**CMGT 1190 Concrete and Framing Lab**

3 Credit 0 Lecture 9 Lab

**Instructor –**

**TEXT**: CONSTRUCTION MATERIALS, METHODS, and TECHNIQUES (4th EDITION) by Kultermann and Spence ISBN-13: 9781305086272

**Course Information**

This course introduces and trains students to the processes, techniques, and skills necessary to be gainfully employed in the building trades. This course will include units in safety, planning, hand tools, power equipment, framing, and estimating materials.

Students may take CMGT 281r or CMGT 1220 to meet the field experience requirement.

**Course Goals**

An instructional course that prepares individuals to layout, fabricate, erect, install, and repair wooden structures and fixtures; using hand and power tools. Includes instruction in common systems in carpentry, construction materials, hand & power tools, and blue print reading. A Project will be constructed by the students, in the lab portion of the class, and completed for occupancy by the end of the school year.

**Student Learning Outcomes (SLO)**

Students will be exposed to all the SLO’s below, but the central focus will be SLO #5:

1) Construction project management from pre-design through commissioning.

3) Recognition of the need for health and safety, accident prevention, and regulatory compliance

5) An understanding of materials, labor and methods of construction.

7) An ability to use and apply current technical concepts and practices in planning and scheduling.

8) An ability to design, implement, and evaluate construction cost management including plan reading, quantity take offs and estimating.

**Course Topics**

Planning and estimating

Safety Procedures

Site layout and preparation

Footings and foundations

Framing/floors/walls/roof

Dry wall/hang/tape

Roof shingles/venting/soffit/fascia