Long Range Plan 2011-2012

Con 1910 – Con Project A: Dollhouse Planning

Objective:

identify the connection between this project course and two or more CTS courses
1.1 identify the outcome(s) from each identified CTS course that support the project.

1.2 explain how these outcomes are being connected to the project.

There are three construction courses that fit under this objective. They are listed below with a description of what is required for each module.

Con2200: Product Development

Description: Students work, individually or as team members, to research, design and build a product suitable for mass production and marketing

Students will

- **list and describe the steps involved in developing a product for manufacturing**
    - describe the life cycle of a typical product from the time of introduction to its decline
    - identify reasons for a product being successful; e.g., physical and emotional need, marketing practice, pricing, reputation
    - explain how new product ideas are generated
    - outline how ideas are developed into new products
    - identify the major steps involved in engineering a new product

- **apply designing and planning skills to assist in the development of a prototype**
    - select or design a product for manufacturing
    - create the necessary detail, assembly and schematic drawings
    - identify the appropriate materials
    - create a prototype product
    - test the product
    - analyze the design related to: function, aesthetic appeal, reliability, manufacturability, profitability, create a market survey

- **describe the marketing and manufacturing potential of a product**
    - state the importance of product testing and market surveys

Con 1160: Manufactured Materials

Description: Students select and use the appropriate materials and tools to build a product or structure from a wood composite or another manufactured material.

- **identify and describe the characteristics of common manufactured materials**
    - identify the various types of manufactured materials; e.g., plywood, hardboard, particle board
    - describe how a common manufactured material is made
    - explain the advantages of using manufactured materials

- **demonstrate the safe use of a given hand and power tool**
  use the appropriate tools, materials and processes to:
    - measure and lay out the components
    - cut to size and surface all edges
    - edge bond all exposed surfaces, as required
    - assemble and clamp
    - attach the appropriate hardware
    - prepare for finishing
    - apply a suitable finish

- **create a product from a manufactured material, using basic joinery techniques**
    - describe typical methods of constructing a product from a manufactured material; e.g., types of joints, fastening systems, edge treatments
    - identify the factors that determine the quality of a wood joint
- select or modify a plan for a project that incorporates basic joinery and edge treatment techniques
- create a bill of materials, cutting list and event sequence
- identify and describe common methods used to finish plywood and other wood substitutes
- conduct a visual inspection of components to see that the joints are tight fitting, surfaces are free of marks and edges are covered and finished appropriately

Con 2060: Doors, Windows, and Siding

Description: Students apply and develop basic knowledge of door, window and siding systems and of installation skills and procedures.

- **identify and describe common types of exterior doors, windows and siding material**
    - list and describe common types of exterior doors and windows
    - identify methods of sizing windows and exterior doors
    - describe the procedures used to install an exterior door and a window
    - list and describe the components used in conjunction with the installation of vinyl and aluminum siding
    - describe the purpose and use of building papers and other housewrap materials

- **read and interpret the appropriate drawings and specifications to create a door and window schedule and siding estimate**
    - use elevation drawings and specifications to develop a door and window schedule
    - use an elevation drawing to identify the types of siding and cornice materials and estimated amounts

- **apply finishing skills to install a pre-hung door, a window unit and siding materials** use the appropriate tools and processes to:
    - level, plumb, seal and fasten a prefabricated door and a window unit
    - install exterior finishes
    - observe proper handling and lifting procedures
    - use appropriate eye and ear protection

As part of your construction project you will complete the following tasks as you progress through the building process.

Students will identify and propose the project by:

- preparing a plan
- clarifying the purposes
- defining the deliverables
- specifying time lines
- explaining terminology, tools and processes
- defining resources; e.g., materials, costs, staffing
- identify and comply with all related health and safety standards
- define assessment standards (indicators for success)
- present the proposal and obtain necessary approvals

Students will then meet goals as defined within their plan:

- complete the project as outlined
- monitor the project and make necessary adjustments
- present the project indicating the:
    - outcomes attained
    - relationship of outcomes to goals originally set
- evaluate the project indicating the:
    - processes and strategies used
    - recommendations on how the project could have been improved

Once you have come up with your plan for your dollhouse, you will begin working on construction and you will work on creating a venture plan.

Students will recognize and assess venture opportunities in their environment

- compile a list of opportunities; e.g., needs, wants, problems
- describe and apply a decision-making model for potential entrepreneurial opportunities
- demonstrate skills in problem solving and decision making

Students will generate ideas for possible venture opportunities in their environment

- demonstrate skills in generating ideas, alternatives and strategies
- outline conditions needed to promote idea generation and change initiation
- explain "failure of a business venture" as an opportunity to learn
- show sensitivity and respect for the perspectives, needs, wants and priorities of others
- demonstrate characteristics of creative thinking

Students will plan a venture

-identify various means of entering business including:
- start a new business
- purchase a business
- purchase a franchise
- multilevel marketing

-analyze common forms of business ownership including:
- sole proprietorship
- partnership
- corporation
-franchise
- cooperative
- conglomerate
- multinational
- crown corporation

- identify non-profit ventures; e.g., community organizations

- describe briefly the process of creating a venture plan including:
-rationale
-goals/objectives
-research
-resources
-market analysis
-risk assessment
-financial analysis
-success strategy

-describe the important components of a venture plan including:
-description/objectives
-market research and analysis
-marketing plan
-production/service plan
-financial plan
-human resources/organizational plan

-describe regulations and social responsibilities that limit venture alternatives
e.g., legal, social, ethical, environmental, cultural, political, economic

Timelines: The course is student directed, as such there are few designated timelines except that the project must be done by the end of the semester. Students will have their plans and materials lists on paper and be ready to start assembling their plan by September 20th.

Evaluation: Student evaluation is based on two major components.

- The planning component consists of 35% of the course mark. This includes the construction planning and the venture plan. Worksheets will fit within this component.
- The construction component provides students the ability to show what they know. It is worth 65% of the course.
- There is no final exam as the course is project based.