233L Organic Chemistry II - Laboratory

6 hours lab, 2 units
Letter Grade or Pass/No Pass Option

Prerequisite: Chemistry 231 and Chemistry 231L, each with a grade of "C" or better, or equivalent.
Corequisite: Completion of or concurrent enrollment in: Chemistry 233 with a grade of "C" or better, or equivalent.
This course is the second semester of a one-year sequence in Organic Chemistry Laboratory and is designed to illustrate the principles presented in Chemistry 233. It is intended for students pursuing a baccalaureate degree in the chemical sciences or in majors such as premedical, predental or pharmacy; and for students training for careers in some chemical technology fields. The emphasis is on synthesis, purification and/or characterization of selected classes of organic compounds, including but not limited to aromatics, alcohols, aldehydes and ketones, carboxylic acids, amines, and simple examples of bio-organic molecules. Additional emphasis is placed on multi-step synthetic pathways and product identification using selected methods of qualitative organic analysis such as wet chemical and advanced spectroscopic techniques. Variation of scale from micro- to macro-quantities, and more advanced separation and analytical techniques, distinguish the level of this course from Organic Chemistry I Laboratory. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities. UC Transfer Course List.

251 Analytical Chemistry

3 hours lecture, 6 hours lab, 5 units
Letter Grade or Pass/No Pass Option

Prerequisite: Chemistry 201 and Chemistry 201L and Mathematics 150 each with a grade of "C" or better, or equivalent.
Advisory: English 101 or English 105 with a grade of "C" or better, or equivalent, or Assessment Skill Level R6 and W6.
This is a course in quantitative analysis. Major topics include theory and practice of gravimetric and volumetric methods of chemical analysis and introduction to instrumental methods of analysis with a focus on precision and accuracy of experimental data. The target audience for Chemistry 251 is students majoring in chemistry or biochemistry and others who need the course for career advancement. It is recommended that students who plan to enroll in this course do so the semester following completion of Chemistry 201. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities. UC Transfer Course List.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Experimental Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), or Work Experience (270). Detailed course descriptions are listed on page 190. Please refer to the class schedule and/or see the dean or department chair for availability.

CHILD DEVELOPMENT (CHIL)

89 Childcare as a Business

1 hour lecture, 1 unit
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
This course provides students and child development professionals with an analysis of appropriate record keeping and business practices necessary to effectively run a daycare business. The course focuses on the enrollment of children, parent-caregiver relationships, contracts and legal considerations, collection of fees, budgets, and reimbursement of food costs. Students explore a variety of business settings including family daycare, franchise, and individual ownership. (FT) Associate Degree Credit only and not Transferable.

101 Human Growth and Development

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course examines the interrelationship among the physical, cognitive, and psychosocial growth and development of individuals from conception through adolescence. It emphasizes positive relationships with family members, peers, and other significant individuals. Topics include theories and philosophies of human development and cross-cultural patterns. Students observe children and educational programs. This course is a core requirement for the State of California Child Development Permit and the State of California Community Care Licensing, Title XXII. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities. UC Transfer

Limitation: Child Development (CHIL) 101 and 103 combined: maximum credit, one course.

103 Lifespan Growth and Development

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course provides students and child development professionals with the study of human development from conception to death. This course emphasizes theories of human development, including the physical, socio-emotional, and cognitive stages from prenatal through adulthood and aging. Students explore the interrelationship of the family's role and its influences throughout life. They also perform behavioral observations of various life stages. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities. UC Transfer Limitation: Child Development (CHIL) 101 and 103 combined: maximum credit, one course.

111 Curriculum: Music/Motor Skills

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a study of the development and significance of music and perceptual motor activities in child development from infancy through kindergarten. Emphasis is placed on basic teaching techniques and selecting suitable materials and equipment for various age and maturity levels among preschool children. This course is designed for students who have an interest in working with children ages 0 - 5 in settings such as preschools, daycares etc. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

121 Curriculum: Art

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course is an introductory study of the function of creativity and the affective domain in early childhood educational programs. Emphasis is placed on the development of art curriculum activities, basic teaching skills, guidance techniques, equipment and materials. Students select appropriate activities for a variety of age and maturity levels based on child development theories and concepts. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

131 Curriculum: Language/Science

3 hours lecture, 3 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
This course is an introductory study of the function of language, math and science learning in early childhood educational programs. Emphasis is placed on the development of language and science curriculum activities, basic teaching skills, guidance techniques, equipment and materials. Students select appropriate activities for a variety of age groups and maturity levels based on child development theories and concepts. This course may be used for licensing, child development permits, transfer and general interest for working with children. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

141 The Child, Family and Community

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course is a study of the dynamics of human development and socialization in a culturally pluralistic society. Emphasis is placed on the influences of contemporary family living and cultural patterns on the child, school-family relationships, and community resources and services that support and strengthen families. This course is a core requirement for California Child Development teacher/director center permits as well as for the State of California Department of Community Care Title XXII licensing childcare centers requirements. This course is designed for all students interested in child development and multi-cultural and behavioral studies. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

151 Program Planning

3 hours lecture, 3 units
Grade Only

Prerequisite: Child Development 101; and either Child Development 111 or 121 or 131, each with a grade of "C" or better, or equivalent.
Corequisite: Child Development 270 or 275.

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course focuses on planning the preschool learning environment to promote optimal development. It emphasizes curriculum planning, guidance, safety, record keeping, observation techniques, resource units, and daily plans. The course partially fulfills State of California Permit requirements. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

153 Techniques of Teaching Using the Reggio Emilia Approach

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
Limitation on Enrollment: Not open to students with previous credit for Child Development 265E.
This course is based on the early childhood philosophy, and teaching techniques adopted by the schools from Reggio Emilia, Italy. Emphasis is placed on the overall principles of the Reggio Emilia philosophy of valuing the capabilities of the child, collaborations between the teachers, family and community, strategies of emergent curriculum, project work and the documentation process. Adaptation strategies for the use of Reggio in traditional preschools and childcare programs are addressed. This course may be used for teachers and administrators as partial fulfillment of Title 22 and Child Development Permit Matrix curriculum requirements. It is also an elective for State of California Child Development Permits; Child Development associate degrees and certificates. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

160 Observing and Understanding Children

1 hour lecture, 3 hours lab, 2 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
Limitation on Enrollment: Health and Safety. TB clearance within the last year is required.
This course focuses on behavioral patterns and growth processes of young children through observations and supervised participation in the campus Child Development Center. The course emphasizes the principles of observing, interpreting, and guiding children's behavior. Topics include children's developmental, safety, and nutritional needs. The course fulfills the specialization requirements for the State of California Master Teacher Permit when taken with Child Development 161 and 162 or Child Development 161 and 188. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

161 Observations and Issues in Child Development

1 hour lecture, 3 hours lab, 2 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skills Level R4 and W4.
Limitation on Enrollment: Health and Safety. TB clearance within the last year is required.
This course explores current issues in child development and how these issues influence both the child and family. The course emphasizes effective communication skills, positive guidance techniques, kindergarten readiness skills, and appropriate classroom activities. It includes supervised participation in the campus Child Development Center, and it fulfills the specialization requirements for the State of California Master Teacher Permit when taken with CHIL 160 and 162 or CHIL 160 and 188. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

162 Observing and Guiding Child Behavior

3 hours lecture, 3 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
This course explores various behavior management techniques, interpersonal communication, ideas and suggestions to assist caregivers in guiding children's behavior. Application of developmental, cultural and communication principles in combination with observation of real situations is the mode of study of this course. The focus will be on children from birth through age 10. The course can be used to meet degree and certificate requirements for Child Development and the Master Teacher Permit requirement if taken with Child Development 160 and 161. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

165 Children with Special Needs

3 hours lecture, 3 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.

An educational and parenting approach to working with children with exceptionalities. Methods of integrating the exceptional child into a mainstreamed educational program will be investigated. Differences and needs of each area of exceptionality will be investigated as well as the roles of different professionals in the educational process. The course is designed primarily for parents, teachers, nurses, social workers, and paraprofessionals employed in schools, day care centers, and child development programs. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

166 Special Needs Curriculum

3 hours lecture, 3 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.

This course provides an in-depth look at curriculum for children with special needs. Full inclusion of children with special needs into school and community settings is explored. Application of specific strategies for integrating children into typical settings is addressed as well as use of adaptive equipment. This course is designed primarily for parents, teachers, nurses, social workers, and paraprofessionals employed in schools, day care centers, and child development programs. The course partially fulfills requirements for the Child Development Certificate and Degree programs and partially meets the specialization requirements for the Master Teacher Permit if taken with Child Development 165. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

175 Infant-Toddler Growth and Development

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.

This course examines typical and atypical physical, social, emotional, and intellectual growth of the infant and toddler. The selection and maintenance of appropriate play materials and equipment for indoor and outdoor environments is discussed. Appropriate observations and visitations to the community are required. This course meets State of California Title 22 licensing regulations for teachers in infant toddler settings, and is beneficial for parents. This course fulfills the specialization requirement for State of California Master Teacher Permit when taken in addition to Child Development 176. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

176 Principles of Infant/Toddler Caregiving

3 hours lecture, 3 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.

This course explores principles and curriculum of an infant/toddler program that includes all aspects of infant and toddler development. Students will learn care strategies in a variety of caregiving situations. Content includes licensing and regulations, developmental needs, health, nutrition, and safety of the very young. The student learns to plan appropriate indoor and outdoor environments. Staff interaction, parent participation, and program development are included. This course fulfills major and master permit specializations when taken along with Child Development 160 and 161. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

180 Nutrition, Health and Safety for Children

3 hours lecture, 3 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.

This course provides students and child development professionals with a survey of the nutritional, health, and safety needs of children from infant/toddlers through preschool age. Topics may include, but are not limited to, the planning and execution of environments and activities that promote safety, balanced diet, and overall health for children. Students also learn the fundamentals of pediatric first aid and cardiopulmonary resuscitation (CPR). This course also meets the Title XXII, fifteen hour, Health and Safety Training requirement, including signs and symptoms of child abuse. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

188 Child Abuse

3 hours lecture, 3 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course examines the causes and effects of child abuse and neglect. It is designed primarily for parents, teachers, nurses, and other childcare professionals to learn strategies for understanding and responding to the various forms of stress and violence that affect many children today. This course emphasizes the skills needed for conflict resolution and explores the environmental set-up and curriculum that promotes peaceful, cooperative and nonviolent play and interactions. Information about the history, current legislation, reporting responsibilities, and identification of abuse is also given. (FT) Associate Degree Credit only and not Transferable.

202 Administration of Early Childhood Programs

3 hours lecture, 3 units
Grade Only

Prerequisite: Child Development 101 and 141.
Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5; and Child Development 111 and 121; or Child Development 131, each with a grade of "C" or better, or equivalent.
This course provides an overview of program administration including theoretical perspectives on early childhood education, licensing regulations, funding sources, budgetary considerations, personnel management, curriculum development, and teacher selection. The course meets State of California Title 22 licensing regulations for site supervisors. It also partially fulfills State of California matrix requirements for Program Director and Site Supervisor Permits. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

210 Supervision of Early Childhood Programs

3 hours lecture, 3 units
Grade Only

Prerequisite: Child Development 141 and 151, each with a grade of "C" or better, or equivalent.
Limitation on Enrollment: This course is not open to students with previous credit for Child Development 201 or 201B.
This course examines early childhood supervisory techniques with emphasis on educational philosophy, professional growth, in-service staff training, program and staff evaluation, models of parent education and involvement, and supportive services. It partially fulfills the State of California Child Development Permit Matrix requirement for supervisors and directors and also meets the State of California Title 22 licensing regulations for directors. This course is designed for students who intend to go into supervisory positions in early childhood education. It also introduces students to the tools that help them organize and evaluate quality children's programs. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

215 Adult Supervision and Mentoring in Early Childhood Settings

3 hours lecture, 3 units
Grade Only

Prerequisite: Child Development 151 with a grade of "C" or better, or equivalent.
This course emphasizes the methods and principles of supervising adults in early childhood settings. Students study effective models for guidance and evaluation of adults, positive communication skills, and the role of the mentor in a teaching environment. It is designed for students who supervise other adults in the preschool classroom while simultaneously providing an appropriate setting for young children. This is a required course for the levels of Master Teacher, Site Supervisor and Program Director for the Child Development permit issued by the Commission on Teacher Credentialing. Associate Degree Credit only and not Transferable.

270 Work Experience

Hours by Arrangement (One unit of credit is earned for each 75 hours of paid employment or 60 hours of volunteer work.), 1-4 units
Grade Only

A program of on-the-job learning experiences for students employed in a job related to their major or their educational goals. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Associate Degree Credit & transfer to CSU and/or private colleges and universities.

275 Supervised Field Study

3-9 hours lab, 1-3 units
Grade Only

Corequisite: Child Development 151.
Advisory: Child Development 160 with a grade of "C" or better, or equivalent.
This directed field study course provides students with an opportunity to apply classroom information in a

practical setting with supervision from faculty as well as field-site supervisors. Intended for students who plan to teach or supervise in early childhood settings, this course partially fulfills the State of California requirement for experience. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

280 Environmental Rating Scale

1 hour lecture, 1 unit
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 & W4.
This course provides students with an introduction to the Environmental Rating Scale administration, scoring system, profile, and improvement plan. The course focuses on environmental evaluation and program improvement. Students learn how to evaluate the quality of child care programs and how to increase the quality of care through practical improvements. This course is intended for child development professionals currently working in the field as well as those seeking professional development, child development permits, employment opportunities, or anyone with general interest in working with children. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

291 Child Development Lab Practicum

3-12 hours lab, 1-4 units
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4; and Child Development 160 or 161 with a grade of "C" or better, or equivalent.
This course provides supervised practical experience at the campus child development lab to supplement child development courses and related curriculum. Through on-site training, students gain practical knowledge in curriculum development, guidance strategies, observation, and child growth and development. This course is designed for students who plan careers in early childhood education and family support agencies or for parents who seek strategies and techniques for guiding children. The course may be used toward the field experience component for the State of California Child Development Permit. This course may be taken four times for credit. The combined maximum credit for Child Development 291 may not exceed 16 units. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

291A Child Development Center Practicum

3 hours lab, 1 unit
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
This course provides directed laboratory experience in the campus Child Development Center. It is designed for students who plan careers in early childhood and family support programs and for parents who seek practical experience in guiding and teaching children. Students become familiar with the operating policies and procedures of a preschool program and observe and access the development of children. This course may be used toward the experience component for the State of California Child Development Permit. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

291B Child Development Center Practicum

3 hours lab, 1 unit
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
This course provides directed laboratory experience in the campus Child Development Center. It is designed for students who plan careers in early childhood education and family support programs and for parents who seek practical experience in guiding and teaching children. Students examine appropriate safety, health, and nutritional practices in a preschool setting with an emphasis on implementation with young children. This course may be used toward the experience component for the State of California Child Development Permit and toward the Health and Safety training requirements for Title 22. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

291C Child Development Center Practicum

3 hours lab, 1 unit
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
This course provides directed laboratory experience in the campus Child Development Center for students who plan careers in early childhood and family support programs and for parents who seek practical experience in guiding and teaching children. Students explore teaching practices that enhance children's learning in the classroom and assist in the planning and implementation of developmentally appropriate

activities. This course may be used toward the experience component for the State of California Child Development Permit. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

291D Child Development Center Practicum

3 hours lab, 1 unit
Grade Only

Advisory: English 42 and English 43, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R4 and W4.
This course provides directed laboratory experience in the campus Child Development Center for students who plan careers in early childhood and family support programs and for parents who seek practical experience in guiding and teaching children. Students examine the role of routines and transitional activities in the organization and structure of an early child development setting. The class emphasizes positive guidance and discipline for young children. This course may be used toward the field experience component for the State of California Child Development Permit. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Experimental Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), or Work Experience (270). Detailed course descriptions are listed on page 190. Please refer to the class schedule and/or see the dean or department chair for availability.

COMPUTER AND INFORMATION SCIENCES (CISC)

71 MicroController Programming

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course introduces students to programming and interfacing microcontrollers to the world around them. Topics include programming a microcontroller to respond to inputs and to control various devices, such as LEDs, fans, servos, and relays. This course is designed for students who want to increase their understanding of microcontrollers and embedded programming. (FT) Associate Degree Credit only and not Transferable.

181 Principles of Information Systems

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: English 48 and English 49, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and W5.
This course is an introduction to basic principles and theory relating to problem solving and analysis in business organizations using computers and software packages. Emphasis is placed on computer organization, data processing systems, decision support systems, and systems analysis. Business software is reviewed with an emphasis on spreadsheet systems including hands-on spreadsheet applications. This course is intended for the transfer student planning to major in business, economics, or social science. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities. UC Transfer Course List.

186 Visual Basic Programming

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: English 49 with a grade of "C" or better, or equivalent, or Assessment Skill Level W4.
This course is an introduction to programming using Visual Basic. The course covers the fundamentals of event oriented programming in a Windows environment. Students learn to use and program a mouse, windows, forms, menus, dialog boxes, icons, buttons, text fields, files, graphics, and other components of a Windows environment in Visual Basic. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities. UC Transfer Course List.

189A Introduction to Programming I

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: Computer and Information Sciences 150 and 181, each with a grade of "C" or better, or equivalent; English 49 and Mathematics 46, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and M40.
Limitation on Enrollment: This course is not open to students with previous credit for Computer and Information Sciences 190-Java Programming.
Using the popular programming language Java, this course introduces students to the process of developing simple software applications to solve typical human problems. This includes language