This addendum contains updates to existing courses and programs, as well as any new courses or programs that were approved after the publication of the 2019-2020 Catalog and Catalog Addendum I.

**UPDATED COURSES**

- ACCTG 015 prerequisites
- CH DEV 022, 023 prerequisites
- CHEM 065 prerequisites
- GEOG 001 description
- MATH 238 description
- MULTIMD 100 description
- NUTRTN 021 transferability
- THEATER 100 prerequisites

**NEW COURSES**

- ART 309
- ARTHIST 140
- CIS 124, 148, 162, 165, 185, 210, 211, 215, 219, 222

**ARCHIVED COURSES**

- CH DEV 185, 285, 385
- CHEM 052
- CO SCI 409
- INTRDGN 105, 108A, 109A, 109B
- PSYCH 185, 285, 385

**NEW NONCREDIT PROGRAMS**

- CERTIFICATE OF COMPETENCY: Advanced Math Application
- CERTIFICATE OF COMPETENCY: Introduction to CSIT
- CERTIFICATE OF COMPETENCY: Statistics Skills and Preparation
- CERTIFICATE OF COMPLETION: Introduction to Construction Technologies
- CERTIFICATE OF COMPLETION: Basic Math Application

**OTHER UPDATES**

- ART HISTORY Realignment
- COMPUTER SCIENCE Realignment
COURSE DESCRIPTIONS

ACCTG 015 TAX ACCOUNTING I – (CSU) 3 UNITS
Prerequisite: None | Lecture: 3 hrs
A study of Federal and California State Income Taxes as they apply to individuals and sole proprietorships and an analysis of laws, consideration of appropriate accounting procedures, and preparation of reports and returns.

ART 309 OIL PAINTING III – (CSU) 3 UNITS
Prerequisite: ART 308 | Advisories: ART 201 and ART 501
Lecture: 2 hrs, Lab: 2 hrs
Advanced oil painting course with emphasis on developing and exploring personal expression and style within contemporary context while building a professional portfolio.

ARTHIST 140 SURVEY OF ARTS OF AFRICA, OCEANIA, AND ANCIENT AMERICA – (UC:CSU) 3 UNITS
Advisory: ENGLISH 101 | Lecture: 3 hrs
This introductory survey course follows the development of the visual arts of Africa, Oceania, and the Americas (with an emphasis on the period before European contact). Art is discussed in its historical and cultural context. Deconstruction of the historiography of these peoples, and critical analysis of methods of display used in exhibiting the visual culture produced, is central to this course.

CH DEV 022 PRACTICUM IN CHILD DEVELOPMENT I – (CSU) 4 UNITS
Prerequisite: CH DEV 001, 002, 007, or 011
Lecture: 2 hrs, Lab: 6 hrs
NOTE: Students must show proof of a current negative TB test (Mantoux test) or chest x-ray within the last twelve months, plus proof of immunizations for measles (MMR), pertussis and influenza (Tdap).
NOTE: Total of 90 hours of supervised field experience plus 18 hours of curriculum/professional development.
Supervised experience in a preschool, child development center, elementary school, special education center, or other childcare and education setting. The student will relate all previous theory and curriculum courses to practical application in the classroom.

CIS 124 DATA ANALYTICS – (CSU) 3 UNITS
(formerly CO SCI 430 Data Analytics)
Prerequisite: None | Lecture: 2 hrs, Lab: 2 hrs
Analytics and data-mining using Excel spreadsheets and Access databases. The course includes: using databases, spreadsheets and other systems to gather information, research, analyze, and interpret complex data, loan amortization schedules, automatic update of spreadsheets with data downloaded from other sources, database management and reporting, and automating processes with VBA. Recommended for Business Majors.

CIS 148 INTRODUCTION TO WEB DEVELOPMENT USING HTMAL AND CSS – (CSU) 3 UNITS
(formerly CO SCI 450 Web Application Development)
Prerequisite: None | Lecture: 2 hrs, Lab: 2 hrs
A beginning course where students will create web pages, set up personal or commercial web sites, upload to a web server that the class creates and use HTML as a foundation to JavaScript.
CIS 162 CYBER SECURITY I – (CSU) 3 UNITS
(formerly CO SCI 411 Cyber Security I)
Prerequisite: None. | Lecture: 2 hrs, Lab: 2 hrs
An introduction to the theory and practice of information security. The topics covered include Windows basics, Windows networking, accounts basics, threats, vulnerabilities, and exploits, routes, domain name servers, workgroups, domains, servers, access control, authentication and basic cryptography and design of system defensive strategies.

CIS 165 PRINCIPLES OF INFORMATION SECURITY – (CSU) 3 UNITS
(formerly CO SCI 483 Principles of Information Security)
Prerequisite: CO SCI 401 or CS 101. | Lecture: 2 hrs, Lab: 2 hrs
The principles of information security including new innovations in technology and methodologies. Course includes the historical overview of information security, risk management and security technology (Firewalls and VPNs), current certification information, legal, ethical, and professional issues. Cryptography, physical security, and implementing information security will be covered. Lab exercises allow students to apply the basics in a hands-on environment.

CIS 185 DIRECTED STUDY – COMPUTER SCIENCE-INFORMATION TECHNOLOGY – (CSU) 1 UNIT
(formerly CO SCI 185 Directed Study – Computer Science-Information Technology)
Prerequisite: None. | Lecture: 1 hr
Provides opportunity for in-depth study of a chosen area of Computer Science Information Technology on a contract basis, under the direction of a supervising instructor.

CIS 210 INTRODUCTION TO COMPUTER NETWORKING – (CSU) 3 UNITS
(formerly CO SCI 487 Introduction to Local Area Networks)
Prerequisite: None. | Advisories: CO SCI 453 or CIS 222
Lecture: 2 hrs, Lab: 2 hrs
Provides a solid foundation in computer networking technology. It covers network cables, connectors & devices, network topologies & architecture, wired and wireless networking protocols & standards, OSI model, TCP/IP, IP addressing, subnets, wide area networks, network security & troubleshooting and client/server operating systems survey.

CIS 211 SECURITY+ CERTIFICATION PREPARATION – (CSU) 3 UNITS
(formerly CO SCI 488 Security+ Certification Preparation)
Prerequisite: CO SCI 487 or CIS 210. | Lecture: 2 hrs, Lab: 2 hrs
Students learn the concepts of computer and network-security and gain skills necessary to apply knowledge of security concepts, tools, and procedures to react to security incidents, and guard against the security risks. At the end of the course students are prepared for the CopmpTIA Security+ certification exam.

CIS 215 NETWORK SECURITY FUNDAMENTALS
(CSU) 3 UNITS
Prerequisite: CO SCI 487 or CIS 210. | Lecture: 2 hrs, Lab: 2 hrs
Examines the theory of the primary network security threats and the practical application of tools to mitigate those threats. Threats covered will include reconnaissance, access, and denial of services attacks, along with virus, worm and Trojan horse projections. Hardware and software based network protection, including firewalls, access control lists, intrusion detection systems, and cryptography will also be explored along with Virtual Private Networking. This course maps to the commercial Cisco CCNA Security certification.

CIS 219 INTRODUCTION TO ORACLE: SQL AND PL/SQL – (CSU) 3 UNITS
Prerequisite: None. | Advisories: CO SCI 430 or CIS 124
Lecture: 2 hrs, Lab: 2 hrs
The student learns the concepts of both relational and object relational databases and the SQL language. Data server technology, creating and maintaining database objects, as well as storing, retrieving and manipulating data are also covered.

CIS 222 PC MAINTENANCE AND TROUBLESHOOTING – (CSU) 2 UNITS
Prerequisite: None. | Lecture: 2 hrs, Lab: 2 hrs
Provides student with the workable knowledge needed for the installation, setup, troubleshooting and optimization of hardware and software related to personal computer systems and peripheral devices. This course will cover information needed to prepare for the current A+ certification test and the CISCO IT certification test.

GEOG 001 PHYSICAL GEOGRAPHY – (UC:CSU) 3 UNITS
Prerequisite: None | Lecture: 3 hrs
Explores the processes shaping the natural environmental systems. Students will explore where major elements of the natural environment are, why they are there, and how they are interrelated. Major topics include weather and climate, water, ecosystems, geologic processes, landform, and human-environment interdependence.
MATH 238 CALCULUS FOR BUSINESS & SOCIAL SCIENCE I (UC:CSU) 5 UNITS
Prerequisite: MATH 123C or MATH 125 or MATH 134
Advisory: MATH 245 | Lecture: 4 hrs, Lab: 2 hrs
A course in Calculus intended for Business and Social Science majors. The following topics and their business applications are included: polynomial, rational, exponential, and logarithmic functions, differentiation, integration, and integration by parts.

MULTIMD 100 INTRODUCTION TO MULTIMEDIA COMPUTER APPLICATIONS – (CSU) 3 UNITS
Advisory: MULTIMD 500 | Lecture: 2 hrs, Lab: 2 hrs
Introduction to fundamental concepts, practices, and theories of digital art production. Topics include integration of traditional design, color, and compositional principles with contemporary digital tools. Students apply the principles and elements of design while developing the skills necessary to digitally manipulate graphic images and text with Adobe Photoshop and Illustrator.

NUTRTN 021 NUTRITION – (UC:CSU) 3 UNITS
(Formerly FAM &CS 021 - Nutrition)
Prerequisite: None | Advisories: ENGLISH 028 or E.S.L. 008
Lecture: 3 hours
Nutrition is the science that deals with the role of nutrients in the human body. These scientific concepts are related to individual needs during the changing life cycles. Interrelationships of nutrients are evaluated for promotion of optimum health.

THEATER 315 INTRODUCTION TO THEATRICAL SCENIC DESIGN - (CSU) 3 UNITS
Prerequisite: None. Advisory: THEATER 100 | Lecture: 3 hrs
Explores the training, practice, and problem solving skills of designing scenery for the stage. Includes concept design development, construction and painting techniques, sketching and rendering media skills, and model making.

EDUCATIONAL PROGRAMS

CERTIFICATE OF COMPETENCY
Advanced Math Application (M038415F)
This certificate will improve student comprehension in advanced math application skills that are necessary to be successful in entry level transfer math courses and better prepared for higher level math courses.
Program Learning Outcomes – Upon completion, students will be able to:
• Setup and solve word problems
• Analyze the results
• Translate application problems to equations
• Apply the proper derivative or integration techniques to solve the problems.

REQUIRED COURSES
ACAD PR 060CE Understanding Word Problems 9
ACAD PR 080CE Supplemental Derivatives and Integrations 9
Total Hours 18

CERTIFICATE OF COMPETENCY
Introduction to CSIT (M038612F)
An introduction to CSIT Certificate of Competency that allows students to study, play and visualize what is Computer Science and Information Technology. Expands the student’s vision and allows them to view the full spectrum of emerging careers in Computer Science and Information Technology. Provides basic understanding of programming, social media, web applications, and/or robots.
Program Learning Outcomes – Upon completion, students will be able to:
• To have an overview of computers and provide an environment for hands-on labs to learn basics of programming, basics of social media or basics of a simple robot.
• To generate interest to pursue these high-pay and high-demand jobs themselves or encourage others in their community to learn these skills.
• To stimulate critical thinking and allow them to view the digital world as tools for entertainment or solve personal, social or business problems.

REQUIRED CORE
VOC ED 281CE Exploring Computer Science Information Technology Careers 18
VOC ED 286CE Everyone Can Code 18
Select one (1) course: 18
VOC ED 294CE Introduction to Social Media – WordPress Blogs
VOC ED 292CE Robotics Lab I
Total Hours 54
CERTIFICATE OF COMPETENCY
Statistics Skills and Preparation (M038391F)
The Statistics Skills and Preparation Certificate of Competency prepares students for the fundamental concepts in descriptive and inferential statistics with emphasis on statistical reasoning skills and interpretation of calculation results that are necessary for success in their credit classes. The use of technology is integrated into the coursework to perform statistical analysis and the relevance of the statistical findings is interpreted.

Program Learning Outcomes — Upon completion, students will be able to:
- Demonstrate knowledge of the fundamental statistical principles and use statistical skills to solve problems and interpret their results.

REQUIRED COURSES
ACAD PR 027CE Statistical Skills and Preparation I 18
ACAD PR 028CE Statistical Skills and Preparation II 27
Total Hours 45

CERTIFICATE OF COMPLETION
Basic Math Application (M038414E)
This certificate will improve student comprehension in basic math application skills that are necessary to be successful in entry level transfer math courses.

Program Learning Outcomes — Upon completion, students will be able to:
- Setup and solve word equations that model a problem through critical thinking
- Find the equation of a line
- Evaluate a function
- Analyze solutions.

REQUIRED COURSES
ACAD PR 060CE Understanding Word Problems 9
ACAD PR 070CE Understanding Algebra Equations 9
ACAD PR 075CE Understanding Linear Lines and Basic Functions 9
Total Hours 27

CERTIFICATE OF COMPLETION
Introduction to Construction Technologies (M038392E)
The pre-apprenticeship Skills Certificate provides training and placement services to individuals seeking a career in the building trades. The program will lead to employment and successful careers in the building industry. The curriculum integrates contextual, work-based learning with vocational and academic skills training in the classroom. These include employability and life skills, career development, and on-the-job training. The program offers instruction that point to best practices in each trade area: carpentry, electrical, plumbing, brick masonry, landscaping, building construction technology, and painting. Students obtain the OSHA10 credential demonstrating knowledge of basic safety rules established by the Occupational Safety and Health Administration (OSHA).

Program Learning Outcomes — Upon completion, students will be able to:
- Demonstrate basic level carpentry skills and knowledge
- Pour cement foundations
- Demonstrate OSHA safety standards and practices
- Demonstrate basic First Aid and CPR
- Write a professional resume
- Display proper interviewing etiquette.

REQUIRED COURSES
VOC ED 008CE Pre-employment Skills/Consumer Training 3
VOC ED 252CE Exploration of Construction and Maintenance Careers 6
VOC ED 259CE (O.S.H.A.) Safety Standards: Construction & Industry 2
Total Hours 11
## 2019-2020 COMPUTER SCIENCE REALIGNED TITLES AND NUMBERS

<table>
<thead>
<tr>
<th>OLD COURSE NUMBERS &amp; TITLES</th>
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</thead>
<tbody>
<tr>
<td>CO SCI 185 – Directed Study – Computer Science-Information Technology</td>
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<tr>
<td>CO SCI 401 – Introduction to Computers &amp; Their Uses</td>
<td>CS 101 - Introduction to Computer Science</td>
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<tr>
<td>CO SCI 407 – Programming Logic &amp; Design</td>
<td>CS 102 - Programming Logic and Design (Introduction to Programming)</td>
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<tr>
<td>CO SCI 411 – Cyber Security I</td>
<td>CIS 162 – Cyber Security I</td>
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<tr>
<td>CO SCI 416 – Beginning Computer Architecture &amp; Organization</td>
<td>CS 130 - Introduction to Computer Architecture and Organization</td>
</tr>
<tr>
<td>CO SCI 430 – Data Analytics</td>
<td>CIS 124 – Data Analytics (Advanced Excel and Access)</td>
</tr>
<tr>
<td>CO SCI 434 – Introduction to Oracle: SQL</td>
<td>CIS 219 – Introduction to Oracle: SQL and PL/SQL</td>
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<tr>
<td>CO SCI 436 – Introduction to Data Structures</td>
<td>CS 136 - Introduction to Data Structures</td>
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<tr>
<td>CO SCI 439 – Programming in C</td>
<td>CS 114 - Programming in C</td>
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<td>CO SCI 440 – Programming in C++</td>
<td>CS 216 - Object-Oriented Programming in C++</td>
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<tr>
<td>CO SCI 450 – Web Application Development</td>
<td>CIS 147 - Introduction to Web Development Using HTML5 and CSS</td>
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<tr>
<td>CO SCI 451 – this is not in ECD</td>
<td>CS 119 - Programming in Python</td>
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<td>CO SCI 452 – Programming in Java</td>
<td>CS 113 - Programming in Java</td>
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<td>CO SCI 453 – A+ Certification Preparation</td>
<td>CIS 222 – PC Maintenance and Troubleshooting</td>
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<td>CO SCI 462 – Programming in JavaScript</td>
<td>CS 112 - Programming in JavaScript</td>
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<td>CO SCI 463 – Full Stack Web Application Development</td>
<td>CS 157 - Full-Stack Web Application Development</td>
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<td>CO SCI 487 – Introduction to Local Area Networks</td>
<td>CIS 210 – Introduction to Computer Networking</td>
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<td>CO SCI 488 – Security+ Certification Preparation</td>
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</table>

*These courses join the courses CIS 192 Introduction to Cloud Computing, CIS 193 Database Essentials in Amazon Web, CIS 194 Computer Engines in Amazon Web Services, CIS 195 Security in the Cloud, and CS 119 Programming in Python.*
## 2019-2020 ART/ART HISTORY REALIGNED TITLES AND NUMBERS*

<table>
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<tbody>
<tr>
<td>ART 101 – Survey of Art History I</td>
<td>ARTHIST 110 - Survey Of Western Art History I</td>
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<tr>
<td>ART 102 – Survey of Art History II</td>
<td>ARTHIST 120 - Survey Of Western Art History II</td>
</tr>
<tr>
<td>ART 103 – Art Appreciation I</td>
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</tr>
<tr>
<td>ART 105 – History Of Asian Art</td>
<td>ARTHIST 130 - Survey Of Asian Art History</td>
</tr>
<tr>
<td>ART 109 – The Arts Of Africa, Oceania And Ancient America</td>
<td>ARTHIST 140 - Survey Of Arts Of Africa, Oceania, And Ancient America</td>
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<tr>
<td>ART 111 – History Of Contemporary Art</td>
<td>ARTHIST 170 - History Of Contemporary Art</td>
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</tbody>
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*These courses join the existing courses ARTHIST 161 Introduction to American Art and ARTHIST 126 Introduction to Modern Art.