

HEALTH SCIENCE

Health Science Program Learning Outcomes (<https://catalog.csudh.edu/program-learning-outcomes/health-human-services-nursing/health-science/>)

College of Health, Human Services, and Nursing

Department of Health Sciences

Bachelor of Science

Degree Roadmaps

Community Health Option

Healthcare Management Option

Radiologic Technology Option

Minor

Master of Science

Orthotics and Prosthetics Option

Faculty

Pamela C. Krochalk, Department Chair

Health Science Faculty: Karla Castillo, Charles Gabbert, Matt Mutchler, Enrique Ortega, Shannon Roback, Gary Sayed, Archana Sharma, Elwin Tilson

Program Office: WH A-330, (310) 243-3748

Mark Muller, Department Chair, Orthotics and Prosthetics Program

O&P Faculty: Ava Herbrick, Mark Cromer, Jen Lucarevic

O&P Program location: 10641 Calle Lee, Suite 185, Los Alamitos, CA 90720

Student Services Center - Advising: WH A-300, (310) 243-2120 or (800) 344-5484

Emeriti Faculty

Amer El-Ahraf, Ellen Hope-Kearns, Chi-Hua Hsiung

Division Mission

The Division of Health Sciences programs are designed to:

Strengthen students' intellectual capacities and abilities to develop and mobilize human and institutional resources and services to meet the health needs of diverse individuals and populations, as well as the communities in which they reside.

Educate students in developing and implementing evidence-based assessment and intervention models that improve the biopsychosocial health of diverse individuals and populations, as well as the communities in which they reside.

Prepare scholar-practitioners to engage in multidisciplinary scientific inquiry that advances the knowledge base of research and practice in the health disciplines.

Prepare graduates who will be leaders in their fields and professions to inform and influence professional dialogues on key health issues affecting diverse individuals and populations, as well as the communities in which they reside.

Prepare scholar-activists who – with global consciousness and ecosystemic perspectives – are committed to attaining health equity

and collective well-being through the promotion of human development, universal human rights, and social justice.

Program Description

Health Science offers a variety of programs including a major with different options leading to the Bachelor of Science in Health Science.

The Community Health Option is designed to provide students with the necessary skills and perspectives to function as effective community health workers and educators in an urban population that is diverse ethnically, economically and demographically. Students will gain knowledge and understanding of health behavior and strategies for change, health disparities among diverse populations, and the development of programs that increase access to healthcare and related services.

A student in this option will acquire oral and written communication skills needed to develop health education materials and gain a basic understanding of public health problems and methods commonly used in studying and addressing these problems. Registered nurses and allied health care workers will be able to serve their patients more effectively by becoming knowledgeable about community health service agencies and public health policy at all levels of government. Upon completion of the Community Health Option, students will qualify to take the national Certified Health Education Specialist (CHES) examination.

The Healthcare Management Option is designed to provide students with a general foundation in the principles and theories of management, the skills needed by frontline or middle level supervisors in a health care unit, an understanding of the organizational structure of the health care system, the financing of health care services in the United States, and knowledge of current health policies at local, state and federal levels.

The Radiologic Technology Option is designed to accommodate the entering undergraduate or transfer student already certified in the profession. The entering program is offered in collaboration with the Harbor-UCLA Medical Center School of Radiologic Technology, which is currently accredited by the Joint Review Committee on Education for Radiologic Technologists and approved by the State of California Department of Education for Radiologic Technology training. Upon completion of the program, students will be qualified to take the certification examinations given by the American Registry of Radiologic Technologists. A separate application to the Radiologic Technology Option for entering students is required. Refer to the Radiologic Technology Option section for further information on the application process and eligibility for consideration as a candidate. Refer also to the Harbor-UCLA School of Radiologic Technology website.

Features

The Healthcare Management and Community Health options are designed for practicing health professionals and future community health and healthcare personnel. Students may also apply to Radiologic Technology. Since many students work during the day, many health science courses are offered in the late afternoon, evening and on weekends, and many meet only once a week. To keep the health science programs contemporary, most of the health science courses are taught by practicing professionals.

The transfer program is designed for Certified/Registered Radiologic Technologists who wish to earn a BS degree. This program is not competitive but students must meet admission criteria.

Academic Advisement

All students are urged to consult with advisors throughout their matriculation at CSU Dominguez Hills. At the very least, advisors should be consulted for the following:

- Admission
- Career plans and choices
- Selection of options
- Variation in programs and/or "course substitution"
- Pre-registration advisement
- Filing for graduation

Advisement is available through the College of Health, Human Services, and Nursing Student Services Center at 1-310-243-2120 or 1-800-344-5484.

Preparation

Students interested in healthcare management or community health may complete their lower division general education, preferably with an associate of science degree, before coming to CSU Dominguez Hills. Those students who are interested in the clinically related options should have a strong science background in high school and should have completed most of the lower division prerequisite courses for the option before entering the Health Sciences Program. For clinical options, some direct care experience is required.

Credit for Prior Health Education

If students have completed a clinical program for which they did not receive academic credit, they may be granted credit for that education. Please consult the health science office for details. The credits obtained for a clinical program may be applied as lower division elective credits toward the Bachelor of Science degree in Health Science only.

Procedures and Admission Criteria

Only a limited number of students can be accommodated in the clinical options. In addition to filing a completed application to the university, students must also complete the desired option application form to be considered for admission. Admission to these clinical options is not automatically ensured by meeting academic requirements, nor does admission to CSU Dominguez Hills as a Health Science Major guarantee acceptance into individual clinical options.

Graduation with Honors in the Major

An undergraduate student may be a candidate for graduation with honors in Health Science provided s/he meet the following criteria:

1. A minimum of 36 units in residence at CSU Dominguez Hills;
2. A minimum grade point average of at least 3.5 in courses used to satisfy the upper division requirements in the major;
3. Recommendation by the Health Science faculty.

Students who achieve honors in Health Science will have the information recorded on their transcripts and diplomas.

Radiologic Technology Option

There are two Radiologic Technology options. One is for pre-certification students wishing to enter the profession. The other is post-certification

option for Certified Radiologic Technologists (CRTs) who wish to continue their education and earn a bachelor's degree in Health Science.

Pre-certification option: Health Science students cannot declare themselves in the Radiologic Technology option until they have been formally admitted into the program. Admission is highly competitive, and the number of students accepted is very limited. Therefore, until formally admitted into the Radiologic Technology option, which includes acceptance into the School of Radiologic Technology at Los Angeles County Harbor-UCLA Medical Center, students must select either the Community Health or Health Care Management option and proceed with required courses in one of these areas. Students who are not admitted to the Radiologic Technology option will receive their Health Science baccalaureate degree in one of these options.

To be eligible for consideration as a candidate in the pre-certification option, an applicant must meet the following minimum requirements:

1. Completion of all lower division required courses. A grade of "C" or better in each course is required. The completion of 56-70 units of lower division course work is highly recommended before application to the program.
2. Applicants meeting the above requirements must be interviewed by Harbor-UCLA faculty program faculty. It is highly recommended that call the program to set up observations and interviews.
3. Applicants must submit two separate applications, with supporting documents, to Harbor-UCLA School of Radiologic Technology and to CSU Dominguez Hills.
4. Applications and supporting documents to Harbor-UCLA School of Radiologic Technology must be received by March 1 of each year. Applications received after March 1 will be considered for the next year.

Applications to the Radiologic Technology program may be obtained online at <http://www.harbor-ucla.org/radiology/tech-school/> or by writing or calling the School of Radiologic Technology at Harbor-UCLA.

Return completed applications to:

Los Angeles County Harbor-UCLA Medical Center
School of Radiologic Technology
1000 West Carson Street Box 27
Torrance, CA 90509

(310) 222-2825

Note: Deadlines are subject to change without notification. Contact the Harbor-UCLA School of Radiologic Technology for deadlines.

Post-Certification Option: To be eligible for the post-certification option, an applicant must meet the following minimum requirements:

1. Either be a Certified Radiologic Technologist (CRT) or registered by the American Registry of Radiologic Technologists (R.T.).
2. Completion of all lower division required courses. A grade of "C" or better in each course is required. The completion of 56-70 units of lower division course work is highly recommended before application to the program.
3. Applicants must submit an application, with supporting documents, to CSU Dominguez Hills.
4. Admission to this option is **not** competitive as long as the above requirements have been met.

Orthotics and Prosthetics Option

Submit application directly to the National Commission for Orthotics and Prosthetics Common Application System:

1. M.S. in Health Science, Orthotics and Prosthetics Program Application is available at <http://portal.opcas.org>. (Common Application System) Applications to the program are accepted one time each year. Students planning to seek admission should submit both applications including all supporting materials no later than December 31 preceding a summer semester admission to the program;
2. a copy of official transcripts;
3. GRE Test scores;
4. a letter of intent;
5. three letters of recommendation must be submitted directly to the Common Application System.
6. A subsequent interview by a panel consisting of orthotics and prosthetics faculty.
7. Upon admittance to the program applicants must submit a complete graduate admission application to the University at calstate.edu/apply/. Please note: Application deadlines are subject to change without notice. Check with the O&P Program for the deadlines of the current application cycle.

Bachelor of Science in Health Science

Total Course Requirements for the Bachelor's Degree

See the "Requirements for the Bachelor's Degree (<https://catalog.csudh.edu/general-information/baccalaureate-degrees-undergraduate-studies/>)" in the University Catalog for complete details on general degree requirements. A minimum of 40 units, including those required for the major, must be upper division. Students must receive a grade of "C" or better in all courses required for the Health Sciences major.

Elective Requirements

Completion of elective courses (beyond the requirements listed below) to reach a total of a minimum of 120.

General Education Requirements (49 units)

See the "General Education (<https://catalog.csudh.edu/general-information/double-counting-general-education-courses/general-education/>)" requirements in the University Catalog or the Class Schedule for the most current information on General Education requirements and course offerings.

Graduation Writing Assessment Requirement

See the "Graduation Writing Assessment Requirement (<https://catalog.csudh.edu/general-information/graduate-writing-examination/>)" in the University Catalog.

Minor Requirements

Single field major, no minor required

Major Requirements, Community Health and Health Care Management Options (66 - 70 units)

The following courses, or their approved transfer equivalents, are required of all candidates for the degree focusing on the Community Health or Health Care Management option.

A major in Health Science in one of these two options consists of lower division required core courses, upper division required core courses and

lower and upper division courses corresponding to the option. The core courses are common to both of the options. The lower and upper division option courses vary with option chosen.

A. Common Core Requirements (36 - 37 units)

1. Lower Division Required Courses (6-7 units)

HEA 201 Healthcare Systems and Perspectives (3)
MAT 131 Elementary Statistics and Probability (3)

or

MAT 132 Statistics and Probability with Support (4)

Note: Students are advised to take MAT 131 OR MAT 132 and HEA 201 to meet General Education requirements and the Health Science lower division requirement.

2. Upper Division Required Courses (30 units)

HEA 312 Intro To Public Health (3)
HEA 313 Introduction to Biostatistics (3)
HEA 315 Interpersonal Skills in Health Communication (3)
HEA 466 Environmental Health Problems (3)
HEA 467 Health Policy Issues and Analysis (3)
HEA 468 Multicultural Health (3)
HEA 471 Law, Ethics and Social Values in Healthcare (3)
HEA 479 Research Methods in Health Sciences (3)
HEA 490 Health Science Senior Seminar (1-3)
HEA 496 Internship in Health Sciences (1-6)
HEA 497 Internship Seminar (1)

Note: HEA 496 and HEA 497 must be taken concurrently. HEA 468 fulfills General Education Area D3: Integrative Studies in Social Science.

B. Select one of the following options.

In addition to the common core requirements, all health science majors must choose one of the following options:

1. Community Health Option (30-33 units)

a. Lower Division Required Courses (3 units)

BIO 102 General Biology (3)

Note: Students are advised to take BIO 102 to meet General Education requirement in Natural Science and the Health Science lower division requirement.

b. Upper Division Required Courses (21 units)

HEA 314 Health Behavior (3)
HEA 316 Introduction to Epidemiology (3)
HEA 320 Contemporary Health and Disease (3)
HEA 461 Community Health Needs Assessment and Program Planning (3)
HEA 462 Methods in Community Health Education (3)
HEA 463 Health Program Implementation and Evaluation (3)
HEA 464 Health Educator as Community Resource and Advocate (3)

c. Electives (6-9 units)

HEA 300 Health in Public Education (3)
HEA 319 Leadership in Healthcare (3)
HEA 465 Introduction to Global Health (3)
HEA 477 Long-Term Care Administration (3)
HEA 495 Spec Topics in Health Sciences (1-3)

2. Health Care Management Option (30-33 units)

a. Lower Division Required Courses (6 units)

ACC 230 Financial Accounting (3)
ECO 210 Economic Theory 1A Micro (3)

Note: ECO 210 Economic Theory 1A Micro (3) meets General Education Requirement Area D1.

b. Upper Division Required Courses (21 units)

HEA 318 Health Services Management (3)
 HEA 319 Leadership in Healthcare (3)
 HEA 469 Management Sciences in Healthcare Organizations (3)
 HEA 472 Survey of Healthcare Finance (3)
 HEA 476 Managing Health Information Systems (3)
 HEA 477 Long-Term Care Administration (3)
 HEA 478 Strategic Management in Health Care (3)

c. Electives (3-6 units)

HEA 316 Introduction to Epidemiology (3)
 HEA 320 Contemporary Health and Disease (3)
 HEA 465 Introduction to Global Health (3)
 HEA 495 Spec Topics in Health Sciences (1-3)

Major Requirements, Radiologic Technology Option (51 units)

The following courses, or their approved transfer equivalents, are required of all candidates for the degree focusing on Radiologic Technology Option.

A Major in Health Science consists of lower division required courses, upper division core courses and lower and upper division courses in one of the options listed below. The upper division core courses are common to all Health Science Majors for those options listed below. The lower division required courses and the lower and upper division option courses vary with the option chosen.

Common Core Requirements (24 units)

A. Lower Division Required Courses (9 units)

CSC 101 Intro.to Computer Education (3)
 HEA 201 Healthcare Systems and Perspectives (3)
 MAT 131 Elementary Statistics and Probability (3)

Note: Students are advised to take MAT 131 Elementary Statistics and Probability (3) to meet both the General Education quantitative reasoning requirement and the Health Science lower division requirement.

B. Upper Division Requirements (15 units)

1. Required Course (3 units)

HEA 479 Research Methods in Health Sciences (3)

2. Select four courses from the following (12 units)

HEA 312 Intro To Public Health (3)
 HEA 314 Health Behavior (3)
 HEA 315 Interpersonal Skills in Health Communication (3)
 HEA 318 Health Services Management (3)
 CLS 308 Pathophys for Hlth Professions (3)

Radiologic Technology Option (42 units)

A. Prerequisites or equivalents

BIO 250 Elem Hum Anat & Physiol (3)
 BIO 251 Elem Hum Anatomy Phys Lab (1)
 ENG 110 Freshman Composition Accelerated (3)
 ENG 111 Freshman Composition II (3)
 PSY 101 General Education Psychology: Understanding Human Behavior (3)
 or
 SOC 101 The Individual In Society (3)
 ANT 100 Introduction to Cultural Anthropology (3)

PHY 100 Patterns In Nature (3)

or

PHY 120 Elements Of Physics I (4)

CHE 110 General Chemistry I (5)

B. Lower Division Required Courses (3 units)

HEA 280 Orientation and Elementary Radiation Protection (1)
 HEA 281 Medical Terminology: Radiology (1)
 HEA 287 Clinical Practicum I (1)

C. Upper Division Required Courses (39 units)

HEA 380 Darkroom Chemistry and Techniques (1)
 HEA 381 Patient Care Procedures Related to Radiology (2)
 HEA 382 Principles of Radiographic Exposure (3)
 HEA 383 Common Radiographic Procedures Using Contrast Media (2)
 HEA 384 Topogr Anatomy & Position I (3)
 HEA 385 Radiation Protection (3)
 HEA 387 Clinical Practicum II (3)
 HEA 388 Clinical Practicum III (3)
 HEA 480 Radiological Physics (2)
 HEA 481 Topographic Anatomy and Positioning II (3)
 HEA 482 Special Radiographic Procedures (2)
 HEA 483 Sub-Specialties in Radiology (2)
 HEA 485 Departmental Administrative and Office Procedures, Computer Literacy (1)
 HEA 487 Clinical Practicum IV (1)
 HEA 488 Clinical Practicum V (3)
 HEA 489 Clinical Practicum VI (3)
 HEA 499 Senior Project Radiology (1)

Minor in Health Science (15 units)

The minor in Health Science is designed for students majoring in another field that can be strengthened with a solid background in health science.

Requirements

A. Lower Division Required Courses (3 units)

HEA 201 Healthcare Systems and Perspectives (3)

B. Additional Required Courses (12 units)

1. Select four courses from the following (12 units)

HEA 312 Intro To Public Health (3)
 HEA 313 Introduction to Biostatistics (3)
 HEA 314 Health Behavior (3)
 HEA 315 Interpersonal Skills in Health Communication (3)
 HEA 316 Introduction to Epidemiology (3)
 HEA 318 Health Services Management (3)
 HEA 319 Leadership in Healthcare (3)
 HEA 466 Environmental Health Problems (3)
 HEA 467 Health Policy Issues and Analysis (3)
 HEA 468 Multicultural Health (3)
 HEA 470 Legal Issues in the Health Sciences (3)
 HEA 474 Health Care Ethics (3)
 CLS 308 Pathophys for Hlth Professions (3)

Master of Science in Health Science

Orthotics and Prosthetics Option (64-66 units)

Orthotics and prosthetics is a specialized health care profession, which combines a unique blend of clinical and technical skills to care for patients who have neuromuscular and musculoskeletal disorders and/or patients who have a partial or total absence of a limb. Orthotists and prosthetists provide treatment that allows these individuals to lead more

active and independent lives by collaborating with other members of the health care team. This work requires substantial clinical and technical judgment.

The principles of biomechanics, pathomechanics, gait analysis, kinesiology, anatomy and physiology are crucial to the practitioner's ability to provide comprehensive patient care and a positive clinical outcome. Patient assessment, treatment and education are part of the practitioner's responsibility and require collaborative communication skills.

In addition to performing orthotic and prosthetic procedures, the orthotists and prosthetists are involved in clinical decision-making and patient education. The scope of practice for orthotists and prosthetists includes, but is not limited to:

- Patient Assessment- Perform a comprehensive assessment of the patient to obtain an understanding of the patient's orthotic/prosthetic needs.
- Formulation of the treatment plan- Create a comprehensive orthotic/prosthetic treatment plan to meet the needs and goals of the patient.
- Implementation of the treatment plan- Perform the necessary procedures to deliver the appropriate orthotic/prosthetic services, which include fabrication of the devices required.
- Follow-up treatment plan- Provide continuing patient care and periodic evaluation to assure/maintain/document optimal fit and function of the orthosis/prosthesis.
- Practice management- Develop, implement and/or monitor policies and procedures regarding human resource management, physical environment management, business/financial management and organizational management.
- Promotion of competency and enhancement of professional practice- Participate in personal and professional development through continuing education, training, research and organizational affiliations.

Pre-Admission Disclosure for Academic Programs Leading to Licensure or Credentialing

Admission into programs leading to licensure and credentialing does not guarantee that students will obtain a license or credential. Licensure and credentialing requirements are set by agencies that are not controlled by or affiliated with the CSU and requirements can change at any time. For example, licensure or credentialing requirements can include evidence of the right to work in the United States (e.g., social security number or tax payer identification number) or successfully passing a criminal background check. Students are responsible for determining whether they can meet licensure or credentialing requirements. The CSU will not refund tuition, fees, or any associated costs, to students who determine subsequent to admission that they cannot meet licensure or credentialing requirements. Information concerning licensure and credentialing requirements are available from **Elisabeth Rollo: Los Alamitos - (310) 243-3300**

Admission Requirements

To be eligible for consideration as a candidate in this option, an applicant must meet the following minimum requirements:

1. A bachelor's degree, from an accredited college or university, preferably in an allied health or related major and a GPA of 3.0 or above in the last 60 semester or 90 quarter units of upper division coursework may apply.

2. Familiar with hand tools, light duty power equipment, and knowledge of materials used in Orthotics and Prosthetics; prior working or volunteer experience is an important selection criterion.
3. Successful completion of all orthotic and prosthetic option prerequisite courses with a grade of "B" or better. The prerequisites are listed in the requirements for the M.S. in Health Science, Orthotics and Prosthetics Option.
4. Has met the TOEFL requirement with a minimum score of 550 on the paper test or a minimum score of 80 on the Internet test.

Admission Procedures

Submit application directly to the National Commission for Orthotics and Prosthetics Common Application System:

1. M.S. in Health Science, Orthotics and Prosthetics Program Application is available at <http://portal.opcas.org>. (Common Application System) Applications to the program are accepted one time each year. Students planning to seek admission should submit both applications including all supporting materials no later than December 31 preceding a summer semester admission to the program;
2. a copy of official transcripts;
3. GRE Test scores;
4. a letter of intent;
5. three letters of recommendation must be submitted directly to the Common Application System.
6. A subsequent interview by a panel consisting of orthotics and prosthetics faculty.
7. Upon admittance to the program applicants must submit a complete graduate admission application to the University at calstate.edu/apply/. Please note: Application deadlines are subject to change without notice. Check with the O&P Program for the deadlines of the current

Program Requirements

Students must complete the program with an average GPA of at least 3.0. All other university requirements for the master's degree in this University Catalog must be met (see the Graduate Degrees and Post Baccalaureate Studies (<https://catalog.csudh.edu/general-information/graduate-degree-postbaccalaureate-studies/>) section of University Catalog). HEA 445 Material Science and Laboratory Skills (2) and HEA 455 Applied Anatomy (1) must be passed prior to Fall semester of year 1 to continue in the program sequence; if not passed, the student will have one additional chance to retake the course with a passing grade, and restart in Fall semester of the following year.

All graduate students are required to satisfy the Graduation Writing Assessment Requirement (GWAR) within the first 9 semester units of coursework in accordance with the established policies of the University as described in the Graduate and Postbaccalaureate section of the University Catalog. Upon completion of the second semester after admission, or 22 units of approved coursework, the student must complete the Graduation Advisement and Advancement to Candidacy Form.

To be Advanced to Candidacy, the student must have:

1. achieved Graduate Classified Standing;
2. maintained a grade point average of 3.0 or better in all graduate coursework to be used for the degree;
3. completed the Graduation Writing Assessment Requirement (GWAR);

4. completed the Graduation Advisement and Advancement to Candidacy Form in consultation with the graduate coordinator; and
5. applied and paid graduation fees.

Capstone Activities

Degree students must complete a series of comprehensive exams/activities. The Capstone Activities involve creative application of theory and practice with real life clients who require orthotic or prosthetic intervention. The comprehensive exams are given over a 4-week period. They involve patient interaction and treatment, laboratory practical, written simulation, oral defense, gait analysis and written exams. Failure to achieve a passing score, after the third attempt, will result in a dismissal from the program.

Incomplete Courses

Students will not be permitted to enroll in new courses if they have two or more incomplete courses on their record. All other university rules about incomplete courses also apply.

Location and Registration

The Orthotic and Prosthetic Option is conducted off site at a CSUDH annex in Los Alamitos, CA. An established clinical affiliation exists with the nearby Veterans Administration Health Care System in Long Beach, CA. All courses in the Option are offered at the CSUDH Center for Orthotics and Prosthetics at the Los Alamitos annex.

Prerequisites and Course Requirements

The Prerequisites and Course Requirements conform to the Standards and Guidelines for the Accreditation of Educational Programs in Orthotics and Prosthetics, published by the National Commission on Orthotic and Prosthetic Education (NCOPE):

College-level Prerequisites: (Semester Units)

- Biology/Life Sciences - lecture with lab - (4 units)
- Chemistry -lecture with lab - (4 units)
- Physics - lecture with lab -(4 units)
- Human Anatomy & Physiology -lecture with lab - (4 units)
- Introductory Psychology -lecture - (3 units)
- Psychology: (Either) Human Growth and Development or Abnormal Psychology (3 units)
- Statistics -lecture - (3 units)
- GRE- the GRE General Test scores provide a common measure for comparing the qualifications of applicants. Admission to the M.S. Option is not solely based on GPA and GRE scores; it also includes letters of recommendation, letter of intent, and the student's background and knowledge of the orthotic and prosthetic profession.

In addition, the following courses are recommended but not required:

- Ethics
- Business Administration

Degree Requirements

A. Upper Division Courses (3 units)

HEA 445 Material Science and Laboratory Skills (2)
HEA 455 Applied Anatomy (1)

B. Core Courses (18 units)

HSC 501 Advanced Research Methods in Health Science (1-3)
HEA 508 Clinical Pathology for Orthotics and Prosthetics (3)
HEA 516 Clinical Evaluation Tools in Orthotics and Prosthetics (2)

HEA 535 Practice Management for Orthotics and Prosthetics (1)
HEA 536 Psychological Aspects of Disability (1)
HEA 545 Normal Gait and Biomechanics of Movement (2)
HEA 547 Gait Analysis and Pathomechanics for O & P (1)
HEA 580 Applied Technologies in Orthotics and Prosthetics (1)
HSC 598 Directed Research (1)

C. Clinical Courses (29 units)

HEA 435 Orthotics Soft Goods Fitters Course (1)
HEA 540 Orthotic Management of the Upper Limb (3)
HEA 541 Orthotic Management of the Lower Limb I (4)
HEA 542 Orthotic Management of the Lower Limb II (5)
HEA 544 Orthotic Management of the Spine (4)
HEA 551 Prosthetic Management of the Upper Limb (3)
HEA 552 Prosthetic Management of the Lower Limb I (4)
HEA 554 Prosthetic Management of the Lower Limb II (5)

D. Clinical Rotation (9 units required, 2 units optional)

HEA 596 Clinical Practicum in Orthotics and Prosthetics (1-4)

E. Capstone Activities (5 units)

HEA 592 Subspecialties in Orthotics and Prosthetics (2)
HEA 593 Culminating Activity in Orthotics and Prosthetics (3)