

## Operations Management

|                          |                                      |  |                     |                  |                   |                   |
|--------------------------|--------------------------------------|--|---------------------|------------------|-------------------|-------------------|
| Course Name              | Course type (credit/hours)           | 전필 (3/3)   |                     |                  | Course code       | 1098              |
|                          | Target students Division/major/grade | Business Admin./2nd year students                  |                     |                  | Openning semester | 2017 1ST SEMESTER |
|                          | Class time and classroom             | Mon D(JH503) Thu D(JH503)                          |                     |                  | English Grade     | A(100%English)    |
| Reference to this course | Prerequisite courses                 | Quantitative Business Analysis, Business Statistic |                     |                  |                   |                   |
|                          | Related basic courses                | Quantitative Business Analysis, Business Statistic |                     |                  |                   |                   |
|                          | Recommanded concurrent courses       |  |                     |                  |                   |                   |
|                          | Related advanced courses             |  |                     |                  |                   |                   |
| Instructor               | Name (title/division)                |  | 성민제 (교수/경영대학 경영학과)  |                  |                   |                   |
|                          | Office Room Number                   | 다526   | Office phone Number | 2912             | e-mail            |                   |
|                          | Office hours                         |  |                     | Homepage address |                   |                   |
| Teaching Assistant       | Name (title/division)                |  |                     |                  |                   |                   |
|                          | Office Room Number                   |  | Office phone Number |                  | e-mail            |                   |

### 1. Introduction

Business processes transform inputs into outputs, either physical goods or services, to satisfy customer needs. This transformation involves a flow of materials and information through a network of various activities including storage buffers. This course covers tools and methods to manage the business processes, which include both long-term strategic planning and short-term adaptive control. Specifically, we will discuss (1) basic concepts of business processes and management strategy, (2) key process measures and their relationships, (3) the effect of uncertainty in flows on the process performance, and (4) synchronization of flows of materials and information.

### 2. Course Objectives

K2 : 인사, 재무, 생산, 마케팅, 회계 등 경영학 전공 지식에 대한 이해와 활용 능력 배양  
 01 : 팀의 일원으로 임무를 수행하는 참여 능력 배양  
 03 : 효과적인 의사전달 능력 배양

### 3. Class types and activities

Class Format: Basically, the class instructional format will be a dialogue between the students and the instructor. It is important to note that strong class participation is founded on adequate preparation. You will be expected to have thoroughly reviewed the material on every class subjects prior to its discussion in class. When you are prepared, the class discussion is greatly enhanced and everyone including me learns far more than otherwise.

### 4. Teaching Method

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> lecture                          | <input checked="" type="checkbox"/> discussion and debate   |
| <input type="checkbox"/> team project(presentation and case studies) | <input type="checkbox"/> experiments(role-playing,etc)      |
| <input type="checkbox"/> designing and production                    | <input type="checkbox"/> on-site learning(on-site training) |
| <input type="checkbox"/> others                                      |   |

### 5. Support Systems in Use

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> e-class              | <input type="checkbox"/> automatic recording system                                   | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture                   | <input type="checkbox"/> blended learning(combination of online and offline teaching) |   |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others   |   |

### 6. Teaching Tools

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> PBL(Problem Based Learning) | <input type="checkbox"/> CBL(Case Based Learning) |
| <input type="checkbox"/> TBL(Team Based Learning)               | <input type="checkbox"/> others                   |

### 7. Knowledge and ability required for taking this course

Lecture Notes/Courseware: The outline of lecture notes (mostly in Powerpoint files) and Excel data files necessary for the analyses of examples and cases will be available on e-class web.

## 8. Method of Evaluation

| Evaluation Item | The Number of Times | Evaluation Proportion | Remarks                                    |
|-----------------|---------------------|-----------------------|--|
| Attendance      |                     |                       | 1 penalty point for each unexcused absence |
| midterm exam    |                     | 45%                   |  |
| final exam      |                     | 45%                   |  |
| quiz            |                     | 10%                   |  |
| presentation    |                     |                       |  |
| discussion      |                     |                       |  |
| homework        |                     |                       |  |
| etc             |                     |                       |  |
| study hours     |                     |                       |  |

## 9. Textbook and supplementary material

| Main/Sub | Title (Web-site)                                  | Writer                               | Publisher     | Publication year |
|----------|---|--------------------------------------|---------------|------------------|
| Main     | Managing Business Process Flows (MBPF)<br>3rd ed. | Ravi, A., S.<br>Chopra, S. D.<br>Des | printice Hall | 2012             |

## 10. Class system and Class shedule

Basically, the class instructional format will be a dialogue between the students and the instructor. It is important to note that strong class participation is founded on adequate preparation. You will be expected to have thoroughly reviewed the material on every class subjects prior to its discussion in class. When you are prepared, the class discussion is greatly enhanced and everyone including me learns far more than otherwise.

### < Class Schedule >

\* language : K-korean, E-English

| Weeks | Topics   | lang<br>uage | Instructor | Teaching<br>Method | Evaluation<br>Method | Matter to<br>be<br>prepared |
|-------|--|--------------|------------|--------------------|----------------------|-----------------------------|
| 1     | Processes and Strategy<br>:Introduction  |              | 성민제        | Lecture            |                      |                             |
| 2     | Products and Processes<br>Process Flow Measures  |              | 성민제        | Lecture            |                      |                             |
| 3     | Process Flow Measures<br>Three Key Operational Measures<br>Little's Law and Applications<br>Analyzing Income Statement |              | 성민제        | Lecture            |                      |                             |

## < Class Schedule >

\* language : K-korean, E-English

| Weeks | Topics  | language | Instructor | Teaching Method | Evaluation Method | Matter to be prepared |
|-------|---|----------|------------|-----------------|-------------------|-----------------------|
| 4     | Flow Time Analysis<br>Critical Path Method<br>Application: Kristen's Cookie Co                                    |          | 성민제        | Lecture         |                   |                       |
| 5     | Uncertain Activity Times  |          | 성민제        | Lecture         |                   |                       |
| 6     | Flow Rate Analysis<br>Capacity Measurements<br>Product Mix Decisions<br>Linear Programming<br>LP in a Spreadsheet |          | 성민제        | Lecture         |                   |                       |
| 7     | Midterm Test  |          | 성민제        | Test            |                   |                       |
| 8     | Inventory Analysis<br>Inventory Basics, EOQ<br>Price Discounts: Forward Buying                                    |          | 성민제        | Lecture         |                   |                       |
| 9     | Safety Inventory<br>Safety Stock & Service Level<br>Effect of Centralization<br>Supply Chain Coordination         |          | 성민제        | Lecture         |                   |                       |
| 10    | Safety Capacity<br>Capacity Analysis  |          | 성민제        | Lecture         |                   |                       |
| 11    | Queuing Models<br>Variance Propagation  |          | 성민제        | Lecture         |                   |                       |
| 12    | Queuing Models<br>Variance Propagation  |          | 성민제        | Lecture         |                   |                       |
| 13    | Queuing Models<br>Variance Propagation  |          | 성민제        | Lecture         |                   |                       |
| 14    | Process Integration<br>Synchronization & Improvement  |          | 성민제        | Lecture         |                   |                       |
| 15    | Business Ethics In Operations   |          | 성민제        | Lecture         |                   |                       |
| 16    | Final Exam  |          | 성민제        | Test            |                   |                       |

## 11. Other items of notification