OUTCOMES BASED LEARNING MATRIX

Course: WORKING DRAWINGS I ARCH-121 **Department: ARCHITECTURAL TECHNOLOGY**

Course Description: Free hand sketching of plans and elevations are introduced to explain orthographic projection and to provide the use of scale and proportion. Further lecture and labs provide the student symbols, conventions, and wall and building sections that are implemented in Working Drawings II. 3 credits

*COURSE OUTCOMES	OUTCOMES ACTIVITIES	ASSESSMENT TOOLS
1. The student shall be able to read plans, elevations and sections of all trades in a set of working drawings.	Listen to lecture with diagrams and presentation of samples of simple plans on small projects CT,TS,OC,QS,R,W	Professor evaluation of student CAD plan, sections, and elevations CT,TS,,O,C,QS,R,W
2. The student shall be able to determine horizon line and vanishing points for perspective drawing	Listen to lecture and apply to class labs CT,OC,QS,W,R	Professor evaluation of sketches on Boston field trip and campus perspectives OC,CT,OS,W
3. The student shall be able to sketch in one and two point perspective	- Listen to lecture on 'isometric, cabinet, and perspective drawings - Sketch two interior and two exterior perspectives on campus during labs W, CT,OC,QS,R	Professor evaluation of sketches W, CT,OC,QS
4. The student shall be able to project elevations and sections from plans	- Listen to lecture on 'orthographic projection', - Sketch solutions as indicated in text manual W,TS,OC,CT,TS,R	Professor evaluation of exercises on orthographic projection in text manual W,TS,OC,CT,TS,R
5. The student shall be able to select and use appropriate scale and material conventions for a drawing.	Listen to lecture on the use of architects and engineers scales and architectural conventions as they apply to a drawing OC.TS,R	- Professor evaluation of solutions as indicated in text manual - Professor evaluation of drawings as implemented with conventions and designations R,W, OC,QS,R
6. The student shall be able to develop skill in organization of elements in a drawing, select scale, appropriate type of drawing, and sequence of drawing production	Listen to lecture with samples of drawings in reference to the order of placement of drawings in a set to include consulting engineering OC,TS,R,W	Professor evaluation of student's individual work when assembled as a set of drawings OC, ,R,W,R

7. The student shall be able to sketch existing areas in plan, elevation, and section in scale	Listen to lecture on the use of degrees of pencils for sketching and proportion OC.W,R	Sketch selected areas that indicate 'scale' R,W,CT,OC,QS
8. The student shall be able to set up computer for 'architectural units'	Listen to lecture on use of Wizard for settings for 'units' OC,CT,TS,R	Professor evaluation of drawing for content using an 'architectural' units set CT,OC,TS,QS
9. The student shall be able to set up a computer with 'Architectural Desktop'	Listen to lecture on library in Architectural Desktop for fixtures and appliances to use on drawings CT,OC,TS,R	Professor evaluation of drawing for content and use of symbols CT,OC,R
10. The student shall be able to field measure existing and provide plans and elevations of same	- Listen to lecture on dimensions that are required to provide a complete drawing - Revise and correct data from drawings that have been marked up by the professor Generate CAD drawings from collected data R,W, CT, TS, OC,QS	Professor evaluation of CAD plan(s), elevations, and sections R,W, CT,TS,OC,QS

*Try to express an outcome as an infinitive phrase that concludes this sentence: **At the end of the course, the students should be able to . . ..** Finding the line between too general and too specific can be difficult. In an English Composition course, for instance, it is probably too general to say, "The student should be able to write effective essays." It is probably too specific to say, "The student should be able to write an introductory paragraph of at least 50 words, containing an attention-getting device, an announcement of the narrowed topic, and an explicit thesis sentence." Just right might read, "The student will write introductions that gather attention and focus the essay."

**Indicate the Core Competencies that apply to the outcomes activities and assessment tools: Critical Thinking (CT); technology skills (TS); oral communications (OC); quantitative skills (QS); reading (R); writing (w).