



Course Syllabus

BMGT 1327 – Principles of Management

Catalog Description: Concepts, terminology, principles, theories, and issues in the field of management.

Prerequisites: None

Semester Credit Hours: 3

Lecture Hours per Week: 3

Lab Hours per Week: 0

Extended Hours: 0

Contact Hours per Semester: 48

State Approval Code: 5202010000

Class section meeting time:

Alternate Operations During Campus Closure: In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Panola College to move to altered operations. During this time, Panola College may opt to continue delivery of instruction through methods that include, but are not limited to: online learning management system (CANVAS), online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor Panola College's website (www.panola.edu) for instructions about continuing courses remotely, CANVAS for each class for course-specific communication, and Panola College email for important general information.

Artificial Intelligence (AI) Course Policy: No use of Generative AI permitted. All work submitted by students will be generated by the students themselves, whether they are working individually or in groups. Students should not have another person or entity do the writing of any portion of an assignment, which includes hiring a person or a company to write assignments and/or using artificial intelligence (AI) tools like ChatGPT. Use of any AI-generated content in this course qualifies as academic dishonesty and violates Panola College's standards of academic integrity.

Instructional Goals and Purposes: The purpose of this course is to explain the role, characteristics, and skills of a manager; identify the principles of management at the supervisory level; define human relations skills necessary for supervision; and explain motivational techniques used by a supervisor in a working environment.

Learning Outcomes:

1. Describe the supervisor's job.
2. Make sound and creative decisions.
3. Improve communication skills.
4. Identify methods for motivating employees.
5. Identify ways to cope with change.
6. Discuss business ethics and organizational politics.
7. Explain the supervisory planning process.
8. Develop ways to manage your time.

9. Organize and delegate.
10. Build work teams.
11. Develop staffing and training skills.
12. Discuss equal employment opportunity.
13. Formulate ways to counsel and support employees.
14. Develop leadership skills.
15. Analyze methods for handling conflict and stress.
16. Evaluate appraisal methods and rewards.

Specific Course Objectives (includes SCANS):

After studying the material presented in the text and online, the student should be able to complete all behavioral/learning objectives listed below with a minimum competency of 70% on quizzes, assignments, and exams.

1. **Describe the supervisor's job.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-ii, 1c-iv, 1c-v, 2b-iv, 2b-vi, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Define supervision.
 - b. Describe the work of a supervisor.
 - c. Present the types of skills necessary to perform the job of supervision.
 - d. State the key reasons for supervisory success.
 - e. Explain the glass ceiling concept.
 - f. Describe guidelines for managing diversity in the workplace.
2. **Make sound and creative decisions.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Discuss the importance of recognition and timeliness in decision making.
 - b. Differentiate between programmed and nonprogrammed decisions.
 - c. State the steps followed in the scientific method of decision making.
 - d. Name several potential advantages and disadvantages of group decision making.
 - e. List several traps that supervisors frequently fall into when making decisions.
 - f. Discuss the role that the supervisor plays in establishing a creative environment.
 - g. Describe several group-oriented techniques that can be employed by supervisors to encourage creativity.
 - h. Itemize some of the more frequently encountered barriers to organizational creativity.
3. **Improve communication skills.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Define communication.
 - b. Describe the interpersonal communication process.
 - c. Describe problems that could arise from conflicting or inappropriate assumptions made in interpersonal communication.
 - d. Define semantics and explain its role in interpersonal communication.
 - e. Define perception.
 - f. Explain how emotions may affect communication.
 - g. Explain active listening.
 - h. Explain the concept of feedback in communication.
 - i. Describe the grapevine.
 - j. Define and briefly discuss the e-mail process.
 - k. Discuss two factors that complicate communications in international business activities.
4. **Identify methods for motivating employees.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Define motivation.
 - b. Define the traditional theory of motivation.
 - c. Explain the hierarchy of needs.
 - d. Discuss the motivation-maintenance theory of motivation.
 - e. Discuss the preference-expectancy theory of motivation.
 - f. Explain reinforcement theory.
 - g. State several things that the supervisor can do to affect employee motivation.

5. **Identify ways to cope with change.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Discuss the supervisor's role in introducing change.
 - b. Explain why employees tend to resist change.
 - c. Present several things that the supervisor can do to foster employees' acceptance of change.
 - d. Discuss three factors that affect the time it takes to successfully implement a change.
 - e. List six different strategies that may be used to implement a change.
 - f. Describe Lewin's Force Field Analysis theory.
 - g. Briefly describe four essential principles that organizations must follow to manage innovation.
6. **Discuss business ethics and organizational politics.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 1c-v, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2c-v, 2d-i)
 - a. Define ethics and discuss what behaviors are considered unethical in the workplace.
 - b. Explain what a code of ethics is and describe what a code of ethics typically covers.
 - c. Discuss the role that supervisors play in setting the ethical tone of an organization.
 - d. Identify the major areas that require ethical conduct by supervisors.
 - e. Outline the steps the supervisor should follow when dealing with a dishonest subordinate.
 - f. Describe how a supervisor can positively increase his or her power base.
 - g. Define organization politics.
 - h. Discuss several guidelines that supervisors should follow when socializing with other member of the organization.
7. **Explain the supervisory planning process.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Describe how an organization plans.
 - b. Describe the supervisor's role in the overall planning system of the organization.
 - c. Discuss the steps involved in the supervisory planning process—with special emphasis on setting objectives.
 - d. Identify the SMART criteria for setting objectives.
 - e. Discuss the role of contingency plans.
 - f. Differentiate among organizational policies, procedures, and rules.
 - g. List several common supervisory planning activities.
 - h. Explain the basic elements of a management by objectives (MBO) system.
8. **Develop ways to manage your time.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2a-i, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Identify several common time wasters.
 - b. Analyze how you actually spend your time on the job.
 - c. Discuss how to plan your time.
 - d. Discuss how to optimize your work routine.
 - e. Identify several areas that typically have a high potential for better time utilization.
 - f. Discuss three alternative work schedules that can help employees better manage their time.
9. **Organize and delegate.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-ii, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Define departmentalization and describe several ways it is implemented in organizations.
 - b. Differentiate between authority and responsibility and between line and staff personnel.
 - c. Explain the concept of centralized versus decentralized authority.
 - d. Define empowerment and explain how it can be encouraged.
 - e. Identify and describe several principles of supervision based on authority.
 - f. Recount the basic steps in the delegation process.
 - g. Discuss why supervisors are often reluctant to delegate authority.
 - h. Describe some supervisory tasks that can't be delegated.
 - i. Describe several tips for making delegation more effective.
10. **Build work teams.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
 - a. Describe formal and informal work groups.
 - b. Define group norms.
 - c. Explain group cohesiveness.
 - d. Define group conformity.
 - e. Outline the conditions under which individual members tend to conform to group norms.

- f. Define groupthink.
 - g. Discuss the concept of team building.
 - h. Explain idiosyncrasy credit.
 - i. Describe a quality circle.
 - j. Explain self-directed work teams.
11. **Develop staffing and training skills.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
- a. Describe the human resource planning process.
 - b. Define job analysis, job description, job specification, and skills inventory.
 - c. Describe the steps in the selection process.
 - d. Define tests.
 - e. Discuss the different types of employment interviews.
 - f. Discuss potential problems in the interviewing process.
12. **Discuss equal employment opportunity.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 1c-v, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
- a. Define protected groups.
 - b. Describe antidiscrimination laws that affect organizations.
 - c. Identify the major federal enforcement agencies for equal employment opportunity.
 - d. Define employment parity, occupational parity, and systemic discrimination.
 - e. Define affirmative action.
 - f. Define sexual harassment.
13. **Formulate ways to counsel and support employees.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iii, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
- a. Determine when it is appropriate for the supervisor to counsel employees.
 - b. Differentiate between directive and nondirective counseling.
 - c. Present a general approach for counseling employees.
 - d. Define a "troubled employee."
 - e. Discuss ways to effectively supervise troubled employees.
 - f. Define what employee assistance programs (EAPs) are.
 - g. Summarize the legal requirements for dealing with troubled employees.
 - h. Explain the difference between a "troubled" employee and a "problem" employee.
 - i. Explain the supervisor's role in career counseling.
 - j. Explain wellness programs.
14. **Develop leadership skills.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-iv, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
- a. Define power, authority, and leadership.
 - b. Describe leader attitudes—Theory X and Theory Y.
 - c. Describe three basic styles of leadership.
 - d. Define supportive and directive leaders.
 - e. Discuss the Managerial Grid.
 - f. Explain the situational approach to leadership.
 - g. Explain transactional and transformational leadership.
15. **Analyze methods for handling conflict and stress.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iii, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
- a. Define conflict.
 - b. Outline the five stages of conflict.
 - c. Discuss the useful effects of conflict.
 - d. Explain the basic perspectives for analyzing conflict in organizations.
 - e. Describe five strategies for dealing with interpersonal conflict.
 - f. Discuss the nature and sources of job-related stress.
 - g. Define burnout and workaholism.
 - h. Suggest several personal guidelines for managing organizational and personal stress.
 - i. Explain the Family and Medical Leave Act of 1993, and discuss how it is designed to reduce employee stress.

16. **Evaluate appraisal and rewards.** (1a-i, 1a-ii, 1a-iv, 1b-i, 1b-ii, 1b-iii, 1b-vi, 1c-iv, 2b-iv, 2c-i, 2c-ii, 2c-iii, 2c-iv, 2d-i)
- Define performance appraisal.
 - Define performance.
 - Explain the determinants of performance.
 - Explain the contents of a job description.
 - Define job analysis.
 - List and describe the eight major performance appraisal methods.
 - Discuss common errors made in performance appraisals.
 - Suggest ways to make performance appraisal systems more legally acceptable.
 - Define compensation.

Course Content:

A general description of lecture/discussion topics included in this course are listed in the Learning Objectives/Specific Course Objectives sections of this syllabus.

Students in all sections of Supervision will be required to do the following:

- Students will self-assess their supervisory skills by completing surveys that evaluate the following: personal interests, communication skills, ethics, time management, delegation, productivity, negotiation, motivation techniques, leadership skills, and ability to handle stress.
- Students will read assigned cases in the text relating to supervisory issues and participate in online discussions.
- Students will complete online objective exams in the presence of a testing proctor.

Methods of Instruction/Course Format/Delivery: Students in both the traditional class and in the Internet class will have access to this course via Canvas. Students in the traditional class will meet regularly for lecture over the material. Students in the Internet class will only be required to meet with the instructor for testing; however, Internet students are always welcome to attend the traditional class (if one is available on the schedule).

Resources for this course provided through Canvas include

- Modules displaying assignments and activities for each week
- Announcements (check your Announcements often)
- Chapter notes
- Self-assessment exercises, case discussions, and exams (all under Assignments)
- Exam reviews
- Email (to communicate with instructor and classmates inside Canvas)
- Grades

All case discussions, self-assessments, and exams will be submitted through Canvas. After the assignment has been graded, the student will be able to view his or her grade by returning to the assignment or by clicking the Grades link in the left banner. Students will have limited review of the answers to the exams, but they will always be able to view the score. Work is generally graded and posted within two days following the deadline.

Students in both the traditional and Internet classes should use email within Canvas to communicate with the instructor. Using Canvas email gives you access to the instructor and other classmates without having to remember or type email addresses—you just select a name from the list. If you are not able to contact your instructor using email in Canvas, you may use his or her Panola College email address. Panola College instructors attempt to respond to all email within 24 hours. Please always include a subject line and your name in your email.

Major Assignments/Assessments:

The following items will be assigned and assessed during the semester and used to calculate the student's final grade:

- **Self-Assessments**

Throughout the semester, you will be asked to download and complete self-assessment exercises. These exercises basically ask you to answer questions about yourself and the results are used to help you determine how well you can supervise and what supervisory skills you need to develop. There will be no right or wrong answers on these exercises and you will be graded based on whether you thoroughly completed the exercises and whether or not you spent time analyzing your abilities/behaviors.

- **Case Discussions**

As you look through your textbook, you will notice case problems at the end of each chapter (usually labeled *Incident*). During the semester, cases will be assigned and discussed using Canvas's discussion feature. We will not discuss all of the cases in the textbook—only specific cases will be assigned—and we won't have a case every week. You will be expected to post a significant response to each discussion question before a certain deadline; failure to post before the deadline and posts that include plagiarized material (using the exact words of someone else) will result in a zero for that case discussion. Posts lacking substance will not receive full credit. Your lowest two discussion grades will be dropped at the end of the semester.

IMPORTANT FOR HIT MAJORS: The following assignments are HIT entry-level competencies. HIT majors **MUST** score a minimum of 70%. If you do not score a minimum of 70% on your first attempt, you will have to repeat the assignment and/or complete an equivalent remedial assignment until you score 70%. **THIS IS A GRADUATION REQUIREMENT FOR HIT MAJORS.**

Week Number	Assignment Title(s)	Assignment Bloom's Level
2	<i>Incident 2-1: A Second Chance?</i>	6
6	<i>Incident 6-1: Additional Expenses?</i>	2
8	<i>Incident 9-1: Where do you start?</i>	2
10	<i>Incident 11-2: Lake Avionics</i>	5
12	<i>Incident 14-2: Promises You Can't Keep</i>	2

- **Exams**

Three exams will be given this semester. Tests will be administered online in Canvas using Proctorio which provides a video/audio recording of your testing experience for the instructor. You will take the exams at home using the webcam on your computer; if you do not have a webcam, you may take the exams at one of the Panola College testing centers in Carthage, Center, or Marshall. If you are unable to take a test when it is scheduled, you must reschedule the test with the instructor **PRIOR** to the testing date. An excused absence and makeup test may be granted for sudden illness or unforeseen circumstances.

Course Grade:

The grading scale for this course is as follows:

- Self-Assessments – 20%
- Case Discussions – 20%
- Exams – 60%

All student grades including a mid-semester and final grade will be posted to Grades in Canvas.

Cheating is defined as unauthorized help on an examination or assigned course material. A student must not submit another student's work as his or her own. A student must not receive from any other student or give to any other student any information, answers, or help during an exam. A student must not "steal" the answers from an unsuspecting student during an exam. A student must not use any sources for answers during an exam (including but not limited to notes, books, or electronic devices) without prior authorization from the professor. A student must not obtain exam questions illegally, tamper with the exam questions,

nor change the results of an exam after it has been graded. **All cheating infractions will result in a grade of "0" for the assignment.**

Plagiarism is defined as the taking of a person's ideas, words, or information and claiming those properties as one's own. The use of all ideas, words, or information from any source must be properly referenced and due credit must be given to its author. All written assignments must be submitted through Canvas which uses turnitin.com to calculate percent originality of the submission. For compositions, a student's work must show 0% plagiarism. For research assignments, properly quoting and citing information from other sources is usually required in the assignment; however, since the integrity of the assignment is based upon the originality of the student's work, no student may turn in a paper which exceeds a 30% score in properly quoted and cited material. The instructor reserves the right to employ other means outside of turnitin.com to check the "originality" of a student's work. **Any submission that contains copied material (other than cited material in a research paper) will automatically receive a grade of "0" for the assignment.**

A student will fail the class upon his or her second cheating and/or plagiarism offense. These policies shall be adhered to unless mitigating circumstances should prove a lesser penalty should apply. Students shall have the right to contest a cheating or plagiarism claim; the appeals process is specifically defined in the student handbook.

Attendance:

Students in the face-to-face class are expected to arrive on time and remain in class until the class is over as random movement into, out of, or around the classroom is disruptive and disrespectful. Students are highly encouraged to participate in class by asking questions and engaging in discussions. Disruptive class behavior will result in dismissal from the classroom and an absent mark on the attendance record. Persistent, disruptive behavior may ultimately result in dismissal from the course, a failing grade, and further disciplinary actions in accordance with college policy.

Make up assignments/exams will only be granted in accord with the excused absence policy.

A student that chooses to NOT finish the course must complete the withdrawal procedure in the Student Success office in order to receive a "W." Otherwise, the student will receive a grade at the end of the semester commensurate with the work completed.

Students needing special classroom or testing accommodations because of physical or learning disabilities must contact the Student Success office before these services will be made available in the classroom.

Texts, Materials, and Supplies:

- *Supervision: Key Link to Productivity*, 11th Edition, Rue, Ibrahim, and Byars, McGraw-Hill, 2014, ISBN: 9780078029226. A used textbook is acceptable for this course and students do not have to purchase an access code or media (CDs, DVDs, etc.) with this textbook.
- Access to a computer and the Internet.

Required Readings:

- Chapters 1-15.

Recommended Readings:

- None

Other:

- Courses conducted via video conferencing may be recorded and shared for instructional purposes by the instructor.
- For current texts and materials, use the following link to access bookstore listings: <https://www.panolacollegestore.com>
- For testing services, use the following link: <https://www.panola.edu/student-services/student-support/academic-testing-center>

- If any student in this class has special classroom or testing needs because of a physical learning or emotional condition, please contact the ADA Student Coordinator in Support Services located in the Charles C. Matthews Student Center or go to <https://www.panola.edu/student-services/student-support/disability-support-services> for more information.
- Panola College welcomes pregnant and parenting students as a part of the student body. This institution is committed to providing support and adaptations for a successful educational experience for pregnant and parenting students. Students experiencing a need for accommodations related to pregnancy or parenting will find a Pregnancy and Parenting Accommodations Request form in *The Pathfinder* or may request the form from the course instructor.
- Withdrawing from a course is the student's responsibility. Students who do not attend class and who do not withdraw will receive the grade earned for the course.
- Student Handbook, *The Pathfinder*: <https://www.panola.edu/> (located at the bottom under students)

SCANS CRITERIA

- 1) **Foundation skills are defined in three areas: basic skills, thinking skills, and personal qualities.**
 - a) **Basic Skills:** A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:
 - i) Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.
 - ii) Writing: communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
 - iii) Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
 - iv) Listening: receive, attend to, interpret, and respond to verbal messages and other cues.
 - v) Speaking: Organize ideas and communicate orally.
 - b) **Thinking Skills:** A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:
 - i) Creative Thinking: generate new ideas.
 - ii) Decision Making: specify goals and constraints, generate alternatives, consider risks, and evaluate and choose the best alternative.
 - iii) Problem Solving: recognize problems and devise and implement plan of action.
 - iv) Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information.
 - v) Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills.
 - vi) Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.
 - c) **Personal Qualities:** A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
 - i) Responsibility: exert a high level of effort and persevere toward goal attainment.
 - ii) Self-Esteem: believe in one's own self-worth and maintain a positive view of oneself.
 - iii) Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
 - iv) Self-Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self-control.
 - v) Integrity and Honesty: choose ethical courses of action.
- 2) **Workplace competencies are defined in five areas: resources, interpersonal skills, information, systems, and technology.**
 - a) **Resources:** A worker must identify, organize, plan, and allocate resources effectively.
 - i) Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.
 - ii) Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
 - iii) Material and Facilities: Acquire, store, allocate, and use materials or space efficiently. Examples: construct a decision time line chart; use computer software to plan a project; prepare a budget; conduct a cost/benefits analysis; design an RFP process; write a job description; develop a staffing plan.
 - b) **Interpersonal Skills:** A worker must work with others effectively.
 - i) Participate as a Member of a Team: contribute to group effort.
 - ii) Teach Others New Skills.
 - iii) Serve Clients/Customers: work to satisfy customer's expectations.

- iv) **Exercise Leadership:** communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.
 - v) **Negotiate:** work toward agreements involving exchange of resources, resolve divergent interests.
 - vi) **Work with Diversity:** work well with men and women from diverse backgrounds.
- Examples: collaborate with a group member to solve a problem; work through a group conflict situation, train a colleague; deal with a dissatisfied customer in person; select and use appropriate leadership styles; use effective delegation techniques; conduct an individual or team negotiation; demonstrate an understanding of how people from different cultural backgrounds might behave in various situations.

c) **Information:** A worker must be able to acquire and use information.

- i) **Acquire and Evaluate Information.**
- ii) **Organize and Maintain Information.**
- iii) **Interpret and Communicate Information.**
- iv) **Use Computers to Process Information.**

Examples: research and collect data from various sources; develop a form to collect data; develop an inventory record-keeping system; produce a report using graphics; make an oral presentation using various media; use on-line computer data bases to research a report; use a computer spreadsheet to develop a budget.

d) **Systems:** A worker must understand complex interrelationships.

- i) **Understand Systems:** know how social, organizational, and technological systems work and operate effectively with them.
- ii) **Monitor and Correct Performance:** distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
- iii) **Improve or Design Systems:** suggest modifications to existing systems and develop new or alternative systems to improve performance.

Examples: draw and interpret an organizational chart; develop a monitoring process; choose a situation needing improvement, break it down, examine it, propose an improvement, and implement it.

e) **Technology:** A worker must be able to work with a variety of technologies.

- i) **Select Technology:** choose procedures, tools or equipment including computers and related technologies.
- ii) **Apply Technologies to Task:** understand overall intent and proper procedures for setup and operation of equipment.
- iii) **Maintain and Troubleshoot Equipment:** Prevent, identify, or solve problems with equipment, including computers and other technologies.

Examples: read equipment descriptions and technical specifications to select equipment to meet needs; set up and assemble appropriate equipment from instructions; read and follow directions for troubleshooting and repairing equipment.