Health science

HEALTH SCIENCE – HSCI

Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits (provider #CEP 7992) Health Science courses which can be used are HSCI-124, 140, 164 and 170.

Joseph Gorga, Dean
Biological and Health Sciences Division
Physical Sciences Building, Room 263

Possible career opportunities
A health science graduate may work in federal, state or county health agencies, community clinics, voluntary health agencies and hospitals, insurance or pharmaceutical companies.

Associate in science degree
Health education

Students completing the program will be able to...

A. apply a multi-dimensional approach to health that incorporates the study of social, behavioral and physiological sciences.
B. identify risk factors for disease and disability.
C. analyze the psychological, physical, social, sexual, and environmental influences on health and wellness.
D. demonstrate behavior-changing techniques to maximize health and wellness.
E. evaluate information and its sources by articulating and applying fundamental evaluation and selection criteria.

The associate in science degree in health education exposes the student to a multi-dimensional approach to health by incorporating the study of social, behavioral and physiological sciences. Students will learn about individual and social-cultural risk factors for disease and disability and be taught behavior-changing skills and public health strategies to improve quality and quantity of life, all of which have broad applications in fields that teach health education such as academic, community, corporate, and/or medical. The course of study also provides a broad foundation in health sciences for those students who want to pursue specialized occupations in the public health profession.

Students may apply the knowledge to work areas, such as workplace wellness, hospital health education center, state or university health center, health club, and/or government and public health agencies that focus on improving individual and societal health. Students wishing to pursue a career in the field of health education should consider this two-year program as it satisfies the general education and/or elective requirements necessary to transfer, and will prepare students for a bachelor’s of science (B.S.) degree program in the field of public health science.

DVC health education students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to four-year institutions of their choice are met. Students who intend to transfer are advised to select either General Education Option 2 (IGETC) or Option 3 (CSU GE). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate in science degree with a major in health education, students must complete each course used to meet a major requirement with a “C” grade or higher and complete general education requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

**major requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI-124</td>
<td>Health and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-130</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
</tbody>
</table>

plus at least 4 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOSC-102</td>
<td>Fundamentals of Biological Science with Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC-117</td>
<td>Human Biology with Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC-119</td>
<td>Fundamentals of Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC-139</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC-140</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC-146</td>
<td>Principles of Microbiology</td>
<td>5</td>
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</table>

plus at least 3 units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HSCI-127</td>
<td>Drugs, Health, and Society</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-135</td>
<td>Health and Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-140</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-164</td>
<td>Health and Healing Systems: Cross-Cultural Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-170</td>
<td>Women’s Health</td>
<td>3</td>
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<tr>
<td>HSCI-298</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI-160</td>
<td>Nutrition: Science and Applications</td>
<td>3</td>
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</table>

plus at least 6 units from any course not used above, or:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUS-240</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH-142</td>
<td>Elementary Statistics with Probability</td>
<td>4</td>
</tr>
<tr>
<td>MATH-144</td>
<td>Statway II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM-108</td>
<td>Introduction to Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH-101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO-120</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**total minimum units for the major** 19
Health science

**Associate in science in public health science for transfer**

Students completing the program will be able to...

A. identify the basic concepts and terminologies of the public health discipline.

B. access credible public health information from various local, state and national public health organizations and agencies.

C. analyze the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations.

D. demonstrate the steps of community organizing and health promotion programming.

E. develop the preliminary skills to serve as an effective advocate for community/public health.

The associate in science in public health science for transfer degree is primarily intended for students who plan to complete a bachelor's degree at a California State University (CSU) in areas of study such as health science, health science with health education option, health science with public health option, health science with community health option, health science with health promotion and disease prevention, health education, public health, public health promotion, kinesiology with health education, kinesiology with health science option, kinesiology with health and wellness promotion, kinesiology with health promotion and disease prevention, and collaborative health and human services with community health option. Students completing this degree are guaranteed admission to the CSU system, but not necessarily to a particular major or campus.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a “C” grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. Some variations in requirements may exist at certain four-year institutions; therefore, students who intend to transfer are advised to refer to the catalog of the prospective transfer institution and consult a counselor.

**major requirements:**

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<tbody>
<tr>
<td>BIOSC-101</td>
<td>Fundamentals of Biological Science</td>
<td>3</td>
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<tr>
<td>BIOSC-102</td>
<td>Fundamentals of Biological Science with Laboratory</td>
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<td>BIOSC-139</td>
<td>Human Anatomy</td>
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<td>BUS-240</td>
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<td>MATH-142</td>
<td>Elementary Statistics with Probability</td>
<td>4</td>
</tr>
<tr>
<td>CHEM-108</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM-120</td>
<td>General College Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>HSCI-124</td>
<td>Health and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-130</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH-101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECON-220</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON-221</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-127</td>
<td>Drugs, Health, and Society</td>
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<td>Nutrition: Science and Applications</td>
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<tr>
<td>SOCIO-120</td>
<td>Introduction to Sociology</td>
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**total minimum units for the major** 33

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**HSCI-100 Introduction to Health Care Careers**

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<th>Course Code</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>3 units</td>
<td>SC</td>
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</table>

- 54 hours lecture per term
- Note: Credit by examination available.

This course provides an overview of health care careers and their respective career paths, educational and skill requirements, and professional responsibilities. Basic skills required by health-related careers such as emphasizing personal attributes, demonstrating professionalism, engaging in teamwork, and building communication skills will be covered. This course is designed to assist students in making educational and career decisions for a wide variety of health care occupations. CSU
Health science

HSCI-124  Health and Wellness  
3 units  SC  
- CSU GE: E  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
- Note: The nutrition, tobacco and substance abuse components of this course fulfill a portion of the state health education requirements for a teaching credential. For CPR training see HSCI-131.  
This course will require students to explore, analyze, personalize, and discuss the following issues as they relate to the essential components of health and wellness: nutrition, physical activity/exercise/fitness, weight control, eating disorders and body image, media influences, mental health, stress, violence, substance use/abuse, sexuality and sexual orientation, sexually transmitted infections, reproductive choices/contraception, relationships, disease prevention, environment, health care, aging, and general public health issues. Students will be taught the knowledge and skills necessary to implement lifestyle behaviors that can improve their health and well-being. C-ID PHS 100, CSU, UC (credit limits may apply to UC - see counselor)

HSCI-126  Stress Management and Health  
3 units  SC  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
This course covers theoretical and research-based frameworks of stress, stress response, and stress management techniques. Topics include the definition of stress, physiological and psychological effects of stress, sources and causes of stress, and health consequences of chronic stress. Numerous evidence-based techniques to manage and cope with stress will also be covered and practiced. CSU

HSCI-127  Drugs, Health, and Society  
3 units  SC  
- IGETC: 4; CSU GE: D, E; DVC GE: IV  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
This course explains concepts and theories relating to the epidemiology and toxicology of substance use, misuse, abuse and dependence, and the impact on personal, community and societal health. The biological/physiological, neurological, and psychological short and long-term effects of selected pharmacological substances on the human brain and body are explored, including an analysis of risk factors associated with abuse and dependence. Historical, political, social, socioeconomic, and legal factors involved in the practice, marketing, distribution, and government regulations of legal and illegal drugs will be covered. An overview of contemporary methods used in prevention, diagnosis and treatment will be reviewed, including an analysis of effective evidence-based strategies and local recovery resources. C-ID ADS 110 X, CSU, UC (credit limits may apply to UC - see counselor)

HSCI-128  Medical Terminology  
3 units  SC  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
This course covers terminology relevant to various medical and allied health care fields. The construction, pronunciation, spelling, definition, and common usage for all medical terms in anatomy, physiology, pathology, and health care will be covered. CSU

HSCI-130  Introduction to Public Health  
3 units  SC  
- IGETC: 4; CSU GE: D, E; DVC GE: IV  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
This course presents an overview of the disciplines of community and public health. Topics include the basic concepts and terminologies of public health; an overview of various public health professions and organizations; the study, prevention and control of diseases in the community; the analysis of the social determinants of health; strategies for eliminating disease, illness, and health disparities among various populations; community organizing and health promotion programming; school health promotion; environmental health and safety; and an overview of the healthcare delivery system in the United States. Emphasis will be placed on the development of knowledge and preliminary skills to serve as an effective advocate for community and public health. C-ID PHS 101, CSU, UC

HSCI-131  Cardiopulmonary Resuscitation (CPR)  
.5 unit  SC  
- 9 hours lecture/3 hours laboratory per term  
This course covers lifesaving skills used in respiratory and cardiac emergencies, and re-certifies students who have already attained Cardio Pulmonary Resuscitation (CPR) certification. CSU

HSCI-135  Health and Social Justice  
3 units  SC  
- IGETC: 4; CSU GE: D, E; DVC GE: IV  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, racism, and gender shape health epidemics and policy development. Fundamental theories to advocate for health and social justice will be explored, and community organizing approaches will be practiced. C-ID PHS 102, CSU, UC
HSCI-137  Cultural Competence in Health and Social Service  
3 units SC  
- IGETC: 4; CSU GE: D; DVC GE: IV  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or Equivalent  
This course examines the political, social, and theoretical perspectives of diverse populations as they relate to health and social services settings. The impact of health status, lifestyle and behavioral patterns, communication styles, socioeconomic status, personal prejudices, ethnic stereotyping, and cultural beliefs on individual and group access to health and social services will be investigated. Emphasis is placed on developing effective strategies to use with diverse populations as well as evaluating the effectiveness of existing health and social service programs. C-ID ADS 195X, CSU, UC

HSCI-140  Human Sexuality  
3 units SC  
- IGETC: 4; CSU GE: D, E; DVC GE: IV  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
This course presents an overview of the field of human sexuality from a biological, psychological, sociocultural, and research-based perspective. Topics include the dimensions of sexuality, sex in the media including the effects of pornography, cultural differences, Sexology research, reproductive anatomy and sexual response, contraception, reproductive options, sexually transmitted infections, sexual problems and solutions, gender, intimate relationships and communication, sexual orientation, sexual development through the lifespan, atypical (paraphilia) behaviors, violence including rape and sexual assault, and the sexual marketplace including human trafficking and prostitution. Students will be encouraged to examine their own sexual beliefs, values, and behaviors and cultivate unprejudiced attitudes toward diversity in human sexuality. C-ID PSY 130, CSU, UC

HSCI-150  Topics in Health Science  
3-4 units SC  
- Variable hours  
A supplemental course in Health Science to provide a study of current concepts and problems in health science. Specific topics will be announced in the schedule of classes. CSU

HSCI-164  Health and Healing Systems: Cross-Cultural Perspectives  
3 units SC  
- IGETC: 4; CSU GE: D, E; DVC GE: IV  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
- Note: Continuing Education Units (CEUs) for nurses  
This course examines health, disease, healing and medicine from an interdisciplinary perspective. Concepts and philosophies from traditional cultural healing systems and contemporary western medicine will be examined from psychological, sociological, biological, historical and cultural perspectives. Topics covered include the history of western medical practices, principles of indigenous healing systems, the role of gender in healing, the effects of personality and emotions on health and disease, and integrative medicine. CSU, UC

HSCI-170  Women's Health  
3 units SC  
- IGETC: 4; CSU GE: D, E; DVC GE: IV  
- 54 hours lecture per term  
- Recommended: Eligibility for ENGL-122 or equivalent  
This course analyzes the biological, psychological and sociocultural aspects of women's health and medical care in society. Contemporary issues of relating to gender roles and stereotypes, aging, politics, and the role of women in the family, workforce, community, and society are examined. CSU, UC (credit limits may apply to UC - see counselor)

HSCI-230  Advanced First Aid/CPR  
3 units SC  
- 54 hours lecture per term  
- Note: Continuing Education Units (CEUs) for nurses  
This course involves the theory and practice of emergency care of the injured. Students will learn to assess a victim’s condition and incorporate proper treatment. Standard first aid, cardio-pulmonary resuscitation (CPR), and automatic external defibrillator (AED) certification(s) will be granted upon successful completion of requirements. This course is appropriate training for medical professionals. C-ID KIN 101, CSU, UC
HSCI-296  Internship in Occupational Work
Experience Education in HSCI

1-4 units  SC
• May be repeated three times
• Variable hours
• Note: In order to enroll in the HSCI-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. The Employment Form can be accessed at www.dvc.edu/wrkx. Incomplete grades are not awarded for this course.

HSCI-296 is a supervised internship in a skilled or professional level assignment in the student’s major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Five hours work per week or seventy-five hours work per term is equal to one unit (paid) or one unit for four hours work per week or sixty hours per term (unpaid work). Students may earn up to a maximum of sixteen units; repetition allowed per Title 5 Section 55253. CSU

HSCI-298  Independent Study

.5-3 units  SC
• Variable hours
• Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

HSCI-299  Student Instructional Assistant

.5-3 units  SC
• Variable hours
• Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.

Students work as instructional assistants, lab assistants and research assistants in this department. The instructional assistants function as group discussion leaders, meet and assist students with problems and projects, or help instructors by setting up laboratory or demonstration apparatus. Students may not assist in course sections in which they are currently enrolled. CSU