CHEM 110L General Chemistry Laboratory  
6 hours laboratory
Prerequisite: A minimum grade of ‘C’ in CHEM 110, or concurrent enrollment in CHEM 110
Transfer acceptability: CSU; UC
C-ID CHEM 110 for CHEM 110 and 110L combined; CHEM 120S for CHEM 110, 110L, 115 and 115L combined
Qualitative and quantitative investigations designed to accompany CHEM 110.

CHEM 115 General Chemistry  
3 hours lecture
Prerequisite: A minimum grade of ‘C’ in CHEM 110 and 110L
Recommended preparation: Concurrent enrollment in CHEM 115L
Transfer acceptability: CSU; UC
C-ID CHEM 120S for CHEM 110, 110L, 115 and 115L combined
A continuation of the general principles of chemistry with emphasis on chemical kinetics, chemical equilibria, acids and bases, thermodynamics, and electrochemistry. It includes an overview of coordination chemistry and organic chemistry.

CHEM 115L General Chemistry Laboratory  
2 hours laboratory
Prerequisite: A minimum grade of ‘C’ in CHEM 110 and 110L; A minimum grade of ‘C’ in CHEM 115, or current enrollment in CHEM 115
Transfer acceptability: CSU; UC
C-ID CHEM 120S for CHEM 110, 110L, 115 and 115L combined
Qualitative and quantitative investigations designed to accompany CHEM 115.

CHEM 197 Chemistry Topics  
(.5 - 4) units
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Topics in Chemistry. See Class Schedule for specific topic offered. Course title will designate subject covered.

CHEM 205 Introductory Biochemistry  
3 hours lecture
Prerequisite: A minimum grade of ‘C’ in CHEM 105
Transfer acceptability: CSU; UC
Fundamental principles of the chemistry of living systems, including structure and function of proteins, nucleic acids, carbohydrates, and lipids. Emphasis on metabolism, energy storage and utilization.

CHEM 210 Analytical Chemistry  
3 hours lecture - 6 hours laboratory
Prerequisite: A minimum grade of ‘C’ in CHEM 115 and 115L
Transfer acceptability: CSU; UC
Principles, calculations, and applications of volumetric, gravimetric, and instrumental analysis. Practice in standardizing reagents and determining the composition of samples of various materials.

CHEM 220 Organic Chemistry  
3 hours lecture - 6 hours laboratory
Prerequisite: A minimum grade of ‘C’ in CHEM 115 and 115L
Transfer acceptability: CSU; UC
Integrated treatment of organic chemistry including electronic and orbital theory with applications to carbon bonding, stereochemistry, resonance theory, and reaction mechanisms of both aliphatic and aromatic compounds. Strong emphasis on organic nomenclature, reactions, preparations, and synthesis of organic compounds. Laboratory: techniques and theories involved in organic reactions and preparations, qualitative organic analysis, and instrumental methods.

CHEM 221 Organic Chemistry  
3 hours lecture - 6 hours laboratory
Prerequisite: A minimum grade of ‘C’ in CHEM 220
Transfer acceptability: CSU; UC
Continuation of the integrated treatment of organic chemistry including electronic and orbital theory with applications to carbon bonding, stereochemistry, resonance theory, and reaction mechanisms of both aliphatic and aromatic compounds. Strong emphasis on organic nomenclature, reactions, preparations, and synthesis of organic compounds. Laboratory: techniques and theories involved in organic reactions and preparations, qualitative organic analysis, and instrumental methods.

CHEM 295 Directed Study in Chemistry  
(1, 2, 3) hours
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Independent study for students who have demonstrated skills and/or proficiencies in chemistry subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

CS 100 Introduction to Chicano Studies  
3 hours lecture
Transfer acceptability: CSU; UC
This course plus CS 101 meets the State requirement in American History and Institutions.
A survey of early American history from the Mexican/Chicano perspective. Focus is on the period of discovery to Reconstruction with emphasis on the evolution, influence and experience of the Chicano. Chicano contributions are analyzed for political, social, economic and cultural development of the United States. Intended for students interested in history, ethnic studies or other social sciences.

CS 101 United States History from a Chicano Perspective I  
3 hours lecture
Note: This course plus CS 102 meets the State requirement in American History and Institutions.
Transfer acceptability: CSU; UC
This course plus CS 101 meets the State requirement in American History and Institutions.
A survey in American history that covers the period from the American acquisition in 1848 of Mexican territory to the present. Emphasis is placed on the role of the Chicano in the development of the United States throughout the nineteenth and twentieth century. Topics include slavery in the former Mexican territories, the native American experience, immigration patterns and constitutional development and government in California. Intended for students interested in history, ethnic studies or other social issues.

CS 102 United States History from a Chicano Perspective II  
3 hours lecture
Note: This course plus CS 101 meets the State requirement in American History and Institutions.
A survey in American history that covers the period from the American acquisition in 1848 of Mexican territory to the present. Emphasis is placed on the role of the Chicano in the development of the United States throughout the nineteenth and twentieth century. Topics include slavery in the former Mexican territories, the native American experience, immigration patterns and constitutional development and government in California. Intended for students interested in history, ethnic studies or other social issues.

CS 105 Chicano Literature  
3 hours lecture
Transfer acceptability: CSU; UC
A survey of Chicano literature from its pre-Columbian origins. Analyzes the identity conflicts resulting from the dual cultures of Mexican and American worlds through literary works. Introduces the student to the rich and culturally diverse Chicano and Chicanas that reflect the literary traditions that have mirrored the Chicano-Mexican reality in the United States.
CS 110  Contemporary Mexican Literature  (3)
3 hours lecture
Transfer acceptability: CSU; UC
A survey of Mexican novels, prose and poetry from the Mexican Revolution to the present. Major landmark novels of Mexico will be examined in their social and historical context. Designed to acquaint non-Spanish major students with Mexican thought, values, and literary heritage relative to world literature.

CS 125  The History of Mexico  (3)
3 hours lecture
Transfer acceptability: CSU; UC
A survey of the political, economic, and cultural development of the Mexican people and nation from the pre-Columbian period through the Revolution of 1910.

CS 155  Ancient Civilizations of Meso America  (3)
3 hours lecture
Note: Cross listed as ANTH 155
Transfer acceptability: CSU; UC
Civilizations of Pre Columbian Mexico and Central America with a focus on their origins and achievements.

CS 161A  Elementary Classical Nahuatl IA  (3)
3 hours lecture
Note: Cross listed as AIS 161A
Transfer acceptability: CSU; UC
This is an introductory course on the Classical Nahuatl language of the Aztec Empire. Students will acquire a basic knowledge of Nahuatl morphology and syntax.

CS 161B  Elementary Classical Nahuatl IB  (3)
3 hours lecture
Note: Cross listed as AIS 161B
Transfer acceptability: CSU
A continuation of AIS/CS 161A that reviews the phonology, morphology, syntax and grammar of the Nahuatl Language, with continued emphasis on culturally relevant terminology leading to increased proficiency in expressing basic concepts both orally and in writing.

Child Development (CHDV)

Contact the Child Development Department for further information.
(760) 744-1150, ext. 2206
Office: MD-354
For transfer information, consult Patrick O’Brien at 760-891-7511 or a Palomar College counselor.

Associate in Science Degrees -
A5 Degree requirements are listed in Section 6 (green pages).
• Child and Family Services
• Early Childhood Administration
• Early Inclusion Teacher
• Infant/Toddler Teacher
• Preschool Teacher

Associate in Science for Transfer -
A5-T, IGETC, and CSUGE requirements are listed in Section 6 (green pages).
• Early Childhood Education

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Child and Family Services
• Early Childhood Administration
• Early Inclusion Teacher
• Infant/Toddler Teacher
• Preschool Teacher

Certificates of Proficiency -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Assistant Teacher
• School Age Assistant

PROGRAMS OF STUDY
Child Development courses prepare students for employment as an aide, teacher, and/or director in a preschool or a child care center (including infant/toddler facilities), as family child care providers, and for other Child Development careers in early childhood education fields. Courses are also appropriate for parents, nannies, recreation leaders, camp counselors, elementary school teaching assistants (some classes may be used as a foundation for elementary school teachers), social services and health care practitioners, early childhood administrators, and others working with young children.

Community Care Licensing State Regulations require students who work with young children to have a minimum of 12 units in Child Development. CHDV 100 and 115 are required core courses. To complete the remaining 6 units, at least 3 units must be a curriculum course from the following: CHDV 105, CHDV 106, CHDV 125, CHDV 130, CHDV 135, CHDV 140, or CHDV 185.

Certificates meet the course requirements for teachers, site supervisors, and directors of private child care programs licensed by the California State Department of Social Services (Title 22). Community Care Licensing The programs also meet the course requirements for the Child Development Permit issued by the California Commission on Teacher Credentialing. Child Development programs that are state funded or federally funded (Title 5 programs such as, Head Start, state preschool, etc.) follow the Child Development Permit matrix. In addition to the course work listed in the certificate, students must have experience working with young children in order to obtain Child Development Permit from the State of California. For specific questions relating to the Child Development Permit, please contact the Child Development department chair for further information.

In order to earn any of the Child Development degrees or certificates, students must achieve a minimum grade of ‘C’ in each of the required courses.

The Child Development Department requires that students obtain a Palomar College Student Activity card for use as identification in order to complete course requirements.

Assistant Teacher
This program includes a selection of courses that provides academic preparation to individuals for a career in the field of child development. The program will give students general knowledge and skills in theory, principles, and techniques for working with young children in an entry level position.

CERTIFICATE OF PROFICIENCY

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<thead>
<tr>
<th>Program Requirements</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHDV 99 Preparation for Child Development Majors</td>
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<tr>
<td>CHDV 100 Child Growth and Development</td>
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<td>CHDV 105 Observation and Assessment</td>
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<td>CHDV 105A Observation, Assessment, and Participation Lab:</td>
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<td>Preschool</td>
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<td>CHDV 105B Observation, Assessment, and Participation Lab:</td>
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<td>CHDV 105C Observation, Assessment, and Participation Lab:</td>
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<td>Early Inclusion</td>
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<td>CHDV 115 Child, Family, and Community</td>
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<td>CHDV 120 Health, Safety, and Nutrition</td>
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<tr>
<td>CHDV 185 Introduction to Curriculum</td>
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TOTAL UNITS 16.5