Course: BA3630.4 Manufacturing Cluster Fall 2015  
Class meets: Wednesday 3-5pm, 275 Gerlach Hall  
Faculty: Dr. Andrea Prud’homme, CSCP, CFPIM, CIRM  
Office and contact information: Fisher Hall 614  prudhomme.3@osu.edu  614.292.3173  
Office Hours: Wednesday 10-11:30am or by appointment, I can often meet with ‘drop-ins’, so please stop by!

This course is the first in a 2-course sequence comprising the requirements for the completion of 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 with our sponsor company organizations. Each course will utilize Fisher College of Business Faculty and industry professionals from contributing sponsors which include Alcoa, GE Aviation, Honda, and Owens Corning this year.

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 Cluster sequence. Taking other relevant manufacturing courses in Business (BusMgt4250 Six Sigma Principles; BusMgt 4232 Operations Planning and Control, BusMgt4239 Managing Process Improvements, BusML 4383 Supply Chain Management) or Engineering (Manufacturing & Process Eng, Intro to Manufacturing Eng, Project Management, etc.) as soon as possible for context for the course.

PROFESSIONAL DEVELOPMENT BEYOND THE CLASSROOM:

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

- Association of Manufacturing Excellence (AME) at [http://www.ame.org/](http://www.ame.org/) (included with APICS; $25 alone)
- Institute for Supply Management (ISM) at [http://www.ism.ws/](http://www.ism.ws/) (free for students)
- Council of Supply Chain Management Professionals (CSCMP) at [http://cscmp.org/](http://cscmp.org/) ($35 for students)
- Society of Manufacturing Engineers (SME) at [http://www.sme.org/](http://www.sme.org/) ($20 for students)

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/](https://groups.cob.ohio-state.edu/boms/)
- Purchasing and Supply Management Association (PSMA) at [http://psma.org.ohio-state.edu/](http://psma.org.ohio-state.edu/)

In the College of Engineering:
- American Society for Quality (ASQ) [http://asq.org.ohio-state.edu/](http://asq.org.ohio-state.edu/)
- Institute of Industrial Engineers (IIE) [http://www.ohiostateiie.org](http://www.ohiostateiie.org)
- Institute for Operations Research & the Management Sciences (INFORMS) [http://informs-sc.osu.edu/](http://informs-sc.osu.edu/)
- Society of Manufacturing Engineers (SME) [http://www.sme.org](http://www.sme.org)

KEY LEARNING OBJECTIVES OF THE MANUFACTURING CLUSTER:

- Awareness of issues facing manufacturing companies in the U.S. and globally
- Develop professional skills, such as verbal/ written communication abilities; etiquette, demeanor & dress
- Enhance team work skills and begin acquiring and building a professional network.
- Engage in career exploration

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 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 a business curriculum, 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 expected from every OSU 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.

**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 24, 2015
- **Etiquette Dinner:** November 16, 2015 evening, Blackwell Ballroom (optional)
- **End of the year celebration:** April 4, 2016 evening, Blackwell Ballroom

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:**

**Current Topic Presentation**: Each student will give one 10 min formal presentations on a current topic of the student’s choice relating to manufacturing. It can be information about a change in regulations/policy, a major activity being undertaken by a firm, new research shedding light on something that will impact manufacturers, etc. This assignment has several goals: 1) help students develop professional information sharing skills, 2) help students get in the habit of staying on top of business news and happenings, and 3) to help the class know what is happening in the business environment. Each student will be assigned a class session during the semester in which to share their news. Your slides should be posted in the Carmen discussion space by noon of your presentation day.
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 business 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 peruse 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 assigned 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 an 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 encouraged 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. 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. In addition, each student will serve as the “Class Ambassador” for at least one class session. This entails arriving to our class room early to ensure it is ready to receive guests, the computer is turned on, etc.. The Ambassador is the first to greet guests, make sure they have what they need, show them where the restrooms are, make ‘small talk’, and to generally welcome our guests. Be sure to get business cards from our guests in order to have their contact information to write a thank you note (stationery will be provided, I will mail them).

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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<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Topic presentation</td>
<td>5%</td>
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<tr>
<td>Research Paper</td>
<td>35% (due in Carmen no later than 11/18, 3:00pm)</td>
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<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>Participation</td>
<td>25%</td>
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<td><strong>Total</strong></td>
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Schedule forthcoming......