# ORTHOPEDIC TECHNOLOGY (OT)

#### OT-110

### Orthopedic Anatomy and Physiology

5 UNITS

Prerequisite: Admission to the Orthopedic Technology Program. Corequisite: Concurrent enrollment in OT 111 and OT 112. 5.0 hours lecture

A study of the development of the muscular-skeletal systems with the emphasis on gross anatomy of the bones, arterial and venous perfusion, and relevant nervous innervation as they relate to the treatment of orthopedic injuries. (CSU)

#### OT-111

# Orthopedic Techniques I

4 UNITS

Prerequisite: Admission to the Orthopedic Technology Program Corequisite: Concurrent enrollment in OT 110 and OT 112.

1.0 hours lecture, 9.0 hours laboratory

An introduction to cast room protocols, including instrumentation, the techniques for the application of the basic types of casts and the special considerations required for treatment of orthopedic trauma cases. The course will include the application of orthopedic casts in the campus laboratory setting and clinical setting. (CSU)

#### OT-112

#### Introduction to Clinical Practicum

3 UNITS

Prerequisite: Admission to the Orthopedic Technology Program Corequisite: Concurrent enrollment in OT 110 and OT 111. 3.0 hours lecture

This course prepares the Orthopedic Technology student for the clinical setting with topics such as HIPAA, infection control, radiation safety, basic patient care, interpersonal communication, cultural diversity, ethics, professionalism in the healthcare environment, and expectations of the Orthopedic Technology student during clinical assignments in both the hospital and private practice setting. (CSU)

# OT-210

# Diagnosis and Treatment of Orthopedic Disorders I

**5 UNITS** 

Prerequisite: "C" grade or higher in OT 110.

Corequisite: OT 211 and 212.

4.5 hours lecture, 1.5 hours laboratory

This course provides advanced instruction in the diagnosis and treatment of orthopedic disorders. Students will be provided techniques for the treatment of orthopedic injuries. This course also offers a campus laboratory designed to teach students advanced application of orthopedic devices for patients with acute and chronic injuries. (CSU)

# OT-211

# **Orthopedic Techniques II**

4 UNITS

Prerequisite: "C" grade or higher in OT 111.

Corequisite: OT 210 and 212.

1.0 hours lecture, 9.0 hours laboratory

This course is a continuation of Orthopedic Technology 111 with emphasis on advanced cast room protocols, instrumentation, orthopedic casting techniques and the assessment and treatment of casting complications. Emphasis will be on the application of advanced assessment and diagnosis of orthopedic injuries through the analysis of x-rays. Application of special casts, pediatric casts, full-body casts and various traction configurations and techniques. (CSU)

#### OT-212

# Supervised Hospital Clinical Practicum I

3 UNITS

Prerequisite: "C" grade or higher in OT 112.

Corequisite: OT 210 and 211.

9.0 hours laboratory

This course is designed to provide clinical application of orthopedic technology in a hospital environment. Students participate in the normal day-to-day activities of an orthopedic service where they develop and refine their skills in the application of orthopedic casts, set up and application of traction devices and the pre and post operative care of the orthopedic patient. The student is required to demonstrate clinical orthopedic competencies as part of this course. (CSU)

#### OT-214

# Supervised Hospital Clinical Practicum II

4 UNITS

Prerequisite: "C" grade or higher in OT 212.

Corequisite: OT 215 12.0 hours laboratory

This course is a continuation of Orthopedic Technology 212, Supervised Clinical Practicum I, and is designed to teach the clinical application of orthopedic techniques in the clinical environment. Students will apply casts, assist in the reduction of fractures, apply and maintain traction configurations and devices, apply total body casts, and assist the orthopedic surgeon in minor and major surgical procedures. Students will also participate in pre-and post-operative patient teaching. (CSU)

#### OT-215

# Diagnosis and Treatment of Orthopedic Disorders II

3 UNITS

Prerequisite: A grade "C" or better in OT 210 and 211.

Corequisite: Concurrent enrollment in OT 214.

3.0 hours lecture

This course is a continuation of OT 211 with emphasis on advanced orthopedic conditions, disorders, and treatment of the spine, specialty casting and certification Board exam review and preparation. (CSU)

#### OT-22

#### **Work Experience Externship**

2 UNITS

Prerequisite: "C" grade or higher in OT 214 and OT 215 and approval of the OT faculty.

A work experience course in which a Grossmont College orthopedic student volunteers at a clinical site with which the Orthopedic Technology Program has established an affiliation agreement. The clinical site supports the objectives of the course and provides supervision through Orthopedic Technology mentors and preceptors. The student applies previously acquired orthopedic theory and clinical skills in the management of orthopedic patients. This course is offered on a Pass/No Pass basis only. (CSU) 120 volunteer or 150 paid work experience hours.