

**Northwest Arkansas Community College**  
Business and Computer Information Systems Division

**Discipline Code**

TRLG

**Course Number**

2033

**Course Title**

Inventory Management

**Catalog Description**

(F) This course explores the industrial purchasing cycle for materials acquisition and management. Students will review inventory control concepts, models for dependent and independent demand inventory systems, material requirements planning systems, distribution requirements, planning techniques, and classical reorder point inventory models. Recent developments in supplier qualifications, appraisals, source selection, buying practices, value analysis, policies, and international purchasing will also be discussed. Prerequisites: MATH 0013 and TRLG 1013. Co-requisite: TRLG 2013.

**Prerequisites**

MATH 0013-Pre-Algebra, and TRLG 1013.

Co-requisite: TRLG 2013. TRLG 2033 and TRLG 2013 must be taken together in the same semester.

**Credit Hours**

3 credit hours

**Contact hours**

45 lecture/lab contact hours

**Load hours**

3 load hours

**Semesters Offered**

Fall

**ACTS Equivalent**

**Grade Mode**

A-F

## Learning Outcomes

Students completing this course will:

- Apply the basic time series forecasting methods (e.g., moving averages, exponential smoothing, and seasonal methods).
- Evaluate which time series forecasting methods are appropriate depending on the different components present in the data.
- Evaluate the gradual delivery EOQ model and be able to apply the optimal order quantity.
- Define the steps involved in developing a time series forecast.
- Differentiate between Continuous Review (Q) Systems and Periodic Review (P) Systems.
- Describe the basic types of forecasting techniques.
- Explain the changes in the demand rates, ordering/setup costs, product price (or costs) and holding costs affects the EOQ.
- Create a time series forecast using multiple regression model.

## General Education Outcomes Supported

None

## Standard Practices

### Topics list

- Demand forecasting
- Time series forecasting
- Relational forecasting techniques
- Economic order quantity
- Continuous review system
- Periodic review systems

### Learning activities

- Lectures, discussion boards and videos.
- This course requires additional work that may need to be completed out of class or in a virtual or on-campus lab.

### Assessments

- Discussions
- Assignments
- Exams
- Quizzes

### Grading guidelines

- A = 90-100
- B = 80-89
- C = 70-79
- D = 60-69
- F = 59 or below