Course: BA3630.4 Manufacturing Cluster Fall 2013
Faculty: Dr. Andrea Prud’homme, CSCP, CPIM, CIRM
Office and contact information: Fisher Hall 614 prudhomme.3@osu.edu 614.292.3173
Office Hours: Wednesday 2-4pm or by appointment, I can often meet with ‘drop-ins, so please stop by!
Class meets: Wednesday 5:30-7:30, Mason Hall 405

This course is the first in a 2-course sequence comprising the requirements for the Manufacturing Cluster, and when combined with other course work provides students with an in-depth exposure to manufacturing business practices. Successful completion of the first course is a prerequisite for inclusion in the spring course, which will continue exposure to relevant manufacturing issues and will also include work on projects within our sponsor company organizations. Each course will utilize Fisher College of Business Faculty and industry professionals from contributing sponsors which will include Alcoa, GE Aviation and Honda.

It is strongly encouraged that students complete the Introduction to Operations Management course (BusMgt3230) and the Introduction to Logistics Management course (BusML3380) before or during the fall semester of the manufacturing industry cluster sequence. Taking other relevant manufacturing courses (BusMgt4250 Six Sigma Principles; BusMgt 4232 Operations Planning and Control, BusMgt4239 Managing Process Improvements, BusML 4383 Supply Chain Management) as soon as possible will provide additional context for the Industry Cluster course.

PROFESSIONAL DEVELOPMENT BEYOND THE CLASSROOM:
Students are also encouraged to become student members of a related professional organization, many of which offer reduced membership rates. Suggested professional organizations include:

- APICS: The Association for Operations Management at http://www.apics.org/
- Association of Manufacturing Excellence (AME) at http://www.ame.org/
- National Association of Manufacturers (NAM) at http://www.nam.org/
- Institute for Supply Management (ISM) at http://www.ism.ws/
- Council of Supply Chain Management Professionals (CSCMP) at http://cscmp.org/
- Society of Manufacturing Engineers (SME) at http://www.sme.org/

In addition to professional organizations, there are several relevant student organizations:

In Fisher College of Business:
- Buckeye Operations Management Society (BOMS) at https://groups.cob.ohio-state.edu/boms/
- The Logistics Association (TLA) at http://www.osutla.com/
- Purchasing and Supply Management Association (PSMA) at http://psma.org.ohio-state.edu/

In the College of Engineering:
- American Society for Quality (ASQ) http://asq.org.ohio-state.edu/
- Institute for Operations Research & the Management Sciences (INFORMS) http://informs-sc.osu.edu/

KEY LEARNING OBJECTIVES OF THE MANUFACTURING CLUSTER:
- a. Demeanor and bearing
- b. Enhance team work skills
- c. Improve verbal and written communication abilities
- d. Begin acquiring and building a professional network

COURSE OVERVIEW:
The objective of the first course in the manufacturing cluster sequence is to familiarize students with the business environment in which manufacturing operates in the U.S and globally. The course is structured with input from corporate executives from manufacturing firms who will be leading classroom discussions of current topics central to manufacturing and supply chain management. Students will acquire awareness of, and an appreciation for, the diversity and complexity of business operations in manufacturing firms, notwithstanding the effects of the latest recession and the seemingly slow recovery. Specifically, the successful completion of this course should enable students to understand and analyze problems which challenge successful operations of manufacturing companies, recognizing that the challenges facing these companies may be macro and micro in nature.

While the emphasis of the course is an overview of topics not covered in depth in other courses available in Fisher’s operations or logistics specializations, students are also expected to acquaint themselves with the
special terms, concepts, and systems encountered in a manufacturing environment to ‘speak the language’ in a professional way. Through work with the sponsoring company partners (projects occur in the spring), students are expected to identify and consider approaches to situational contingencies they will face in their careers. Because executives will be visiting us, student interactions with company guests are expected to be exemplars of the professionalism looked for in every Fisher student.

This course is a mixture of lecture, case studies, readings, individual and team exercises, in-class group discussion, a research paper and an examination. Understanding of the key issues within manufacturing will be gained primarily through readings and presentations by faculty and industry guests. Additionally, since this course assumes that skills gained in the classroom can be applied by the student to “the real world,” there is a strong emphasis on the analysis of manufacturing and supply chain system problems through the preparation and discussion of a variety of case studies and other assignments. Students must be fully prepared for class. Each student should come to class ready to discuss, validate, debate, and/or state their positions concerning various topics within the classroom and with guests — just as they would in a business setting.

CLASSROOM EXPECTATIONS:

- Prompt attendance is expected for all class sessions, and required when we have a guest. This means seated and ready to begin work at the scheduled class start.
- Students should dress business casual when we have a guest.
- Cell phone/tablet/pad/computer usage in any form, for any reason, is not permitted during scheduled class time unless specifically required by professor or speaker.
- Students are expected to come to class prepared to actively participate in class discussion and to engage in intellectual conversation with our guests, which requires that assigned readings/work is done in advance. Our classes are meant to be interactive and our guests are expecting students to be knowledgeable about the topic, actively engaged, and participate in spirited discussion.
- Messages related to the course will be sent to you via e-mail between class sessions and posted in Carmen. Therefore, it is essential that you check your OSU e-mail messages on a regular basis, as well as Carmen.
- Professional, attentive, respectful and collegial behavior is expected and required.

MANDATORY EVENTS TAKING PLACE OUTSIDE OF SCHEDULED CLASS TIME:
Students are REQUIRED to attend the following events as part of the overall Fisher Cluster program. The only attendance exception will be for a documented illness or documented family emergency.

- Kick-off Event: August 20, 2013 8:00-5:00
- Etiquette Dinner: February 10, 2014 evening
- End of the year celebration: April 7, 2014 evening

In addition, we may have the opportunity to have tours or visits to see what we have been learning in class, out in the field ‘live’. Every effort will be made to provide adequate notice to allow students to adjust their busy schedules. Please note that there is not a time, other than our scheduled class, when all of us certainly have no other obligations. Every effort to vary the timing of additional activities will be undertaken so that as many students as possible will be able to take part (this is not part of formal participation assessment).

ASSESSMENT OF STUDENT LEARNING AND PARTICIPATION:

Research Paper: Recognizing that manufacturing is a complex area of study, that there are many issues facing manufacturing firms worldwide, and that each student has unique areas of interest, the topic of the required research paper can be selected by the student with faculty approval. Topics can include areas such as the impact of tax policy, the changing role of labor unions, the role of culture, etc. Please think of something that interests YOU that you would like to know more about, and we can come up with an interesting topic or question for you to research, and to share with the class.

Please approach this as you would a research project that you have been asked to do on the job, and that your manager will use the information that you provide to make critical decisions that will impact the future of your firm (and the livelihood of everyone that works there). The paper should be no more than 10 pages, standard formatting (reasonable font, 1.5 spacing, reasonable margins, etc.) and must include at least 5 separate,
reputable sources and should include multiple points of view. In addition, you must have a separate executive summary of your findings, which may include relevant charts, graphs, bullet points, etc.. You will turn in your executive summary in Carmen in the appropriate discussion space, and your full paper in a separate discussion space. EVERY student is expected to read EVERY executive summary posted by others in the class; the full papers are also available for you to pursue as per your interest. You may also comment on the work posted by another student, maintaining professional and collegial standards. Material from executive summaries may appear on quizzes and can be used on the final exam.

Quizzes: Unannounced quizzes may occur at any time during the term. The purpose is to encourage you to stay current on the material and to gage your understanding of the material. A quiz may include questions over any material assign to date, including the readings for the current class session. They will occur at the start of class; late arrivals will not be given extra time. There will be no make-ups unless arranged in advance.

Final Exam: There will be one essay exam, which will serve as the final exam. The purpose of the exam is to demonstrate your ability to integrate the material covered in the class (readings, speakers, your research, and research done by other students) to address a posed problem, situation or statement. As we will have an integrative exam, students are strongly encourage to take/keep/review your notes about the assigned readings, speaker presentations, in-class discussions, and research summaries for study and future reference.

Participation: This class is not meant to be a standard lecture class, but should be much more participatory with our guest speakers. Please keep in mind that our speakers have traveled some distance to be on campus with us, often after having worked a full day in their jobs, on their own time. As such the very highest levels of professional behavior are expected in class. This includes (but is not limited to), information included in the “Classroom Expectations” portion of the syllabus. With this said, the class should also be a dynamic place where we can all share ideas, opinions and ask questions in a collegial environment.

Assessment of students in this area will include adherence to the standards above, participation in class discussion and evidence of student’s thoughtfulness about discussion topics, and the student’s ability to make a positive impact in the classroom. Mere attendance, while necessary, is not sufficient; you must also consistently make visible, positive contributions (like a job!). This can also include participation on the Carmen discussion spaces. Everyone will start with ‘0’ for participation and the quality and quantity of your contributions will earn you credit in this area.

PLEASE ASK QUESTIONS about your performance as the semester progresses, so there are not surprises at the end!

Plan for Evaluation:

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<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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<tr>
<td>Research Paper</td>
<td>40% (due in Carmen no later than <strong>11/6, 5:30pm</strong>)</td>
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<tr>
<td>Participation</td>
<td>25%</td>
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<td>100%</td>
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Given the newness of the cluster, final speaker topics/dates have not been fully scheduled. A separate schedule will be provided shortly.