COURSE SYLLABUS

COURSE NUMBER: CIVE 528
COURSE TITLE: DESIGN OF LIGHT - FRAMED STRUCTURES

Course Designation
Technical elective for civil and construction engineering majors.

Course Description

Pre-Requisite
Credit in CIVE 321.

Lectures/Laboratory Schedule
Lecture – 3 sessions per week, 50 minutes per session

Textbooks and References
3. NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION, SUPPLEMENT AND COMMENTARY, NATIONAL FOREST PRODUCTS ASSOCIATION, WASHINGTON, D.C., 2012. (Required)
4. SPECIFICATION FOR THE DESIGN OF COLD – FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE, WASHINGTON, D.C., 2012. (Recommended)

Course Learning Outcomes
To provide the student with a thorough understanding of material properties, structural design and detailing for light – frames structures using wood and metal studs.

Topics Covered
- Introduction and Materials.
- Gravity Loads.
- Beam Design.
- Column Design.
- Combined Stresses.
- First exam.
- Lateral Loads.
- Horizontal Diaphragms.
- Shear Walls.
- Connections and Details.
- Final exam.

Grading
1. Homework assignments and quizzes 20%
3. Exams 50%
4. Final 30%