

Course name: BUILDING CONSTRUCTION (2)

Course code: ARCH 121

Course hours: Credit hours 3, Contact hours 4

Course Pre-requisites: ARCH 120

Course Description

This course introduces building elements construction, and structural frames, connecting the knowledge about materials properties, and functional requirements, to understand, justify and modify construction assemblies. Including staircase design, interior finishes, external envelop system, steel frames, concrete frames, flooring systems, and construction joints.

Course Main Objective

In this course, the students will be to:

- Introduce staircases terminology, standards, detailing and design.
- Improve students' understanding of structural materials and assemblies.
- Provide the students with the basic knowledge about finishing materials.
- Develop students' skills to design finishing details according to functional requirements and materials properties.
- Present building envelops requirements and alternatives.

Course Learning Outcomes

After the completion of this course, the students will be able to;

- Define basic building construction terminologies.
- Outline building structural and finishing materials properties.
- Modify building elements details to meet the requirements.
- Design external envelop system based on functional requirements.

Course evaluation

- Quizzes, practical assignments
- Weekly/biweekly reviews
- Midterm examination
- Attendance
- Final examination

Course recommended books

- Roy Chudley & Roger Greeno, (2014) Building construction handbook. 10th edition.
- Stephen Emmitt & Christopher Gorse, (2014) Barry's advanced construction of buildings. 3rd edition.
- Francis D. K. Ching, (2008) Building construction illustrated. 4th edition.
- Madan Mehta et al.(2009) Building construction principles, materials and systems.

Course References

- British standards.