ALLIED HEALTH

Contact Information

Division
Sciences and Mathematics

Dean
Randy Lehr

Associate Dean
Nancy James

Division Office
V 211, Rocklin Campus

Department Office
RN1 100, Rocklin Campus

Department Phone
(916) 660-8300

Overview
Allied Health offers alternatives to nursing and medicine for students interested in healthcare professions. Careers include Dental Hygiene, Licensed Vocational Nursing, Medical Assisting, Physical Therapy Assistant, Respiratory Therapist, Radiology Technician, Sonography, and others. Allied Health at Sierra College is designed to help identify and train for these alternative healthcare careers and to prepare students for success working in hospitals, clinics, dental offices and long term care facilities.

Degrees/Certificates

Associate Degrees

- Allied Health-General Option (p. 1)
- Allied Health-Pre-Nursing Option (p. 2)

Certificates of Achievement

- Allied Health-General Option (p. 1)
- Medical Assisting (p. 2)

Allied Health - General Option

AS Degree and/or Certificate of Achievement
The Allied Health General Option is designed as a gateway into allied health professions and to prepare students for success in Allied Health degree and certificate programs at Sierra and other institutions. This may include training programs for professions such as Dental Hygiene, LVN, Medical Assistant, Occupational Therapy Assistant, Physical Therapy Assistant, Respiratory Care, Radiology Technician, Sonography and others. Some variation in degree/certificate requirements may exist for particular Allied Health programs, therefore, it is essential that students refer to the catalog of their intended transfer institution and contact a counselor to ensure that all required coursework is completed. For the degree, students must fulfill the following major requirements with grades of “C” or better, complete a minimum of 60 degree-applicable semester units (12 of which must be completed at Sierra College) with a grade point average of at least 2.0 and complete one of the following three general education patterns:

- Sierra College Associate Degree Requirements (http://catalog.sierracollege.edu/student-resources/general-education/associate-degree-requirements);
- California State University General Education Breadth pattern (http://catalog.sierracollege.edu/student-resources/general-education/california-state-university-general-education-breadth-requirements);

A certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALH 0020</td>
<td>Introduction to Allied Health</td>
<td>1</td>
</tr>
<tr>
<td>Select 17 units from the following:</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

- ANTH 0002 Cultural Anthropology
- BIOL 0001 General Biology
- BIOL 0004 Microbiology
  - or BIOL 0008A Microbiology I
  - and BIOL 0008B Microbiology II
- BIOL 0005 Human Anatomy
  - or BIOL 0007A Human Anatomy I
  - and BIOL 0007B Human Anatomy II
- BIOL 0006 Human Physiology
- BIOL 0055 General Human Anatomy and Physiology
- BIOL 0056 Biology: A Human Perspective
- CHEM 0001A General Chemistry I
  - or CHEM 0003A General Chemistry I - Part 1
  - and CHEM 0003B General Chemistry I - Part 2
- CHEM 0001B General Chemistry II
- CHEM 0002A Introduction to Chemistry I
- CHEM 0002B Introduction to Chemistry II
- CSCI 0010 Introduction to Computing
- COMM 0001 Fundamentals of Public Speaking
- COMM 0003 Small Group Communication
- COMM 0005 Communication Foundations
- COMM 0007 Intercultural Communication
- COMM 0008 Interpersonal Communication
- ENGL 0000N Introduction to College Writing
- ENGL 0001A College Reading, Writing, and Research
- HDEV 0001 Human Development Through the Lifespan
- HED 0001 Standard First Aid/Community CPR
- HSCI 0003 Medical Terminology
- IT 0010 Applying Computer Software
- MATH 0000D Intermediate Algebra
- MATH 0000E Practical Mathematics
- MATH 0000G B-STEM Intermediate Algebra
- MATH 0013 Elementary Statistics
- MATH 0027 Trigonometry
- NUTF 0005 Food Preparation for Nutrition and Life Fitness
Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTF 0010</td>
<td>Principles of Nutrition</td>
<td></td>
</tr>
<tr>
<td>PHYS 0010</td>
<td>Basic Concepts in Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 0105</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 0105L</td>
<td>General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PSYC 0100</td>
<td>General Principles of Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 0142</td>
<td>Introduction to Psychological Statistics</td>
<td></td>
</tr>
<tr>
<td>SOC 0001</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>SOC 0015</td>
<td>Introduction to Statistics in Sociology</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 18

Allied Health - Pre-Nursing Option

AS Degree

Successful completion of the Associate in Science, Allied Health # Pre# Nursing Option, prepares the student with the knowledge, skills and qualities necessary to apply to most nursing programs. The program includes the prerequisites for necessary for most registered nursing programs at community colleges and may be transferable to nursing majors at various universities. Some variation in degree requirements may exist for a particular program; therefore, it is essential that students refer to the catalog of their intended institution and contact a counselor to ensure that all required coursework is completed. For the degree, students must fulfill the following major requirements with grades of “C” or better, complete a minimum of 60 degree-applicable semester units (12 of which must be completed at Sierra College) with a grade point average of at least 2.0 and complete one of the following three general education patterns:

- Sierra College Associate Degree Requirements (http://catalog.sierracollege.edu/student-resources/general-education/associate-degree-requirements);
- California State University General Education Breadth pattern (http://catalog.sierracollege.edu/student-resources/general-education/california-state-university-general-education-breadth-requirements);

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALH 0020</td>
<td>Introduction to Allied Health</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 0004</td>
<td>Microbiology (OR)</td>
<td>5</td>
</tr>
<tr>
<td>or BIOL 0008A &amp; BIOL 0008B</td>
<td>Microbiology I and Microbiology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 0005</td>
<td>Human Anatomy (OR)</td>
<td>5</td>
</tr>
<tr>
<td>or BIOL 0007A &amp; BIOL 0007B</td>
<td>Human Anatomy I and Human Anatomy II</td>
<td></td>
</tr>
<tr>
<td>BIOL 0006</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 002A</td>
<td>Introduction to Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>COMM 0001</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 0001A</td>
<td>College Reading, Writing, and Research</td>
<td>4</td>
</tr>
<tr>
<td>HDEV 0001</td>
<td>Human Development Through the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NUTF 0010</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 0100</td>
<td>General Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 0002</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

or SOC 0001 | Introduction to Sociology | |

Total Units 40-46

Demonstrate mathematics proficiency by one of the following:

- MATH 000A Elementary Algebra
- MATH 000D Intermediate Algebra
- MATH 000E Practical Mathematics
- MATH 000G B-STEM Intermediate Algebra
- MATH 0012 College Algebra
- MATH 0013 Elementary Statistics
- MATH 0016A Calculus for Social and Life Sciences
- MATH 0016B Calculus for Social and Life Sciences
- MATH 0024 Modern Business Mathematics
- MATH 0029 Pre-Calculus Mathematics
- MATH 0030 Analytical Geometry and Calculus I
- MATH 0031 Analytical Geometry and Calculus II
- MATH 0042 Business Calculus
- PSYC 0142 Introduction to Psychological Statistics
- SOC 0015 Introduction to Statistics in Sociology

Medical Assisting Certificate of Achievement

Successful completion of the Medical Assisting Program certificate prepares the student with the knowledge, skills and qualities necessary for the medical assisting profession. The medical assistant acquires a broad scope of skills which makes him/her a valuable allied health professional within the ambulatory care setting. During this program, students will learn and demonstrate vital signs, EKGs, venipunctures, injections, assist with minor office surgeries and patient education, as well as medical office administrative tasks. Students will also learn basic anatomy, physiology and pharmacology. This comprehensive education allows graduates to find employment in clinics, urgent care facilities, primary care and specialty physician offices. Medical assistants are also employed in medical laboratories, surgical centers, and electrocardiography departments in hospitals, government agencies and educational institutions. Core coursework will be fulfilled in two semesters, followed by a 160-hour externship. A certificate of achievement will be earned after completing all courses with a grade of “C” or better and successfully passing the externship (ALH 0009). The certificate is designed to focus on providing specific career technical skills; it is not equivalent to an associate degree.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALH 0001</td>
<td>Electronic Health Record/Billing</td>
<td>2.5</td>
</tr>
<tr>
<td>ALH 0002</td>
<td>Medical Coding</td>
<td>2.5</td>
</tr>
<tr>
<td>ALH 0003</td>
<td>Introduction to Pharmacology for Medical Assisting</td>
<td>2.5</td>
</tr>
<tr>
<td>ALH 0004</td>
<td>Physical Exam Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ALH 0005</td>
<td>Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ALH 0006</td>
<td>Medical Office Laboratory Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ALH 0007</td>
<td>Medical Asepsis and Surgical Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ALH 0008</td>
<td>Medication Administration and Injection Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

Sierra College Catalog 2019-2020
ALH 0001. Electronic Health Record/Billing  
**Units:** 2.5  
Prerequisite: Completion of BIOL 55, CIS 50, HED 2, and HSCI 3 with grades of "C" or better; eligibility for ENGL 1A  
Hours: 63 (36 lecture, 27 laboratory)  
How to document the total patient encounter in the Electronic Health Record using a current vendor product along with Medisoft Clinical Practice Management which incorporates the electronic billing process. (letter grade only) (not transferable)

ALH 0002. Medical Coding  
**Units:** 2.5  
Hours: 63 (36 lecture, 27 laboratory)  
Students will acquire basic knowledge of the functions of coding in the ambulatory medical setting. In addition, students will learn to interpret and locate codes in both the CPT (Current Procedural Terminology) and ICD-10-CM (International Classification of Disease, clinical modification 10) manuals. (letter grade only) (not transferable)

ALH 0003. Introduction to Pharmacology for Medical Assisting  
**Units:** 2.5  
Hours: 63 (36 lecture, 27 laboratory)  
Introduction to the principles of pharmacology and medication forms, routes of administration, and common medication for each body system as used in the ambulatory setting. (letter grade only) (not transferable)

ALH 0004. Physical Exam Procedures  
**Units:** 3  
Hours: 90 (36 lecture, 54 laboratory)  
Prepares students to perform clinical tasks within the scope of practice of a medical assistant. Skill competencies include preparation of exam rooms, acquisition of patient history and vital signs, introduction to oral medication administration, nutritional education planning, orthopedic bracing/casting, handling office emergencies, and performing CPR and electrocardiograms. (letter grade only) (not transferable)

ALH 0005. Medical Office Procedures  
**Units:** 3  
Prerequisite: Completion of ALH 1, 2, 3, and 4 with grades of "C" or better  
Hours: 90 (36 lecture, 54 laboratory)  
Designed for the Clinical Medical Assistant to learn legal/ethical and professional requirements, pay ranges, and employer expectations. Students will get hands-on experience related to various Allied Health occupations and gain insight into job roles and responsibilities through guest speakers. Course includes an overview of health care delivery systems, associated career opportunities, infection control, and laws governing patient confidentiality. Students will have the opportunity to participate in organized field trips. (letter grade only) (not transferable)

ALH 0006. Medical Office Laboratory Procedures  
**Units:** 3  
Prerequisite: Completion of ALH 1, 2, 3, and 4 with grades of "C" or better  
Hours: 90 (36 lecture, 54 laboratory)  
Students will acquire skills to competently implement and evaluate standard laboratory tests as performed in medical offices or general lab settings. Emphasis on specimen collection, handling and storing procedures, analysis and interpretation of normal and abnormal lab values. Acquire phlebotomy skills that prepare students to practice within their scope of work as a medical assistant. (letter grade only) (not transferable)

ALH 0007. Medical Asepsis and Surgical Procedures  
**Units:** 3  
Prerequisite: Completion of ALH 1, 2, 3, and 4 with grades of "C" or better  
Hours: 90 (36 lecture, 54 laboratory)  
Students will acquire knowledge to apply theory to practice while assisting with minor office surgeries and wound care. Sterile and aseptic techniques, sterile field and instrument sanitization procedures and protocols prepare students with the necessary skills to practice within the scope of practice of a medical assistant. (letter grade only) (not transferable)

ALH 0008. Medication Administration and Injection Procedures  
**Units:** 3  
Prerequisite: Completion of ALH 1, 2, 3, and 4 with grades of "C" or better  
Hours: 90 (36 lecture, 54 laboratory)  
Students will acquire and apply knowledge of various routes of medication administration and the related injection safety, techniques, and site selection. Medication dosage calculations, medication side effects and emergencies pertaining to medication administration will prepare students to practice within the scope of practice of a medical assistant. (letter grade only) (not transferable)

ALH 0009. Medical Assisting Clinical Practicum Experience  
**Units:** 3.5  
Prerequisite: Completion of ALH 5, 6, 7, and 8 with grades of "C" or better  
Hours: 171 (9 lecture, 162 laboratory)  
Students will acquire clinical Medical Assisting experience in the work setting under the supervision of a licensed physician in a Board-Certified medical office setting or outpatient facility. (letter grade only) (not transferable)

ALH 0020. Introduction to Allied Health  
**Unit:** 1  
Hours: 20 (18 lecture, 2 activity)  
Introduction to career choices in the Allied Health field. Topics include: education and career mapping, job outlooks, occupational and professional requirements, pay ranges, and employer expectations. Students will get hands-on experience related to various Allied Health occupations and gain insight into job roles and responsibilities through guest speakers. Course includes an overview of health care delivery systems, associated career opportunities, infection control, and laws governing patient confidentiality. Students will have the opportunity to participate in organized field trips. (letter grade only) (not transferable)

**Program Student Learning Outcomes**

- Demonstrate an understanding of the functions of the organ systems of the human body.
- Use the Scientific Method to investigate biological questions and critically evaluate and effectively communicate scientific data.
- Understand and apply foundational knowledge for a future allied health career or program of study.