I. INTRODUCTION
A. The purchasing process as it relates to such topics as inventory control, price determination, vendor selection, supply chain management, negotiation techniques, and ethical issues in purchasing.

B. BMGT 1313 Principles of Purchasing is a required course for the Associate of Applied Science in Logistics and Global Supply Chain Management.

C. Principles of Purchasing is an introductory course in Logistics and Global Supply Chain Management that examines the role of purchasing in the supply chain.

CIP Code Description: 52.0202 (Purchasing, Procurement/Acquisitions and Contracts Management)

D. Alphanumeric coding used throughout this syllabus denotes integration of the Secretary’s Commission on Achieving Necessary Skills (SCANS) occupational competencies (CA, C1, 2, B, etc.) and foundation skills (B, C1, 2, FA, etc.) for this course. The instructor will ensure the designated SCANS competencies and skills are addressed in the course. A detailed description of each competency/skill is contained in “A SCANS Report for America 2000,” Executive Summary, furnished.

II. LEARNING OUTCOMES

Upon successful completion of this course, Principles of Exports the student will be able to:

A. Describe the purchasing function as it relates to departments within the company; identify the basic concepts used in purchasing decisions including negotiation techniques and ethical issues;

B. Explain the relationships of materials management and inventory control with the purchasing process; and explain supply chain management.

C. The following SCANS competencies and foundations skills will be covered in this course:

1. Foundation Skills:
   a. Basic Skills
      (1) Reading (FA1)
      (2) Writing (FA2)
      (3) Mathematics (FA3)
      (4) Listening (FA4)
      (5) Speaking (FA5)
b. Personal Qualities
   (1) Responsibility (FC1)
   (2) Self-esteem (FC2)
   (3) Sociability (FC3)
   (4) Self-management (FC4)
   (5) Integrity/honesty (FC5)

2. Competencies
   a. Resources
      (1) Time (CA1)
      (2) Money/budget (CA2)
   b. Information
      (1) Acquires/uses (CC1)
      (2) Organizes/maintains (CC2)
      (3) Interprets/communicates (CC3)

III. INSTRUCTIONAL MATERIALS


IV. COURSE REQUIREMENTS

A. Reading Assignments: Read text assignments and independent research related to the reading on at least one of the discussion questions at the end of each chapter prior to class. Be prepared to discuss the text material and your research answering instructor questions orally with well-organized thoughts and ideas. (CC3, FA1 & 5)

B. B. Homework Assignments: Instructor will assign two case studies which must be completed as scheduled. (FA2, FA3, FC1, CA1, CC1 through CC3)

C. This will be a 4 -5 page case analysis including the following:

Case Analysis

1. *Preview the case.*
Read the case scenario through before attempting to solve it. First grasp a general idea of the overall situation of what is happening to the organization and individuals described in the case. At this point do not try to identify the problem or develop
specific problems, solutions, and/or recommendations – just get an overall sense of the scenario.

2. **Read and study the case in detail.**

During subsequent readings of the case gain more thorough understanding of the situation and circumstances affecting the organization. Identify specific facts, challenges, and opportunities that will to develop relevant solutions or recommendations using the text as rationale, justification, and support. Start to identify and consider major problems, sub-problems, key variables, situational constraints, resource limitations, possible alternatives, and any potential SCM tools and techniques that might be applicable.

3. **Formulate the problem statement.**

Create a problem statement that will be a brief summary of the situation or environment faced by the case participants. Create a list of the major issues and challenges as the first steps in formulating a specific problem statement.

4. **Consider important and relevant variables and issues.**

Identify those variables and issues that are relevant to the problem as identified in Step 3. It is also important to distinguish between those variables and issues that are controllable by the organization and individuals in the case and those that are not. A controllable variable is one that can be affected or impacted by the manager or organization in the case, while an uncontrollable variable is one that cannot be affected or impacted by the manager or organization. This section of the analysis should also include a brief, relevant history of the organization, an internal analysis, and an external or business environmental analysis.

5. **Determine and consider strategic and organizational goals, objectives, and/or targets.**

All problem statements, potential alternatives, and final recommendations must be developed and considered in light of the organization’s specific goals, objectives, and/or targets. For example, SCM goals and objectives are often concerned with cost minimization, quality improvement, and/or cycle time reduction and should never be considered independently from the organization’s strategic intent and overall goals and objectives.

6. **Determine and consider situational constraints and resource limitations.**

No organization or individual has unlimited resources in terms of money, time, and effort; so the analysis of the case scenario and development of recommendations to address the problem statement must consider relevant situational constraints and resource limitations. In most case scenarios, consider developing appropriate
solutions to immediate, short-term (< six months), moderate term (six months to one year), and long-term (< one year) problems.

7. **Determine potential alternative solutions.**

This key step is a brainstorming and data gathering phase that involves determining relevant potential alternative solutions that could potentially address the issues outlined in the problem statement previously developed. Alternatives, at this stage, should only be listed and not be evaluated. The focus is on determining a variety of possible solutions on which data can be collected and applied in the next step.

8. **Specify assumptions and evaluate potential alternative solutions.**

During this step specify any assumptions that apply to the case scenario. Examples of assumptions that may be applicable to a typical SCM case might include: the nature of future demand, (i.e. growth rate, rate of demand, pattern of demand, etc.), return on investment criteria, nature of the buyer-supplier relationship, time horizon, supply chain risk, and the like. The prepare a list of the advantages and disadvantages and costs and benefits for *each* potential alternative solution. Each potential alternative should be evaluated for feasibility and practicality according to a predetermined set of decision criteria. Examples of typical decision criteria might include: total cost, time to implement, level of resources needed, training needed, the information technology support required, anticipated budget, etc.

9. **Determine final recommendation(s).**

Once the evaluation of potential alternative solutions has been completed, develop a final set of recommendations or solutions to address the problem statement. This step should include an action plan which is a detailed description of the final recommendation(s) or solution(s), accompanied by a thorough discussion of the advantages and disadvantages and costs and benefits, the “what.” Where appropriate, indicate how the final recommendation(s) are to be implemented, i.e., the “who,” “when,” “where,” and “how.” Finally, provide sufficient justification (the “why”) for the final recommendation for the relevant decision maker in the case, using relevant text materials, models, tools, and/or techniques.

**Additional Comments.**

Effective analysis of the case scenario (and a good grade) requires that the following issues are adequately addressed:

- Brief background and history of the organization;
- Accurate description of the specific situation and/or problem(s);
- Identification of key issues and concerns;
• Identification of several possible alternatives to address these key issues and concerns;
• Analysis of the advantages and disadvantages of each alternative;
• Presentation and detailed discussion of the recommendation for a favored alternative, along with appropriate rationale (i.e., tell “Why” and support with relevant text materials, theories, models, etc.).

Additional points for the student to consider in preparing and presenting a SCM case analysis.

• Don’t recite large chunks or pieces of factual information from the case study and feed them back verbatim. Instead, selectively use important information to illustrate the detailed analysis, defend a particular point of view, and/or discuss salient points.
• Avoid being merely descriptive; be analytical instead.
• Make sure the sections and subsections of the discussion flow logically and smoothly from one section to the next. Make an outline to help with this.
• Eliminate spelling and grammatical errors. As such, they make the analysis difficult to read and comprehend. Proofread it several times. Get someone else to do likewise.
• State explicitly how the strategy, alternative, or recommendation solves the specific problem identified.
• Clearly define what needs to be accomplished (and by whom) in order to implement each of the recommendation(s).
• Make sure that the student uses appropriate course materials to support his/her analysis and to help “sell” the recommendation.
• Write the case study analysis paper from the reader’s perspective. In other words, answer the question, “What would the reader (i.e., boss, customer, or client) expect to see in this report?”

How the Case is Graded:

<table>
<thead>
<tr>
<th>The specific problem is clearly identified</th>
<th>30 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative solutions and how they would solve the problem are clearly stated.</td>
<td>30 pts</td>
</tr>
<tr>
<td>The recommended solution should be clearly stated</td>
<td>20 pts</td>
</tr>
<tr>
<td>There are at least three well-reasoned arguments that support the solution</td>
<td>30 pts</td>
</tr>
<tr>
<td>Quotes from the course text book must be used to support or disagree with those arguments.</td>
<td>20 pts</td>
</tr>
</tbody>
</table>
C. Class Attendance: You are expected to attend each class period and be involved in the class discussion. You are responsible for all course material missed due to absence. The instructor does not provide class notes for classes missed. (FA1, FA4, FA5, FC1, FC3 through FC5, CA1, CC1 through CC3)

D. Class participation. This course is using a “flipped classroom” model. You are required to read the chapter prior to coming to class. In addition to the reading you must google at least one topic within the chapter that interests you. Be prepared to cite your research in class including the source.

Classroom time will be focused on discussion of the questions at the end of each chapter. You will be graded on your meaningful participation in those discussions. There will be up to 200 points awarded over the course of the semester. (FA1, FA4, FA5, FC1, FC3 through FC5, CA1, CC1 through CC3)

E. Chapter quiz. Each chapter will have a 25 point multiple choice quiz administered in blackboard. There are 16 chapter quizzes worth 25 points each of 400 total points. There is no quiz for Chapter 17. There are no major exams.

(CC1 through CC3; CA1, CA2; FA1 through FA5)

V. How the Grade is Determined

A. Points for grades will be awarded as follows:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>The solution clearly defines who in the case must take what action.</td>
<td>20 pts</td>
</tr>
<tr>
<td>The flow of the paper must be clear and the discussion flows logically</td>
<td>20 pts</td>
</tr>
<tr>
<td>The paper must be correct with regard to grammar, spelling, punctuation and sentence structure</td>
<td>20 pts</td>
</tr>
<tr>
<td>The paper must be properly submitted.</td>
<td>10 pts</td>
</tr>
<tr>
<td>Total</td>
<td>200 pts</td>
</tr>
</tbody>
</table>
Chapters 1-16 chapter Quiz (25 points each) | 400
---|---
Two Research Papers (200 points each) | 400
Classroom participation | 200
Total | 1000

B. Letter grades will be assigned based on the percentage of total points earned as follows: 90-100% = A 80-89% = B 70-79% = C 60-69% = D BELOW 60% = F VII.

NOTES AND ADDITIONAL INSTRUCTIONS FROM COURSE INSTRUCTOR

A. Course Withdrawal: It is the student's responsibility to officially withdraw from a class if circumstances prevent attendance. Any student who desires to, officially withdraw from a course after the first scheduled class meeting must file a Central Texas College Application for Withdrawal (CTC Form 59). The withdrawal form must be signed by the student.

CTC Form 59 will be accepted at any time prior to Friday, the 12th week of classes during the 16-week fall and spring semesters. The deadline for sessions of other lengths is:

- 10-week session Friday of the 8th week
- 8-week session Friday of the 6th week
- 5-week session Friday of the 4th week

The equivalent date (75% of the semester) will be used for sessions of other lengths. The specific last day to withdraw is published each semester in the Schedule Bulletin.

A student who officially withdraws will be awarded the grade of "W", provided the student's attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with the College before they may be considered for withdrawal. A student may not withdraw from a class for which the instructor has previously issued the student a grade of "F" or "FN" for nonattendance.

B. Administrative Withdrawal: An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on CTC Form 59 for submission to the registrar.
C. Incomplete Grade: The College catalog states, "An incomplete grade may be given in those cases where the student has completed the majority of the course work but, because of personal illness, death in the immediate family, or military orders, the student is unable to complete the requirements for a course..." Prior approval from the instructor is required before the grade of "IP" is recorded. A student who merely fails to show for the final examination will receive a zero for the final and an "F" for the course.

D. Cellular Phones and Beepers: Cellular phones and beepers will be turned off while the student is in the classroom.

E. American's With Disabilities Act (ADA): Disability Support Services provide services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at www.ctcd.edu/disability-support for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

E. Instructor Discretion: The instructor reserves the right of final decision in course requirements.

F. Civility: (FC3) Individuals are expected to be cognizant of what a constructive educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.

G. Honesty and Integrity: (FC5) All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all course work and during examinations. The following will be considered examples of scholastic dishonesty:

a. Plagiarism: The taking of passages from writing of others without giving proper credit to the sources.

b. Collusion: Using another's work as one's own; or working together with another person in the preparation of work, unless joint preparation is specifically approved in advance by the instructor.

c. Cheating: Giving or receiving information on examinations. Students guilty of scholastic dishonesty will be administratively dropped from the course with a grade of “F” and will be subject to disciplinary action. (FC5)
VIII. COURSE OUTLINE

Unit 1. Chapters 1-3, Introduction to Purchasing. In general, the business world is becoming ever more interconnected with significant advances in international transportation and communication. The globalization of the supply chain has had a profound effect on the role of purchasing and supply management in all organizations. This unit introduces purchasing as a part of supply chain management, how purchasing decisions integrate with business strategy and considers some of the legal aspects of purchasing.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

- Explain the purchasing function’s contribution to profitability.
- Identify the relationship between the purchasing function and other functional areas.
- Explain the basic historical development of the purchasing function.
- Explain the evolution of the basic supply management concept.
- Differentiate between purchasing, supply management, and supply chain management.
- Explain the relationship between the purchasing function and inventory ordering, and transportation costs.
- Discuss the advantages and disadvantages of centralized purchasing organizational designs.
- Identify various purchasing organizational designs.
- Discuss careers in purchasing
- Explain the role of purchasing in corporate strategy.
- List and explain the most important elements of the strategic planning process for purchasing.
- Name the components of purchasing strategy.
- Explain how sourcing is integrated into corporate strategy.
- Discuss how purchasing strategy is linked to other functional areas.
- Explain the impact of purchasing decisions on supply chain management.
- Explain how the sourcing audit can to formulate purchasing objectives and strategy.
- Discuss the supply chain relationship pegging analysis.
- Discuss how to develop a strategic purchasing plan.
- Discuss the legal aspects of the purchasing function.
- Review the factors that are involved in the selection of the purchasing manager.
- Explain the extent of the purchasing professional’s legal authority.
- Explain how contracts and purchase orders are legally executed.
- Name the essentials of a binding purchasing contract.
- Define the terms of an enforceable contract.
- Distinguish between an offer and a nonoffer.
- State the possible outcomes of an offer.
• Explain the legal implications of leasing
• Explain the legal impact of the information age.
• Recall the components of electronic contracts and signatures.
• Discuss the importance of ethics in purchasing.

2. Learning Activities:
   a) Read the assigned chapters. (FA1, FC1)
   b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
   c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)

Unit 2, Chapters 4 – 6, Inventory and Materials Management
   It is essential to understand the functions of inventory and how materials planning provides for the proper inventory at the proper time. This unit discusses the considerations of materials management processes, the classic inventory management practices and just-in-time inventory purchasing.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

   • Identify the activities of materials management.
   • List and explain the five functions of inventory.
   • Discuss the relationship between purchasing and materials management.
   • Determine how the materials management concept makes a contribution to profitability.
   • Explain why firms have implemented materials management systems.
     • Discuss the relationship between the purchasing function and inventory control.
     • List the primary reasons for holding inventory.
     • Explain the differences between independent and dependent demand.
     • Identify the necessary requirements for effective inventory management.
     • Describe ABC analysis.
     • Identify the cost components of the classical EOQ model.
     • Summarize the basic assumptions of the EOQ model
     • Define quantity discounts.
     • Characterize service levels.
     • Identify the differences between fixed-order quantity and variable-order inventory systems.
     • Explain lean production systems.
     • Explain the differences between JIT and MRP.
     • Discuss the relationship between JIT and purchasing
     • Name critical JIT purchasing advantages.
     • Identify the activities needed to implement JIT purchasing.
• Determine the role of culture in the implementation of JIT purchasing.
• Analyze the impact of JIT purchasing on a buying firm.

2. Learning Activities:
   a) Read the assigned chapters. (FA1, FC1)
   b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
   c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)

**Unit 3, Chapter 7, Purchasing Procedures, E-Procurement and Systems Contracting**

Understanding the fundamental purchasing processes and procedures is a significant part of mastering purchasing function. Among the elements in these processes are the electronic systems that purchasing systems increasingly depend upon.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

   • Identify the steps in the conventional purchasing cycle.
   • Explain the differences between buying and purchasing.
   • List the main activities of a typical purchasing department.
   • Define routine versus non routine purchasing/buying methods.
   • Identify the technical requirements for e-procurement.
   • Show the differences between EDI and e-procurement.
   • Explain the RFID technology.

2. Learning Activities:
   a) Read the assigned chapters. (FA1, FC1)
   b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
   c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)
   d) Complete the midterm exam covering chapters 1 to 8. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)
Unit 4, Chapters 8, Supplier Selection and Evaluation. In today’s competitive environment firms must be able to provide quality products and a reasonable price. Product quality and reasonable price are both, in large part, a direct of a quality, well priced supplier. This unit focuses on the selection and evaluation of the firms suppliers.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

- Identify the qualifications of a good supplier.
- Demonstrate the key elements of the make—versus-buy decision.
- Identify appropriate supplier selection techniques.
- Discuss about supplier relationship management.
- Discuss potential disadvantages of single sourcing.
- Analyze how to reduce the number of suppliers.
- Discuss about strategic supplier relationship management.
- Explain how supplier evaluation is accomplished in a variety of industrial environments.

2. Learning Activities:
   a) Read the assigned chapters. (FA1, FC1)
   b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
   c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)
   d) Complete the assigned case, Austin Wood Products drawing on the materials covered thus far in the text. (FA2, FA3, FC1, CA1, CC1 through CC3)

Unit 5, Chapters 9 – 10, Strategic Outsourcing and Global Sourcing Traditionally business acquired products through internally operated departments and from, if not local, then regional or national suppliers. In the changing roles for purchasing the possibility of outsourcing the purchasing function exists and the supplier may be located anywhere in the global community.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

- Recall the precise definition of outsourcing.
- Describe why organizations outsource manufacturing and services business processes.
- List the benefits and pitfalls of outsourcing.
• Discuss why the outsourcing process is not considered contracting or joint venturing.
• Identify the hidden cost of outsourcing.
• Discuss core and noncore competencies.
• Identify outsourcing trends.
• Discuss the elements of strategic outsourcing.
• Identify the role of the outsourcing relationship manager
• Identify what factors/forces increase foreign trade.
• Paraphrase the basics of global sourcing.
• Describe how total costs are determined.
• Explain the hidden costs of global sourcing.
• List the quantitative and qualitative aspects of global sourcing.
• Describe how to critically analyze various global sourcing alternatives.
• Describe how to effectively use foreign trade zones.
• Paraphrase how to negotiate in different countries

Learning Activities:
  a) Read the assigned chapters. (FA1, FC1)
  b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
  c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)
  d) Complete the midterm exam covering chapters 1 to 8. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)

Unit 6, Chapters 11, 12 Supply Partnerships and TQM Two of the crucial elements in the purchasing process is the development of strategic supply chain partnerships and the measurement of supply quality. This unit examines those supply relationships as well as examining the concept of Total Quality Management.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

   • Explain the relationship between purchasing, supply partnerships, and supply chain power.
   • Describe the elements of supply chain partnerships.
   • Illustrate the continuum of interfirm relationships.
   • Discuss the potential benefits of supplier partnerships.
   • Explain the nature of supply chain power.
   • Describe the different sources of power.
• Examine how supply partnerships work in the automotive industry.
• Identify purchasing’s functional role in a firm within an overall quality assurance program.
• Determine the various costs associated with quality and why it is difficult to measure these costs.
• Define what is meant by total quality management (TQM).
• Describe how quality specifications and targets are determined.
• Identify the advantages of statistical process control (SPC).
• Discuss the advantages of six-sigma implementation.
• Identify the advantages of the Taguchi method.
• Paraphrase the mechanics of acceptance sampling for commodity purchasing.

2. Learning Activities:
   a) Read the assigned chapters. (FA1, FC1)
   b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
   c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)

Unit 7, Chapter 13, Price Determination One of the most important and complex decisions a firm will make is what to pay for its items and services.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

   • Explain the relationship between cost and price.
   • Discuss how discussing curve analysis relates to materials purchase price.
   • List and paraphrase the various pricing methods.
   • Explain the competitive bidding trap.
   • Discuss how price/cost analysis is used for the negotiation process.
   • Illustrate the price/cost analysis process.
   • Show the difference between gross margin and markup.

2. Learning Activities:
   a) Read the assigned chapters. (FA1, FC1)
   b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)

Unit 8, Chapter 14 Bargaining and Negotiations Bargaining occurs when two or more parties have different interests and goals and they are able to communicate an exchange of goods or services. This is a common human occurrence and this unit examines the economic and psychological dimensions of that process.

1. Learning Outcomes: Upon successful completion of this unit, the student will be able to:

   • Explain the difference between bargaining and negotiations.
   • Identify the differences between distributive and integrative bargaining.
   • Identify the differences between the psychological and the economic aspects of bargaining.
   • Discuss the six psychological factors that affect bargaining.
   • Discuss the factors related to the payoff system.
   • Implement bargaining strategies.
   • Identify the elements of negotiation

2. Learning Activities:
   a) Read the assigned chapters. (FA1, FC1)
   b) Review the Discussion Questions at the end of each chapter (FA2, FA3, FC1, CA1, CC1 through CC3)
   c) Complete the assigned Quiz in Blackboard to test your knowledge of the materials. There are sixty minutes are allowed for twenty five questions for one submission attempt. (FA1, FA3, FC1, FC4, FC5, CA1, CC1 through CC3)