# American Public University System

The Ultimate Advantage is an Educated Mind

School of Business	
TLMT602	
RFID Uses in Logistics	
3 Credit Hours	
8 weeks	
Prerequisite: None	

Please see the Lessons area in the classroom for additional course specific information

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#### **Course Description (Catalog)**

TLMT 602, Radio Frequency Identification (RFID) uses in Logistics, is a systems-centric view for using today's radio frequency identification (RFID) product tracking system in logistics applications in retail and in the military. This course is intended for students and professionals working in supply chain management, logistics, business management, transportation management, and corporate and military decision makers. This course focuses on how technology has changed the way decision makers use operations management tools since the computer age and RFID began in the 1940s by the military.

#### **Course Scope**

The course will teach students how to analyze and advise decision makers in the use of RFID technology compared to the use of bar code tracking systems in logistics and transportation applications. Students will be able to describe the history, rationale and management impacts of why this technology was mandated by the Department of Defense and Walmart in January 2005 to be used on all shipping pallets and containers. Students will classify and explain how different active and passive RFID technology can be used to increase product movement and storage visibility along supply chains. Students will examine and compare how a real-world application of this technology is improving logistics visibility in a military or retail environment. Students will design an implementation plan to incorporate RFID technology as part of a real-world business model. Students may work in a team environment (with faculty approval first) as well as individuals in creating a series of written papers on the current state of the art in using RFID technology to meet the retail or military transportation and logistics needs. Students will conduct an informal survey of military or retail decision makers to learn how to appraise qualitative as well as quantitative data and reports of the use of this technology. This can be an elective course for the

Transportation and Logistics Management Program, Reverse Logistics Management, any military or DOD management course.

#### **Course Materials**

#### **Required Course Textbooks:**

None. Electronic reading materials are listed in lessons area of the course.

#### **Course Objectives**

After successfully completing this course, you will be able to:

- 1. Explain the range of differences between RFID and bar code technology.
- 2. Illustrate the complexity of RFID uses on an open and closed system.
- 3. Distinguish the different active or passive RFID technology uses in countries other than the US.
- 4. Define a range of metrics to use to measuring the performance of RFID technology in logistics or reverse logistics.
- 5. Create a range of possible new metrics to use to measuring the performance of RFID technology
- 6. Perform an Assumption-based Planning War Game exercise on a real-world RFID application.
- 7. Formulate a research problem to solve with RFID technology.
- 8. Justify not using RFID technology for some product or logistics or reverse logistics process.

<u>Week</u>	Learning Objective(s)	<u>Topics</u>
1	Explain the range of differences between RFID and bar code technology.	<ol> <li>RFID Primer</li> <li>Emerging Complexity and Trends in SC</li> <li>HF vs. UHF</li> <li>The Case for Active RFID</li> <li>Users Power Up Active RFID</li> </ol>
2	Illustrate the complexity of RFID uses on an open and closed system.	1. Alaska Use of RFID
3	Distinguish the different active or passive RFID technology uses in countries other than the US.	<ol> <li>DP World Ramps Up Its Dubai Deployment</li> </ol>
4	Define a range of metrics to use to measuring the performance of RFID technology in logistics or reverse logistics.	1. Key Performance Indicators for the Evaluation of RFID-Enabled B-to-B E-Commerce Applications: The Case of a Five Layer Supply Chain Metrics Forecast for Post Implementation of Passive RFID Technology
	Create a range of possible new metrics to use to	1. ASEM Paper 2011

5	measuring the performance of RFID technology.	<ol> <li>C-08-Final Report</li> <li>RFID RLA</li> </ol>
6	Perform an Assumption-based Planning War Game exercise on a real-world RFID application.	<ol> <li>ABP Rand Booklet</li> <li>Assumption Based Metrics: Recipe for Success</li> </ol>
7	Formulate a research problem to solve with RFID technology.	<ol> <li>ASEM 2012 Publication</li> <li>EC114</li> </ol>
8	Justify not using RFID technology for some product or logistics or reverse logistics process.	<ol> <li>No Easy Answers on RFID Strategy</li> <li>Training for Beeps</li> <li>Is RFID Right for You?</li> <li>Radio Frequency Identification: Invaluable Technology or a New Obstacle in the Marketing Process</li> </ol>

#### **Course Delivery Method**

This course delivered via distance learning will enable students to complete academic work in a flexible manner, completely online. Course materials and access to an online learning management system will be made available to each student. Online assignments are due by Sunday evening of the week as noted and include Forum questions (accomplished in groups through a threaded forum), examination, and individual assignments submitted for review by the Faculty Member). Assigned faculty will support the students throughout this eight-week course.

#### Policies

Please see the <u>Student Handbook</u> to reference all University policies. Quick links to frequently asked question about policies are listed below.

Drop/Withdrawal Policy Plagiarism Policy Extension Process and Policy Disability Accommodations

#### **Grading Scale**

Please see the <u>Student Handbook</u> to reference the University's grading scale.

### **Citation and Reference Style**

Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

### <u>Netiquette</u>

Online universities promote the advancement of knowledge through positive and constructive debate – both inside and outside the classroom. Forums on the Internet, however, can occasionally degenerate into needless insults and "flaming." Such activity and the loss of good manners are not acceptable in a university setting – basic academic rules of good behavior and proper "Netiquette" must persist. Remember that you are in a place for the rewards and excitement of learning which does not include descent to personal attacks or student attempts to stifle the Forum of others.

- **Technology Limitations:** While you should feel free to explore the full-range of creative composition in your formal papers, keep e-mail layouts simple. The Sakai classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color-coding or other visual effects will not translate in your e-mail messages.
- Humor Note: Despite the best of intentions, jokes and <u>especially</u> satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add "emoticons" to help alert your readers: ;-), : ), <sup>(C)</sup>

# **Disclaimer Statement**

Course content may vary from the outline to meet the needs of this particular group.

#### Academic Services

The Online Library is available to enrolled students and faculty from inside the electronic campus. This is your starting point for access to online books, subscription periodicals, and Web resources that are designed to support your classes and generally not available through search engines on the open Web. In addition, the Online Library provides access to special learning resources, which the University has contracted to assist with your studies. Questions can be directed to <u>librarian@apus.edu</u>.

- **Charles Town Library and Inter Library Loan:** The University maintains a special library with a limited number of supporting volumes, collection of our professors' publication, and services to search and borrow research books and articles from other libraries.
- *Electronic Books:* You can use the online library to uncover and download over 50,000 titles, which have been scanned and made available in electronic format.
- *Electronic Journals:* The University provides access to over 12,000 journals, which are available in electronic form and only through limited subscription services.
- **Tutor.com**: AMU and APU Civilian & Coast Guard students are eligible for 10 free hours of tutoring provided by APUS. <u>Tutor.com</u> connects you with a professional tutor online 24/7 to provide help with assignments, studying, test prep, resume writing, and more. Tutor.com is tutoring the way it was meant to be. You get expert tutoring whenever you need help, and you work one-to-one with your tutor in your online classroom on your specific problem until it is done.
- **Disability Accommodations**: Students are encouraged email <u>dsa@apus.edu</u> to discuss potential academic accommodations and begin the review process.

# Request a Library Guide for your course (<u>http://apus.libguides.com/index.php</u>)

The AMU/APU Library Guides provide access to collections of trusted sites on the Open Web and licensed resources on the Deep Web. The following are specially tailored for academic research at APUS:

- Program Portals contain topical and methodological resources to help launch general research in the degree program. To locate, search by department name, or navigate by school.
- Course Lib-Guides narrow the focus to relevant resources for the corresponding course. To locate, search by class code (e.g., SOCI111), or class name.

If a guide you need is not available yet, please email the APUS Library: <u>librarian@apus.edu</u>.

# Turnitin.com

Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.