1. Course Number and Name:

BUAD 3020 Principles of Manufacturing and Service Systems

2. Credits and Contact hours:

Credits: 3 hours, Contact: 3 lecture hours

3. Instructor's or course coordinator's name:

Hao-Wei Chen

4. Text book, title, author, and year:

None

a. Other supplemental materials:

5. Specific Course Information:

a. Brief description of the content of the course (catalog description):

Understanding how the operations and supply chain management processes work and the recent issues and development in supply chain management in practice.

b. Pre-requisites, or co-requisites:

BUAD 1020 or BUAD 2060

6. Specific goals for the course:

a. Specific outcomes of instruction:

- 1. Understand the process of extracting raw materials from the environment through production, consumption, recycling/reuse and the return of waste materials to the environment.
- 2. Understand the production and processes that enable smooth transfer of products across the supply chain up to the customer.
- 3. Understand basic processes that enable organization to match supply of products with demand for products.

b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course:

None

7. Brief list of topics to be covered:

- 1. Operations and supply chain management.
- 2. Strategy and sustainability.
- 3. Manufacturing Processes.
- 4. Service Processes.
- 5. Sales and Operations Planning.
- 6. Material Requirements Planning.
- 7. Inventory management.
- 8. Quality management and Six Sigma.
- 9. Global Sourcing and Procurement.