ARCH 2330 BUILDING TECH III **DAY .15 AGENDA : Revit – Steel Structure - GYM, Atrium, Lab**

Introduction & Attendance

- **Agenda Overview**
- **Attendance**

Activity 1

- **Review of last classes work on concrete beams.**
  - **Discussion of Concrete Beam Sizing**
  - **Minimum width of beam for aggregate distribution and rebar coverage**
- **Discussion of brick coursing in elevation and section as a way to determine proper location of concrete slab as related to brick masonry cavity wall.**

Activity 2

- **In class tutorial for creation of steel structure**
  - **GYM : Wide Flange Columns and Steel Angle Double LL Trusses to span 100'**
  - **Atrium : HSS (High Strength Steel) Tubular Columns and tubular trusses**
  - **Laboratory : Wide Flange Steel Columns and Beams**

Activity 3

- **Discussion of Steel Wide Flange Beam Sizing and assignment to complete structural framing plan for second floor of the laboratory S-102**

Wrap-Up - Assignments and Deadlines

- **Current Assignment(s) & Due Dates –**
  - **S-102 Second Floor Framing Plan (1/8"=1'-0") due next class (Wednesday April 3)**
  - **Individual Case Studies Due next class (Wednesday April 3)**
    - **Case study to include an Atrium and a GYM requiring long span structures. Can be the same or two separate buildings.**
    - **Include location, date of construction, architect, engineer, client.**
    - **Identify Structural Systems, Mechanical Systems, Lighting & materials.**
  - **Identify the type of structural systems you plan on using for your own GYM & Atrium.**

- **Begin to prepare set of structural drawings for engineer handoff**
  - **S-100 Foundation Plan : GYM, ATRIUM, LAB (1/16"=1'-0")**
  - **S-101 First Floor Framing Plan : GYM, ATRIUM, LAB (1/16"=1'-0")**
  - **S-102 Second Floor Framing Plan : GYM, ATRIUM, LAB (1/16"=1'-0")**
  - **S-102.A Second Floor Framing Plan : ATRIUM (1/8"=1'-0")**
  - **S-102.G Second Floor Framing Plan : GYM (1/8"=1'-0")**
  - **S-102.L Second Floor Framing Plan : LAB (1/8"=1'-0")**
    (note: Add plan and section details)