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.

Program-level student learning outcomes
Program learning outcomes are subject to change. The most current list of program learning outcomes for each program is published on the DVC website at www.dvc.edu/slo.

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.

<table>
<thead>
<tr>
<th>major requirements:</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI-124 Health and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HSCI-130 Introduction to Public Health</td>
<td>3</td>
</tr>
</tbody>
</table>

plus at least 4 units from:

<table>
<thead>
<tr>
<th>course</th>
<th>description</th>
<th>units</th>
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<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>description</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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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>course</th>
<th>description</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>or MATH-142</td>
<td>Elementary Statistics with Probability</td>
<td>4</td>
</tr>
<tr>
<td>or MATH-144</td>
<td>Statway II</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM-108</td>
<td>Introduction to Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>or PSYCH-101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOCIO-120</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

total minimum required units 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, 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:****

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOSC-101</td>
<td>Fundamentals of Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>BIOSC-102 Fundamentals of Biological Science with Laboratory</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>
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<tr>
<td>BUS-240</td>
<td>Business Statistics</td>
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<td>MATH-142</td>
<td>Elementary Statistics with Probability</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>
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</table>

**plus at least 3 units from:**

<table>
<thead>
<tr>
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</thead>
<tbody>
<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>SOCIO-120</td>
<td>Introduction to Sociology</td>
<td>3</td>
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</table>

**total minimum required units** 33

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

3 units SC  
- 54 hours lecture per term

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 spectrum of health care occupations. CSU
Health science

HSCI-124 Health and Wellness
3 units SC
- 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 focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors. Topics include (but not limited to) nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety. 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: ENGL-116/118 or equivalent

This course will examine the theoretical frameworks of stress and common stress management techniques. Topics of study will include defining stress, understanding physiological theories of stress, defining sources and causes of stress, and examining health consequences of chronic stress. Students will examine and analyze numerous strategies to manage and cope with stress such as: time management, relaxation techniques, communication skills, diet and exercise. CSU

HSCI-127 Drugs, Health and Society
3 units SC
- 54 hours lecture per term
- Recommended: ENGL-116/118 or equivalent

This course introduces concepts, theories, epidemiology and toxicology of substance abuse and its relevance to personal and public health. The biological, psychological and social effects of drug use on the health of individuals and on society is emphasized. Concepts such as substance use versus misuse, abuse and dependence; risk factors; signs and symptoms; mental illnesses; treatments; and prevention theories associated with addiction will be covered. The pharmacological classification of psychoactive substances, illicit and licit, and their neurological and physiological effects on the human brain will be explored. An extensive analysis of health statistics identifying trends of usage, dependency, and the controversies around the social, political, and economic factors related to the legal and illegal distribution, marketing and government regulation of drugs is also covered. Current options for recovery and local resources will be reviewed. C-ID PHS 103, 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 presents terminology relevant to many 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
- 54 hours lecture per term
- Recommended: Eligibility for ENGL-122 or equivalent

This course introduces students to the discipline of Public/Community Health. Areas of emphasis 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 including the analysis of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations; community organizing and health promotion programming; environmental health and safety; and an overview of the healthcare delivery system in the U.S. Emphasis will be placed on the development of knowledge and preliminary skills to serve as an effective advocate for community/public health. C-ID PHS 101, CSU, UC

HSCI-131 Cardiopulmonary Resuscitation (CPR)
.5 unit SC
- 9 hours lecture/3 hours laboratory per term
- Recommended: ENGL-116/118 or equivalent

This course introduces 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
- 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 presented. C-ID PHS 102, CSU, UC
HSCI-140  Human Sexuality  
3 units  SC  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL-122 or equivalent  
During the course of the semester students will explore and discuss several issues relating to human sexuality from a biological, psychological, social, cross-cultural and research-based perspective. Topics include reproductive anatomy and sexual response, intimate relationships and communication, gender, contraception, reproduction, sexual orientation, sexually transmitted infections, sexual dysfunctions, paraphilia behaviors, violent behaviors, cultural differences, sex in the media including the effects of pornography, the sexual marketplace, and sexual development through the lifespan. This course will attempt to empower students with the skills necessary to take control of their own sexual health decisions and behaviors. C-ID PSY 130, CSU, UC

HSCI-150  Topics in Health Science  
.3-4 units  SC  
• Variable hours  
• Recommended: Eligibility for ENGL-122 or equivalent  
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  
• 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 thought, 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  
• 54 hours lecture per term  
• Recommended: Eligibility for ENGL-122 or equivalent  
An exploration of the biological, sociopolitical, and psychological aspects of women’s health and medical care in contemporary society. The course examines contemporary issues of women’s health with emphasis on the politicization of the social, physical, emotional, intellectual, and environmental components of health. 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 advanced course involves the theory and detailed demonstration of the first aid care of the injured. The student 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