**Instructor(s):** Dr. Erick C. Jones

**Office Number:** Woolf Hall (WH) 325F

**Office Telephone Number:** (817) 272-7592

**Email Address:** ecjones@uta.edu

**Faculty Profile:** <https://www.uta.edu/profiles/erick-jones>

**Office Hours:** Monday and Wednesday 3:00pm – 3:50pm 402 WH or by Appointment

**Section Information: IE 4304 (Sections 001,002); IE 5312 (Sections 001,002,003)**

**Time and Place of Class Meetings:** Monday and Wednesday 5:30pm – 6:50pm 402 WH

**Description of Course Content:** An extension of Production and Inventory Control (IE 4303), this course covers enterprise resource planning systems (ERP) in manufacturing, E-Commerce and supply chain environments. ERP software and case studies are reviewed. Prerequisite: IE 4303.

A continuation of IE 5329 covering enterprise resource planning systems (ERP) and other advanced production control techniques. Computer modeling is emphasized. Prerequisite: IE 5329

**Student Learning Outcomes:** Upon completion of this course the student is expected to have demonstrated his/her ability to know and properly use:

1. Enterprise Resource Planning (ERP) Software module analysis techniques
2. Radio Frequency Identification (RFID) technologies evaluation techniques
3. Advanced Inventory control management techniques using RFID and Automation
4. Advanced Scheduling for production operation techniques using RFID and Automation
5. Push and pull production control theories (MRP and JIT) with ERP Systems

**Required Textbooks and Other Course Materials**

\*1. RFID and Auto-ID in Planning and Logistics, A Practical Guide for Military UID Applications, Erick C. Jones and Christopher A. Chung, PhD, **\* Required**

2. Factory Physics, 3rd edition, Wallace J. Hopp and Mark L. Spearman

3. Integrated Business Processes and ERP Systems, Simha R. Magal and Jeffrey Word

**Descriptions of major assignments and examinations:**

02/18 Exam #1

03/30 Exam #2

03/09 *Spring Vacation*

05/11 Final Exam and Final Report (Paper) Due ***Note Time!*** [5:30PM-8:00PM]

**Attendance:** At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, **“I have decided that attendance at class meetings is not required but strongly encouraged”**

**Other Requirements:** Course prerequisites IE 5329 or IE 4303 and or approved equivalent.

**Grading**: Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels; see “Student Support Services,” below. All work will be done individually unless otherwise specified. The grading policy is expected to be as follows

 Graduate (5312)

Exams 2 **30%**

 Final Exam **20%**

 Homework **5%**

 Project/Paper **40%**

Quizzes **5%**

 Total **100%**

Exams: May include multiple choice, short answer, and quantitative analysis type questions. No makeup exams will be allowed without prior authorization.

Homework: Problems sets will be assigned. Selected problems form those homework sets will be collected and graded. **Homework is not accepted late.**

Project/Paper: All students will be required to participate on projects including report development and presentations. Graduate students will need to take a leadership role on team projects and are required to attempt to produce a peer review quality paper and with themselves, the team and the professor as co-authors. Submission to a journal or magazine will be based on quality including accurate referencing through safe assignment and completely at the discretion of the professor. ***All final reports will be turned in and graded individually unless otherwise state by the professor. A team performance document will be included.***

Quizzes will be given. The score will be used to determine the semester points for the quizzes. Any person caught cheating on an examination or quiz will receive a zero score for that examination or quiz.

**There are no make-up quizzes.**

**Grading**: [Insert a detailed description of grading policies, *including* how the final grade will be calculated.] [Suggested additional language: Optional] Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels; see “Student Support Services,” below.

**Make-up Exams**: None

**Expectations for Out-of-Class Study**: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend **at least an additional 9 hours per week of their own time in course-related activities**, including reading required materials, completing assignments, preparing for exams, etc. (A general rule of thumb is this: for every credit hour earned, a student should spend 3 hours per week working outside of class. Hence, a 3-credit course might have a minimum expectation of 9 hours of reading, study, etc.)

**Grade Grievances**: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

**Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Title IX:** The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit [www.uta.edu/titleIX](http://www.uta.edu/titleIX).

**Academic Integrity:** Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents’ Rule* 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities.** Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

**Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

**Student Support Services**:UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**The English Writing Center (411LIBR)**: Hours are 9 am to 8 pm Mondays-Thursdays, 9 am to 3 pm Fridays and Noon to 5 pm Saturdays and Sundays. Walk In ***Quick Hits*** sessions during all open hours Mon-Thurs. Register and make appointments online at [http://uta.mywconline.com](http://uta.mywconline.com/). Classroom Visits, Workshops, and advanced services for graduate students and faculty are also available. Please see [www.uta.edu/owl](http://www.uta.edu/owl) for detailed information.

**Librarian to Contact:** Sylvia George-Williams, (817) 272-7519, sylvia@uta.edu

[http://www.uta.edu/library/help/subject-librarians.php](http://www.uta.edu/library/help/subject-librarians.php%22%20%5Ct%20%22_blank)

Library Home Page <http://www.uta.edu/library>

Subject Guides [http://libguides.uta.edu](http://libguides.uta.edu" \t "_blank)

Subject Librarians [http://www.uta.edu/library/help/subject-librarians.php](http://www.uta.edu/library/help/subject-librarians.php%22%20%5Ct%20%22_blank)

Database List [http://www.uta.edu/library/databases/index.php](http://www.uta.edu/library/databases/index.php%22%20%5Ct%20%22_blank)

Course Reserves [http://pulse.uta.edu/vwebv/enterCourseReserve.do](http://pulse.uta.edu/vwebv/enterCourseReserve.do%22%20%5Ct%20%22_blank)

Library Tutorials [http://www.uta.edu/library/help/tutorials.php](http://www.uta.edu/library/help/tutorials.php%22%20%5Ct%20%22_blank)

Connecting from Off- Campus [http://libguides.uta.edu/offcampus](http://libguides.uta.edu/offcampus%22%20%5Ct%20%22_blank)

Ask A Librarian [http://ask.uta.edu](http://ask.uta.edu/%22%20%5Ct%20%22_blank)

The following URL houses a page where we have gathered many commonly used resources needed by students in online courses: [http://www.uta.edu/library/services/distance.php](http://www.uta.edu/library/services/distance.php%22%20%5Ct%20%22_blank).

**Course Schedule**“*As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. –First M. Last.”*

Week Date Topic Text Chapters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 19-Jan |  | **MARTIN LUTHER KING Jr. DAY HOLIDAY** | 0,1, FP |
|  | 21-Jan |  | Course Administration/Manufacturing in America | 1, FP |
| 2 | 26-Jan |  | Manufacturing in America |  |
|  | 28-Jan |  | Inventory Control: From EOQ to ROP | 2, FP |
| 3 | 02-Feb |  | Overview of Auto-ID/RFID | 4.4, 13,RFID |
|  | 04-Feb |  | Auto-ID/RFID and Inventory Control | 20,21,RFID |
| 4 | 09-Feb |  | The MRP Crusade\* | 3, FP |
|  | 11-Feb |  | History of ERP\* | 1, Suppl |
| 5 | 16-Feb |  | Integrating the Supply Chain and ERP | 6,Suppl |
|  | 18-Feb |  | **Exam 1** |  |
| 6 | 23-Feb |  | Theory of Constraints and ERP | 2,Suppl  |
|  | 25-Feb |  | \*The Goal Movie  | Video |
| 7 | 02-Mar |  | Guest Lecture  |  |
|  | 04-Mar |  | Operations Planning and ERP | 7, Suppl |
| 8 | 09-Mar |  | **SPRING BREAK** |  |
|  | 11-Mar |  | **SPRING BREAK** |  |
| 9 | 16-Mar |  | JIT Revolution/What Went Wrong | 4, Suppl |
|  | 18-Mar |  | Manpower Planning, Production Planning | 18, 19,RFID |
| 10 | 23-Mar |  | Integrating the Supply Chain and ERP revisited | 6,Suppl |
|  | 25-Mar |  | SCOR Model | 6, Suppl |
| 11 | 30-Mar |  | **Exam 2** |  |
|  | 01-Apr |  | Auto-ID/RFID Supply Chain Planning Levels | 13, RFID |
| 12 | 06-Apr |  | Supply Chain Management | 17 |
|  | 08-Apr |  | **Implementing ERP (Guest) Lecturer** |  |
| 13 | 13-Apr |  | ERP System Requirements | 11, Suppl |
|  | 15-Apr |  | Selecting the right ERP |  12, Suppl |
| 14 | 20-Apr |  | Implementing ERP/RFID (Guest) Lecturer |  |
|  | 22-Apr |  | RFID System Requirements | 12 |
| 15 | 27-Apr |  | RFID System Requirements | 12 |
|  | 29-Apr |  | Lean Six Sigma Research Methodology | Supplement |
|  16  | 04-May |  | Selecting the right ERP System | Supplement |
|  | 06-May |  | No Class |  |
| 17 |  11-May |  | **FFINAL EXAM 5:30pm – 7:00pm** | S |
|  | 16-May |  |  **GRADAUATION** |  |