University of Cincinnati

I. Course Information:

Title: Operations Planning & Scheduling
Course #: 22-OM4076-001
Credit Hours: 3
Class Schedule: Tu/Th 11:00 AM – 12:20 PM, Lindner 109
Term: Spring 2018
Prerequisites: OM3080 or OM380 or OM385 with min grade of D-.

II. Instructor Information:

Name: Dr. Denise White
Title: Assistant Professor – Educator in OBAIS
Office Information: LCB, Room 516
Office: (513)556-2228
Email: whited5@ucmail.uc.edu
Office Hours: Wednesdays 9:30 – 10:30 AM EST and by request
Communication Policy: Students are encouraged to contact me anytime via email or phone. A response will be given within 36-48 hours except on weekends.

III. Link to Pace:

This course aligns with PACE, the Lindner College of Business platform for developing the total business professional.

P – Professionalism

- Enhance oral & written communication, express ideas clearly, logically and persuasively.
- Develop and practice teamwork skills through group projects and exercises.
- Practice professional habits of punctuality, preparation, respect and participation.

A – Academics

- Develop foundational knowledge of core business functions and their interactions within firms.
- Begin applying functional and cross-functional knowledge to critically analyze business problems; for example applying techniques for business plan development.

C – Character

- Learn and apply leadership techniques for project management (plan, brief, execute, debrief).
- Build an understanding and initial skills of managing diversity, including understanding cultural differences, and challenges and opportunities of global business.
• Understand importance of ethics and social responsibility in business and personal settings.

E – Engagement

• Build understanding of importance and practices of networking through interactions with business professionals and guest speakers.
• Develop awareness and appreciation of involvement in social organizations, community service, and professional group opportunities.

IV. Course Materials

Required

• Online computer game: Littlefield by Responsive Technologies, Inc. Details to be provided in week 1.

V. Course Description:

This course introduces students to planning and control as practiced in state-of-the-art firms. The principles of inventory and capacity management are covered. Specific topics include product prioritization based on bottleneck (capacity-constrained) resources and profitability, inventory modeling, resource planning, just-in-time/lean systems, factory dynamics and benchmarking models, the impact of variability on performance and applications of operations planning.

VI. Student Learning Outcomes:

Upon successful completion of this course, the learner will be able to:

• Understand problems & practices in Operations Planning
• Apply critical thinking using quantitative problem solving techniques
• Effectively communicate operations thoughts and concepts (project presentation, class discussions)
• Integrate operations planning and scheduling concepts into operational applications (homework, in-class applications, online games)

VII. Instructional Methods (Including Description about Bb):

The following course utilizes the Blackboard (Bb) Learning Management System to provide student-centered online learning that will enhance the teaching and learning process. Through a variety of instructional methods (e.g. discussion boards, video lectures, readings, online assessments, etc.) the learner will become immersed and engaged in the learning process. If you are not familiar with these tools, please visit https://kb.uc.edu/karticles/blackboard-landing.aspx.

VIII. Course Communication:
University policy requires that the email set up in Blackboard is the primary means of communication. It is advisable that you use your UC email for this purpose and that you check it often. If you choose to change your email in Blackboard to a non-UC email it is your responsibility to ensure you check it frequently. Please see the attached Student Email Policy for more information:
http://www.uc.edu/content/dam/uc/infosec/docs/general/Policy.StudentEmail.pdf.

IX. Course and Grading Policies:

1. **Course Structure:** Changes to the syllabus, due dates, course requirements or grading requirements will be made as far in advance as possible. Due dates will be clearly marked in Blackboard. All assignments will be submitted via Blackboard using a Word document, PDF document or an Excel document unless otherwise noted.

2. **Academic Integrity:** As with all Lindner College of Business efforts, in this course you will be held to the highest ethical standards, critical to building character. Ensuring your integrity is vital and ultimately is your responsibility. To help ensure the alignments of incentives, the Lindner College of Business has implemented a “Two Strikes Policy” regarding Academic Integrity that supplements the UC Student Code of Conduct (see: http://www.uc.edu/conduct/Code_of_Conduct.html)
   - All academic programs at the Lindner College of Business use this “Two Strikes Policy”; Any student who has been found responsible for two cases of academic misconduct may be dismissed from the College.
   - All cases of academic misconduct (e.g., copying other students assignments, failure to adequately cite or reference, cheating, plagiarism, falsification, etc.) will be formally reported by faculty; and
   - Students will be afforded due process for allegations as outlined in the policy.

3. **Disability:** Students with disabilities who need academic accommodations or other specialized services while attending the University of Cincinnati will receive reasonable accommodations to meet their individual needs as well as advocacy assistance on disability-related issues. Students requiring special accommodation must register with the Disability Services Office. http://www.uc.edu/aess/disability.html

4. **Counseling Services, Clifton Campus:** Students have access to counseling and mental health care through the University Health Services (UHS), which can provide both psychotherapy and psychiatric services. In addition, Counseling and Psychological Services (CAPS) can provide professional counseling upon request; students may receive five free counseling sessions through CAPS without insurance. Students are encouraged to seek assistance for anxiety, depression, trauma/assault, adjustment to college life, interpersonal/reational difficulty, sexuality, family conflict, grief and loss, disordered eating and body image, alcohol and substance abuse, anger management, identity development and issues related to diversity, concerns associated with sexual orientation and spirituality concerns, as well as any other issue of concerns. After hours, students may call UHS at 513-556-2564 or CAPS Cares at 513-556-0648. For urgent physician consultation after-hours students may call 513-584-7777.
5. **Title IX**: Title IX is a federal civil rights law that prohibits discrimination on the basis of your actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also covers sexual violence, dating or domestic violence, and stalking. If you disclose a Title IX issue to me, I am required to forward that information to the Title IX Office. They will follow up with you about how the University can take steps to address the impact on you and the community and make you aware of your rights and resources. Their priority is to make sure you are safe and successful here. You are not required to talk with the Title IX Office. If you would like to make a report of sex or gender-based discrimination, harassment or violence, or if you would like to know more about your rights and resources on campus, you can consult the website www.uc.edu/titleix or contact the office at 556-3349.

6. **Missed and/or late examinations, quizzes, and graded exercises:**
   No assignments, quizzes, exams or presentations will be accepted after the stated due date.

7. **LCB Weather Related Protocol**:
   When inclement weather threatens the safety of the University of Cincinnati community, the Senior Vice President for Administration and Finance may invoke University Rule 3361: 10-55-01 and declare an emergency closing.

   The Lindner College of Business will observe the university emergency closing protocol for all on-campus classes. During a university emergency closing, all college offices will be closed.

   Students should clarify with their course instructors how the closure will affect assignments and deadlines, and whether class information from the missed session(s) will be posted on Blackboard, and/or if the class will meet virtually during the closure.

   **In the event of inclement weather and the university is closed, the closure will not affect online courses. All course assignments and activities will remain as scheduled in the course syllabus.**

8. **Criteria for letter grades**:
   Your course grades will be based on your performance on the following:

   **Point Allocation**:
   - 5% Class Participation and Attendance
   - 5% Quizzes
   - 30% Homework Assignments (best 4 of 5)
   - 60% Assessments (weighted average from Exams, Littlefield, Course Project)

   **Grading Scale**
   - 93 – 100% A
   - 80 – 83% B-
   - 67 – 69% D+
Description of Major Assignments
(NOTE: All assignments are due before the start of class on the date specified. No exceptions!)

- **Class Participation:** (5%)
  - For class participation credit, you will be required to participate in class, by attending class, asking clarification questions when appropriate, answering questions posed in class, actively contributing to your learning and that of others in class. You may be asked to present / discuss lecture materials in class, critique material from a previous class, etc. Participation during team presentations will count for a higher percentage of this grade since the content is not readily available for students to absorb.

- **Homework Assignments:** (30%)
  - Homework assignments 1-5 may be done in groups of at most two students. If you choose to work with a partner, one person will submit the assignment and the other should submit a file that states some like, “I worked with ________________ on this assignment and he/she submitted our final document.” Both students should not submit the assignment. Students who collaborate with more than 1 other person on the assignments will receive a zero on the assignment and will be treated as an incidence of academic integrity. The point of the assignments is to learn the material and is not intended to be a large group effort. (NOTE: Assignments should not be shared among several students with only a few words changed for the submission. This is cheating because you are submitting someone else’s work as your own.)

- **Quizzes** (5%)
  - There will be weekly open-book, open-note quizzes that are very short and will be administered via Blackboard. These quizzes are intended to reinforce the concepts taught in class that week. Students are permitted to work with others to complete the quizzes which will be administered at the end of class on Thursdays. The quizzes can only be taken in-class and make-ups will not be permitted. The 3 lowest quiz scores will be dropped so if you miss a class or do not do well on a few quizzes, this should not impact your final quiz grade.

- **Assessments:** (60%)
  - Two in-class exams will be given during the semester. The exams will assess the student’s individual understanding of the concepts learned during the course. Five pages of notes on (8.5 x 11 inch paper) can be used for the exams and should be submitted with the exam for verification. They will be returned to students once the exams are graded.
  - There will be two team-based assignments during the semester. The Littlefield Game and a Course Project Presentation. These will be completed in groups of approximately 4 students. The Littlefield Game
will have 2 parts that will be assessed toward a final score for the deliverable.

- The final grade for this component will be assessed by taking 30% each for the top 3 grades and 10% for the 4th grade. (Example, a student who receives a 95 on Exam 1, 80 on Exam 2, 92 on the Littlefield Project and 98 on the Course Project Presentation would get 95*.30 + 80*.10 + 92*.30 + 98*.30 = 93.5 for this grade.

X. Course Schedule:

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic(s):</th>
<th>Readings, Lectures, &amp; Other Materials</th>
<th>Assignments &amp; Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) 1/9</td>
<td>Factory Physics P, Q Problem</td>
<td>Skim Chapter 0</td>
<td></td>
</tr>
<tr>
<td>2) 1/11</td>
<td>P,Q Problem History of Operations</td>
<td>Chapter 1</td>
<td></td>
</tr>
<tr>
<td>3) 1/16</td>
<td>Human Element</td>
<td>Chapter 11</td>
<td></td>
</tr>
<tr>
<td>4) 1/18</td>
<td>Deterministic Inventory Models</td>
<td>Chapter 2</td>
<td>Littlefield Game 1 1/18 – 1/25</td>
</tr>
<tr>
<td>5) 1/23</td>
<td>Deterministic Inventory Models</td>
<td></td>
<td>Assigned: Homework 1</td>
</tr>
<tr>
<td>6) 1/25</td>
<td>Stochastic Inventory Models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) 1/30</td>
<td>Stochastic Inventory Models</td>
<td>Due: Homework 1</td>
<td>Due: Littlefield 1 Report</td>
</tr>
<tr>
<td>8) 2/1</td>
<td>MRP</td>
<td>Chapter 3</td>
<td></td>
</tr>
<tr>
<td>9) 2/6</td>
<td>MRP/ERP</td>
<td>Assigned: Homework 2</td>
<td></td>
</tr>
<tr>
<td>10) 2/8</td>
<td>ERP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11) 2/13</td>
<td>SAP Lab</td>
<td>Due: Homework 2</td>
<td></td>
</tr>
<tr>
<td>12) 2/15</td>
<td>JIT/Lean/TPS</td>
<td>Chapter 4</td>
<td></td>
</tr>
<tr>
<td>13) 2/20</td>
<td>JIT/Lean/TPS</td>
<td>Assigned: Homework 3</td>
<td></td>
</tr>
<tr>
<td>14) 2/22</td>
<td>Exam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15) 2/27</td>
<td>Basic Factory Dynamics</td>
<td>Chapter 7</td>
<td></td>
</tr>
<tr>
<td>16) 3/1</td>
<td>Basic Factory Dynamics</td>
<td>Assigned: Homework 4</td>
<td>Due: Homework 3</td>
</tr>
<tr>
<td>17) 3/6</td>
<td>Basic Factory Dynamics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18) 3/8</td>
<td>Variability</td>
<td>Chapter 8</td>
<td></td>
</tr>
<tr>
<td>19) 3/13</td>
<td>NO CLASS SPRING BREAK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20) 3/15</td>
<td>NO CLASS SPRING BREAK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21) 3/20</td>
<td>Variability</td>
<td>Due: Homework 4</td>
<td></td>
</tr>
<tr>
<td>22) 3/21</td>
<td>Variability</td>
<td>Assigned: Homework 5</td>
<td></td>
</tr>
<tr>
<td>23) 3/27</td>
<td>Variability Push/Pull</td>
<td>Chapter 10</td>
<td></td>
</tr>
<tr>
<td>24) 3/29</td>
<td>Push/Pull Team Project Presentations (2)</td>
<td>Due: Homework 5</td>
<td></td>
</tr>
<tr>
<td>25) 4/3</td>
<td>Team Project Presentations (4)</td>
<td>Littlefield Game 4/3 – 4/10</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/5</td>
<td>Team Project Presentations (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/10</td>
<td>Team Project Presentations (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/12</td>
<td>Team Project Presentations (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/17</td>
<td>Littlefield Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exam Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due:</td>
<td>Littlefield 2 Reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/19</td>
<td>Exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>