upon continued development of technique and reading ability in intermediate level students; private and group piano teaching methods; selection of intermediate literature; Baroque, Classical, Romantic and 20th Century styles; studio organization and personal development as teacher and musician. Observation of piano lessons or classes and supervised practice teaching of private or class piano students may be required. Intended for pianists with intermediate or advanced skills. Strongly Recommended: MUS 21B with a minimum grade of C. 36 hours lecture. Family: Music Piano Pedagogy. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MUS 28 KEYBOARD SKILLS 1 UNIT

Emphasis on correct harmonization of melodies with various styles of piano accompaniments; transposition; improvisation; modulation; sight reading; principles of accompanying soloists and groups; ensemble playing; playing by ear. Frequent solo and ensemble performances in class. Intended for piano teachers or classroom music teachers. Strongly Recommended: MUS 21B with a minimum grade of C. 54 hours laboratory. Family: Music Piano Pedagogy. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 29 INDEPENDENT STUDY, MUSIC 0.5-2 UNITS

Supervised study in the area of Music. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27-108 hours laboratory. Transfer: CSU.

Degree Applicable, Credit Grading Option: OP

MUS 31 STUDY OF PIANO 1 UNIT

Development of functional piano skill. Designed for knowledge and skill of intermediate or advanced level. Prerequisite: MUS 21B with a minimum grade of C. 54 hours laboratory. Family: Music Piano. Transfer: CSU, UC.

Degree Applicable, Credit Grading Option: OP

MUS 34 MUSIC IN FILM 3 UNITS

The class traces the history and development of film music through reading, lecture and film viewing. The class studies the process of film scoring and how music and its relationship to film have changed over the last century. Class includes discussion and evaluation of different compositional styles and learning to listen critically to film scores while viewing movies. 54 hours lecture. AA/AS GE. Transfer: CSU, UC; CSU GE: C1, C2; IGETC: 3A, 3B.

Degree Applicable, Credit Grading Option: OP

MUS 35 INTRO TO MUSIC TECHNOLOGY 3 UNITS

This course covers the following basic aspects of music technology: computer skills, software-based sequencing, synthesis, MIDI, sampling, notation, principles of sound, microphones, introduction

to digital audio, signal processing, mixers and mixing, recording principles, cables and interconnects, and audio in live performance. 54 hours lecture. Transfer: CSU; C-ID# CMUS 100 X, CMUS 130 X.

Degree Applicable, Credit Grading Option: OP

MUS 36 INTERMEDIATE MUSIC TECHNOLOGY 3 UNITS

This course is the 2nd level course in the music technology series. Topics include intermediate/advanced computer skills, software-based sequencing, synthesis, MIDI, sampling, notation, principles of sound, microphones, introduction to digital audio, signal processing, mixers and mixing, recording principles, cables and interconnects, and audio in live performance. Prerequisite: MUS 35 with a minimum grade of C. 54 hours lecture. Transfer: CSU; C-ID# CMUS 110 X, CMUS 120 X.

Degree Applicable, Credit Grading Option: OP

MUS 37 MUSIC INDUSTRY CAREER DEVELOPMENT 3 UNITS

Career opportunities and business practices in the music industry. Focus on career options and development, artist management, unions, music merchandising, music for film and digital media, and concert promotion. 54 hours lecture. Family: Music Industry. AA/AS GE. Transfer: CSU; C-ID# CMUS 140 X.

Degree Applicable, Credit Grading Option: OP

MUS 38 APPLIED LESSONS 1 UNIT

Individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. Achievement is evaluated through a juried performance. Enrollment subject to a standardized audition demonstrating basic competencies in technique and musicianship in their major performance medium. Concurrent enrollment in one music theory class (MUS 8A, MUS 8B, MUS 10A or MUS 10B) and one performing ensemble (MUS 12, MUS 14, MUS 15, MUS 16, MUS 44, MUS 45, MUS 46A, MUS 46B, or MUS 48). Corequisite: MUS 8A or MUS 8B or MUS 10A or MUS 10B and MUS 12 or MUS 14 or MUS 15 or MUS 16 or MUS 44 or MUS 45 or MUS 46A or MUS 46B or MUS 48. 54 hours laboratory. AA/AS GE. Transfer: CSU, UC; C-ID# MUS 160.

Degree Applicable, Credit Grading Option: OP

MUS 41 INSTRUMENTAL CHAMBER MUSIC 1 UNIT

This course is an instrumental music ensemble that performs selections from the standard classical repertoire, as well as modern compositions. Students develop all aspects of instrumental performance including technique, sight-reading, intonation, rhythmic interpretation, ensemble balance, and stylistic interpretation. Musical instruments may include members of the brass, woodwind, string, percussion, and keyboard families. Enrollment by audition only. 54 hours laboratory. Transfer: CSU; C-ID# MUS 185. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 44 CONCERT CHOIR 1 UNIT

This course offers an opportunity for students to study, interpret, and perform vocal ensemble music in a variety of styles. Emphasis is placed on building ensemble singing experience and techniques towards a successful audition into higher-level ensembles. Designed for students of all backgrounds and experience levels. Concurrent enrollment in MUS 6 (Basic Music Skills) is highly recommended. 54 hours laboratory. Family: Music Choir. AA/AS GE. Transfer: CSU, UC; C-ID# MUS 180. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 45 CHAMBER CHOIR 2 UNITS

A performance-based class furthering the effective study, interpretation, and presentation of choral literature. Designed for vocalists with previous classical ensemble experience. Performs multiple times per semester. Strongly Recommended: MUS 6 with a minimum grade of C, MUS 44 with a minimum grade of C. 9 hours lecture, 81 hours laboratory. Family: Music Choir. AA/AS GE. Transfer: CSU, UC; C-ID# MUS 180. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 46 VOCAL JAZZ ENSEMBLE 2 UNITS

An advanced performance-based class exploring jazz voice in an ensemble setting. Course emphasizes the study of a variety of jazz and pop/rock styles, overall healthy vocal technique, use of microphones and an active sound system, vocal improvisation, and overall musicianship. Singing and ensemble experience highly recommended, as the class requires strong sense of intonation, rhythm, and vocal blend. Performs multiple times per semester. Strongly Recommended: MUS 6 with a minimum grade of C, MUS 44 with a minimum grade of C. 9 hours lecture, 81 hours laboratory. Family: Music Jazz Choir. AA/AS GE. Transfer: CSU, UC. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

MUS 47 COLLEGE PRODUCTIONS-MUSIC 1-5 UNITS

Participation in scheduled music productions. Includes music support for drama productions, college musicals, and other major performances. Enrollment is for the duration of the production, and by audition only. 54-270 hours laboratory. Family: Music Theater/Productions. Transfer: CSU, UC. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: GR

MUS 48 IMPROVISATION LAB 1 UNIT

This course exposes students to the fundamental concepts and skills any improviser needs to succeed in a group setting. The course is open to any instrumentalist or vocalist with no audition or experience in jazz required. The course is intended to prepare students for established advanced jazz ensembles in the department like Jazz Combos, Jazz Band, and Vocal East. Emphasis will be on group activities, independent practice, basic theory concepts, and performance. Strongly Recommended: MUS 6 with a minimum grade of C or MATH 8A with a minimum grade of C. 54 hours laboratory. Transfer: CSU, UC. Number of times course may be taken for credit: 4.

Degree Applicable, Credit Grading Option: OP

NONCREDIT AUTOMOTIVE TECHNOLOGY

The Automotive Technology Department at Las Positas College offers tuition-free, non-credit courses and two certificate programs designed to provide students with the skills needed to secure employment and/or workplace advancement in the industry. Students in the Las Positas Non-Credit Automotive Technology program work side by side and hands-on with industry professionals in a fully equipped and up-to-date facility.

Programs of Study

Certificates of Completion:

- Automotive Basic
- Automotive Smog

Certificate of Completion Automotive Basic

About the Certificate

The Automotive Basic Certificate of Completion can provide the skills necessary for students to qualify as entry-level technicians. This program focuses on basics of the automobile. Students work side-by-side and hands-on with industry professionals in a fully equipped and up-to-date facility.

Career Opportunities

Career opportunities include, Introductory Automotive Technician, and Automotive Parts Personnel.

Program Outcomes

- Upon completion of the Certificate of Completion in Automotive Basic, students are able to diagnose basic engine mechanical issues.
- Upon completion of the Certificate of Completion in Automotive Basic, students are able to measure engine components and compare to specifications.
- Upon completion of the Certificate of Completion in Automotive Basic, students are able to tear down, inspect and reassemble engines.

Required Core (360 Hours)

NAUT INTR (Automotive Service and Introduction).....	144
NAUT LABA (Automotive Lab)	108
NAUT LABB (Automotive Lab Advanced).....	108

Total Hours 360

Certificate of Completion Automotive Smog

About the Certificate

The Automotive Smog Certificate of Completion will provide the skills necessary for students to qualify as trained entry-level technicians, as well as for career advancement. This program focuses on the rules and regulations of the California Smog Program and will prepare student to gain their California Smog licenses. This programs focus is on the diagnosis and repair of smog controlled vehicles in California. Students work side-by-side and hands-on with industry professionals in a fully equipped and up-to-date facility.

Career Opportunities

Career opportunities include Teaching, Automotive Technician, Automotive Parts Personnel, Automotive Management, Shop Owners, and Automotive Performance Personnel

Program Outcomes

- Upon completion of the Certificate of Completion in Automotive Smog, students are able to apply and take the California Smog test.
- Upon completion of the Certificate of Completion in Automotive Smog, students are able to diagnose emission issues.
- Upon completion of the Certificate of Completion in Automotive Smog, students are able to diagnose engine mechanical issues.

Required Core (387 Hours)

NAUT INTR (Automotive Service and Introduction).....	144
NAUT L1L2 (Smog Level One and Level Two)	117
NAUT SDR (Specified Diagnostic and Repair)	126

Total Hours 387

Noncredit Automotive Technology Courses (NAUT)

NAUT INTR AUTOMOTIVE SERVICE 0 UNITS AND INTRODUCTION

Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle or who are planning an automotive career. 144 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NAUT L1L2 SMOG LEVEL ONE 0 UNITS AND LEVEL TWO

This course includes classes/modules the State of California's requires for a student/automotive technician to be prepared to take their Smog License Test. This class will include Level One and Level Two smog training only. At the end of the class students may or may not qualify for either EI or EO smog license. See www.smogcheck.ca.gov for more information. 117 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NAUT LABA AUTOMOTIVE LAB 0 UNITS

Automotive Lab is an open laboratory class for basic automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently). 108 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

**NAUT LABB AUTOMOTIVE LAB 0 UNITS
ADVANCED**

Automotive Lab Advanced is an open laboratory class for advanced automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Students are expected to help others in class and be able to work without guidance. Service information via computer service manuals will be available for students to use for vehicle information and research. Class is recommended for second year students only. Prerequisite: AUTO LABA with a minimum grade of C or NAUT LABA with a minimum grade of C, AUTO INTR with a minimum grade of C or NAUT INTR with a minimum grade of C. 108 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

**NAUT SDR SPECIFIED DIAGNOSTIC 0 UNITS
AND REPAIR**

This is a Bureau of Automotive Repair approved alternative to the ASE A6, A8 and L1 certification required for obtaining and maintaining smog technician licenses. This course will follow BAR guidelines for smog license prep. Student may or may not qualify for license exam after taking this class. For more information see www.smogcheck.ca.gov. 126 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NONCREDIT BUSINESS

The Business Department at Las Positas College offers tuition-free, short-term, noncredit courses design to build skills needed to succeed in careers requiring introductory and advanced business skills. Whether you would like to run your own business or enhance your current position, the courses offer valuable and practical education on leadership, customer service, and management skills. Note: This program is not intended as a substitute for any credit certificate or associate degree.

Programs of Study

Certificates of Completion:

- Customer Service
- Small Business Management

Certificate of Completion Customer Service

About the Certificate

This customer service program is a short-term (typically one year) non-credit program. It is a career technical education program designed to prepare students for workplace readiness in all levels of business. The program will help students at all levels if their career from interviewing, managing, decision making, and working with people on a daily basis. The program will also aid students in preparing for college-level courses in Business.

Career Opportunities

Employment opportunities include working in fields related to retail, customer service, marketing, sales, management, and small business. The skills taught in these classes are soft skills which have been identified from our advisory board, local employers, and Bureau of Labor Statistics as valuable and desirable. In addition to a traditional career, this will prepare students for the gig economy.

Program Outcomes

- Upon completion of the Certificate of Completion in Customer Service, students are able to demonstrate how to prioritize responsibilities in relation to deadlines/time demands.
- Upon completion of the Certificate of Completion in Customer Service, students are able to identify personal strengths and areas of improvement in relation to business roles and expertise.
- Upon completion of the Certificate of Completion in Customer Service, students are able to recognize multiple tools in improving customer satisfactions and loyalty.

Required Core: Select One (9 Hours)

NBUS 200 (Communication in the Workplace) 9

NBUS 210 (Customer Service)9

List A: Select Four (36 Hours)

NBUS 201 (Writing Skills for Managers).....9
 NBUS 202 (Attitude in the Workplace)9
 NBUS 203 (Decision Making and Problem Solving).....9
 NBUS 204 (Managing Organizational Change).....9
 NBUS 205 (Team Building)9
 NBUS 206 (Time Management)9
 NBUS 207 (Conflict Resolution)9
 NBUS 208 (Stress Management in the Workplace).....9
 NBUS 209 (Values and Ethics)9

Total Hours 45



About the Certificate

This small business management program is a short-term (typically one year) non-credit program. It is a career technical education program designed to prepare students and managers of all levels in operating, managing, and growing a small business. Learning from real-life small business management cases and projects, you'll develop the business acumen and technical expertise needed to launch a new enterprise, take over an existing business, or be the one employee who can make a difference to the future of the company. The program will also aid students in preparing for college-level courses in Business.

Career Opportunities

Students will be prepared to launch new enterprises, assume responsibility for existing businesses, or work as a manager in others' organizations. Additional employment opportunities include working in fields related to management, marketing, sales, operations, and entrepreneurship.

In addition to a traditional career, this will prepare students for the gig economy. It is estimated by the Department of Labor and the Small Business Administration that 80% of new jobs are initially created by small businesses.

Program Outcomes

- Upon completion of the Certificate of Completion in Small Business Management, students are able to evaluate the feasibility of success when starting a new business venture.
- Upon completion of the Certificate of Completion in Small Business Management, students are able to research and compose a business plan that can be used for planning as well as financing.
- Upon completion of the Certificate of Completion in Small Business Management, students are able to recognize the advantages and disadvantages of the various forms of business ownership relative to a business opportunity.
- Upon completion of the Certificate of Completion in Small Business Management, students are able to demonstrate the ability to comprehend, apply, and evaluate standards of ethical

behavior in various business settings.

Required Core (18 Hours)

NBUS 212 (Developing Your Business Plan).....9
 NBUS 213 (Legal Aspects of Small Business).....9

List A: Select Three (27 Hours)

NBUS 211 (Design Thinking for the Entrepreneur).....9
 NBUS 214 (Success in the Gig Economy)9
 NBUS 200 (Communication in the Workplace)9
 NBUS 201 (Writing Skills for Managers).....9
 NBUS 202 (Attitude in the Workplace)9
 NBUS 203 (Decision Making and Problem Solving)9
 NBUS 204 (Managing Organizational Change)9
 NBUS 205 (Team Building)9
 NBUS 206 (Time Management)9
 NBUS 207 (Conflict Resolution)9
 NBUS 208 (Stress Management in the Workplace).....9
 NBUS 209 (Values and Ethics)9
 NBUS 210 (Customer Service)9

Total Hours 45

Noncredit Business Courses (NBUS)

NBUS 200 COMMUNICATION IN THE WORKPLACE 0 UNITS

This course introduces the key elements for communication in the professional workplace, and is beneficial for students seeking to improve their interpersonal communication skills. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 201 WRITING SKILLS FOR MANAGERS 0 UNITS

This course is designed to provide students with the skills necessary to effectively write various business documents. This course is beneficial for students seeking to improve their written communication skills in the workplace. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 202 ATTITUDE IN THE WORKPLACE 0 UNITS

This course introduces the key elements for attitude in the professional workplace. This course is beneficial for students seeking to improve their ability to communicate a positive attitude while at work. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 203 DECISION MAKING AND PROBLEM SOLVING 0 UNITS

This noncredit course introduces the key elements for decision making and problem solving in the professional workplace. This course is beneficial for students seeking to improve their decision making and problem solving skills. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 204 MANAGING ORGANIZATIONAL CHANGE 0 UNITS

This noncredit course introduces the key elements for managing organizational change in the professional workplace. This course is beneficial for students seeking to improve their understanding of how to manage organizational change. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 205 TEAM BUILDING 0 UNITS

This course is designed to provide students with an understanding of how teams work together, and common problems teams encounter and how to solve them. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 206 TIME MANAGEMENT 0 UNITS

This course is designed to introduce students to time management principles and specific tools that assist in making the most efficient use of time. This course is beneficial for students seeking to improve their time management skills. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 207 CONFLICT RESOLUTION 0 UNITS

This course is designed to introduce students to the meaning of conflict, the causes of conflict, and strategies for resolving interpersonal conflict. This course is beneficial for students seeking to improve their conflict resolution skills. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 208 STRESS MANAGEMENT IN THE WORKPLACE 0 UNITS

This course is designed to acquaint students with key elements of stress management in the workplace. This course is beneficial for students seeking to improve their skills in recognizing and managing stress. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 209 VALUES AND ETHICS 0 UNITS

This course is designed to acquaint students with the importance of values and ethics in the workplace. This course is beneficial for students seeking to improve skills in interpreting how values influence actions and evaluating the impact of ethical behavior. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 210 CUSTOMER SERVICE 0 UNITS

This noncredit course covers key skills and attitudes necessary to effectively meet the customer's need and teaches students best practices for the importance of values and ethics in the workplace. Not applicable to associate degree. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 211 DESIGN THINKING FOR THE 0 UNITS

ENTREPRENEUR

This course introduces students to the decision making process called Design Thinking. Design Thinking emphasizes deep user understanding, intentional iteration and a focus on possibilities as a way to improve people's lives and enhance and create value for stakeholders. Design Thinking draws on methods from engineering and design and combines them with ideas from the arts, social services and the business world. Emphasis will be placed on experiential learning, identifying specific behaviors and skills that enable design thinkers to meet customer demands in all types of organizations including for-profits, non-profits, healthcare, arts and education. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 212 DEVELOPING YOUR BUSINESS PLAN 0 UNITS

This is a course designed for students considering starting their own businesses. All major elements of a business plan will be covered, including financial statements, marketing, and competitive strategies. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 213 LEGAL ASPECTS OF SMALL BUSINESS 0 UNITS

This course is designed for students interested in establishing a business and who need information about the legal issues involved. Legal aspects such as forms of ownership, licensing, and taxes will be covered. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 214 SUCCESS IN THE GIG ECONOMY 0 UNITS

This course provides students with a hands-on class experience in starting a side business that can add to a student's income stream or grow into a full-time business. Students will learn to: identify income producing opportunities, develop business and promotion plans, and fund, launch, refine their business and make a profit. Emphasis will be placed on experiential learning, taking action and the iterative refinement process needed to start a new business. 9 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NBUS 233 PERSONAL FINANCIAL MANAGEMENT AND PLANNING 0 UNITS

Designed to provide students with the practical, hands-on means of successfully managing their personal finances and of becoming financially empowered upon course completion. Among other topics, the course will cover the basics of credit management, assessing insurance needs, budgeting, personal financial statement preparation, investment and savings accounts, management of taxes, retirement accounts, will preparation and estate planning. 54 hours.

Non-Degree Applicable, Noncredit Grading Option: OP

NONCREDIT COMPUTER INFORMATION SYSTEMS

The Computer Information Systems Department at Las Positas College offers tuition-free, noncredit courses that provide a pathway into the Computer Information Systems and Computer Networking Technology credit programs specifically in the fields of cybersecurity and networking technologies.

Noncredit Computer Information Systems Courses (NCIS)

NCIS 201 CYBERSECURITY CAMP 0 UNITS

This course will introduce the novice to cybersecurity career opportunities, cyber ethics, online safety, and cyber threats. Students will be introduced to cybersecurity principles, virtual machines, basic Windows and Linux administration security policies, fundamental CISCO network routing and CISCO packet tracer. As a culminating activity students will compete by analyzing and fixing vulnerabilities on the provided Windows and Linux images. 40 hours.

Non-Degree Applicable, Noncredit Grading Option: P/NP/SP

NCIS 201B CYBERSECURITY ADVANCED SKILLS 0 UNITS

This course will build upon the intro to cybersecurity camp. Review cybersecurity career opportunities, cyber ethics, online safety, and cyber threats. Students will build upon cybersecurity principles, virtual machines, basic Windows and Linux administration security policies, fundamental CISCO network routing and CISCO packet tracer. As a culminating activity students will compete by analyzing and fixing vulnerabilities on the provided Windows and Linux images. 40 hours.

Non-Degree Applicable, Noncredit Grading Option: P/NP/SP

NCIS 202 CYBERSECURITY COMPETITION PREP 0 UNITS

This course prepares students to participate in cyber security competitions (CyberPatriot, National Cyber League, etc). Topics include an overview of cyber competitions, virtual machines, Linux operating systems and administration, Windows operating systems and administration, CISCO networking, and packet tracer. Through business scenarios, students will create checklists of potential vulnerabilities and work in teams to secure networks and sensitive data. 30 hours.

Non-Degree Applicable, Noncredit Grading Option: P/NP/SP

NCIS 203 CYBERSECURITY 0 UNITS

COMPETITION

This course allows students to participate in cyber security competitions (CyberPatriot, National Cyber League, etc). Topics include an overview of cyber competitions, virtual machines, Linux operating systems and administration, Windows operating systems and administration, CISCO networking, and packet tracer. Through business scenarios, students will create checklists of potential vulnerabilities and work in teams to secure networks and sensitive data. 30 hours.

Non-Degree Applicable, Noncredit Grading Option: P/NP/SP

NCIS 210 ORIENTATION TO IT CAREERS 0 UNITS

This course enables students to analyze the field of information technology (IT). The class will include a survey of the IT professions, industry certifications, employment skills, definitions, associations, current issues, salaries, and self-assessment survey of skills and competencies. Students will be able to identify an IT program pathway at LPC. 18 hours.

Non-Degree Applicable, Noncredit Grading Option: P/NP/SP

NCIS 244 IT FUNDAMENTALS + 0 UNITS

Information Technology Fundamentals+ (ITF+) is the essential qualification for exploring a career in IT. This course will cover the topics of the CompTIA IT Fundamentals certification, which validates the knowledge and skills required to identify and explain the basics of computing hardware and software, IT infrastructure, applications and software, software development concepts, database fundamentals, and security. Technologies and trends of the IT industry and the exploration of IT careers. This course will prepare you to take the CompTIA certification exam. 36 hours.

Non-Degree Applicable, Noncredit Grading Option: P/NP

NONCREDIT ENGLISH

The English Department offers a tuition-free, noncredit English course that provides secondary-level reading and writing skills to prepare students for further college coursework, including in career and technical programs, and to support other academic, personal, and professional goals.

Noncredit English Courses (NENG)

NENG 204 INTEGRATED READING AND WRITING II 0 UNITS

An accelerated one-semester preparation in English for success in college. Integrates reading, critical thinking and writing assignments, using materials that present a variety of perspectives from across the curriculum. 108 hours.

Non-Degree Applicable, Noncredit Grading Option: P/NP

NONCREDIT ENGLISH AS A SECOND LANGUAGE

The ESL Department at Las Positas College offers tuition-free, noncredit courses designed to help students become proficient in English. Noncredit English as a Second Language courses lead to a College Grammar Pathway Certificate of Competency, and/or a College Reading and Writing Pathway Certificate of Competency. Most classes in the ESL Department are mirrored and can be taken for credit or noncredit.

Programs of Study

Certificates of Competency:

- ESL College Grammar Pathway
- ESL College Reading and Writing Pathway

Certificates of Completion:

- Advanced ESL Communication Studies

Certificate of Competency ESL College Grammar Pathway

About the Certificate

The ESL College Grammar Pathway provides a supportive, noncredit pathway into transfer level ESL courses. The curriculum emphasizes rigorous study of the foundational English language skill of grammar with a special focus on application in reading and writing. Students have the opportunity to take a sequence of four courses, from beginning to intermediate, which will help in developing vocabulary, reading, writing, speaking and listening skills. Students who successfully complete the pathway will be able to enroll in UC and CSU transfer level ESL classes, and will be better prepared to pursue their educational goals, including language learning, transfer, Associate's Degree, certificate, or CTE.

Program Outcomes

- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to use foundational grammar, including all verb tenses and types of sentences.
- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to use academic vocabulary, including parts of speech, at the intermediate level.
- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to analyze grammatical content in written discourse for comprehension.

- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to apply grammatical concepts in writing.
- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to matriculate into credit, transfer-level ESL courses.

Required Core: Select One or More (54-162 Hours)

NESL 230A (Beginning Grammar for Reading and Writing) 54
 NESL 230B (High-Beginning Grammar for Reading and Writing) 54
 NESL 220A (Intermediate Grammar for Reading and Writing)..... 54

Capstone: (54 Hours)

NESL 220B (High-Intermediate Grammar for Reading and Writing)..... 54

Total Hours 108-216

Certificate of Competency ESL College Reading and Writing Pathway

About the Certificate

The ESL College Reading and Writing Pathway provides a supportive, noncredit pathway into transfer level ESL courses. Students have the opportunity to take a sequence of four courses, from beginning to intermediate, which will focus on reading and writing, grammar, vocabulary development, and speaking and listening skills. The curriculum emphasizes rigorous study of the foundational English language skills of reading, writing, and grammar. Students who successfully complete the pathway will be able to enroll in UC and CSU transfer level ESL classes, and will be better prepared to pursue their educational goals, including language learning, transfer, Associate's Degree, certificate, or CTE.

Program Outcomes

- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to comprehend a variety of authentic reading materials at the intermediate level.
- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to write paragraphs and essays with control of organization, development and language at the intermediate level.
- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to use foundational grammar, including all verb tenses and types of sentences.
- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to utilize a variety of study skills and strategies for language acquisition.
- Upon completion of the Certificate of Competency in ESL