SERIES PURPOSE:

THE PURPOSE OF THE INFORMATION TECHNOLOGY OCCUPATION IS TO DESIGN, WRITE, ANALYZE AND UPGRADE NEW AND/OR MODIFY EXISTING COMPUTER PROGRAMS AND/OR ANALYZE AND DESIGN AUTOMATED INFORMATION SYSTEMS IN ORDER TO SUPPORT THE AGENCY MISSION FOR BOTH INTERNAL AND EXTERNAL CUSTOMERS.

AT THE THREE LOWER LEVELS, INCUMBENTS WRITE & MAINTAIN SIMPLE COMPUTER PROGRAMS UNDER CLOSE SUPERVISION.

AT THE THREE HIGHER LEVELS, INCUMBENTS WRITE & MAINTAIN COMPUTER PROGRAMS AND/OR ANALYZE AND DESIGN COMPUTER SYSTEMS, OR ARE INVOLVED IN DEVELOPING AND EVALUATING LONG RANGE INFORMATION SYSTEM PLANS.

GLOSSARY: THE TERM BELOW IS TO BE INTERPRETED AS FOLLOWS WHEREVER IT APPEARS IN THE CLASSIFICATION SPECIFICATION.

ADVANCED (HIGH-LEVEL) PROGRAMMING LANGUAGE: A COMPUTER PROGRAMMING LANGUAGE THAT HAS SYNTAX AND GRAMMAR CRUDELY APPROXIMATING A NATURAL (HUMAN) LANGUAGE, SUCH AS ENGLISH, AND TYPICALLY REQUIRES TRANSLATION TO A LOW-LEVEL LANGUAGE THAT A COMPUTER CAN RECOGNIZE. SOFTWARE SUCH AS CRYSTAL REPORT WRITER, MICROSOFT FRONTPAGE AND THE LIKE DO NOT CONSTITUTE AN ADVANCED PROGRAMMING LANGUAGE.

ENTERPRISE WIDE: AGENCY-WIDE, WHICH INCLUDES ALL DECENTRALIZED LOCATIONS (E.G., INSTITUTIONS, DISTRICT OFFICES AND/OR REGIONAL OFFICES) OF THE EMPLOYING AGENCY.

PROGRAMMING LANGUAGE: A UNIQUE VOCABULARY AND SET OF RULES FOR WRITING COMPUTER PROGRAMS.

PROJECT MANAGEMENT: A SERIES OF STEPS FOLLOWED IN ORDER TO FORMULATE AND/OR IMPLEMENT PROJECT POLICY TO ENSURE SUCCESSFUL PROJECT DEVELOPMENT. THE STEPS INCLUDE: DEFINE THE PROBLEM (E.G., GATHER USER REQUIREMENTS; MEET WITH STAKEHOLDERS); DEVELOP POSSIBLE SOLUTIONS (E.G., FACILITATE BRAINSTORMING SESSIONS; IDENTIFY RESOURCE REQUIREMENTS; DEVELOP COST BENEFIT ANALYSIS; DEVELOP A RECOMMENDED SOLUTION; SEEK AGREEMENT TO PROCEED); DEVELOP A PROJECT PLAN (E.G., IDENTIFY MILESTONES AND CRITICAL DEPENDENCIES; GATHER APPROPRIATE RESOURCES AND SECURE COMMITMENT; FINALIZE FUNDING; ENCUMBER FUNDS; BUILD PROJECT PLAN; DISTRIBUTE PLAN FOR REVIEW) EXECUTE THE PLAN (E.G., PROVIDE ON-GOING STATUS REPORTS; RESPOND TO CHANGES IN SCOPE; COORDINATE DELIVERABLES; SUPERVISE PROJECT STAFF BOTH ASSIGNED AND AD HOC; DEFINE TEAM MEMBERS ROLES AND RESPONSIBILITIES; MANAGE TEAM; MAINTAIN PROJECT SCHEDULE; RESPOND TO PROBLEM); VALIDATION AND VERIFICATION (E.G., POST PROJECT FOLLOW UP AND REVIEW; UPDATE PLAN TEMPLATE; HOLD A LESSONS LEARNED DISCUSSION AND DOCUMENTATION SESSION; CLOSE OUT THE PROJECT). IF ASSIGNED, RESPONSIBILITY ALSO INCLUDES SUPERVISING, COORDINATING AND/OR MANAGING PERSONNEL ASSIGNED TO ONE WORK UNIT OR SECTION OR ACROSS MULTIPLE UNITS OR SECTIONS AND/OR CONTRACT STAFF.

WEB ARCHITECT: RESPONSIBILITIES INCLUDE THE FOLLOWING: DESIGNS AND ARCHITECTS INTERNAL AND EXTERNAL WEB SYSTEMS & SITES TO INCLUDE ALL TECHNICAL ASPECTS OF AGENCY'S WEB SITE AND PRIMARY/BACKUP SERVERS TO INCLUDE RECOMMENDING SERVER OPERATING SYSTEMS, HARDWARE AND SOFTWARE REQUIREMENTS AND ENCRYPTION STANDARDS FOR COMMUNICATIONS TO AND FROM SERVERS, AND RECOMMENDING STRATEGIES AND LEADING EFFORTS FOR CREATING WEB APPLICATION LINKS TO VARIOUS DATA BASE BACK ENDS, WORKS CLOSELY WITH CLIENT PROJECT MANAGERS AND TECHNICAL LEADERS TO UNDERSTAND CUSTOMERS' BUSINESS OBJECTIVES AND SYSTEMS REQUIREMENTS, ANALYZES FUNCTIONAL REQUIREMENTS AND STATE-OF-THE-ART, WELL-INTEGRATED AND COST-EFFECTIVE WEB SOLUTIONS, DEFINES AND DESIGNS WEB INFRASTRUCTURE, DESIGNS AND IMPLEMENTS AN INTERNET STRATEGY FOR AUTHORIZATION OF USERS TO ACCESS CONTROLLED COMPONENTS, DESIGNS RELATIONAL DATA BASES TO PERFORM WELL LOGICALY AND PHYSICALLY FOR DECISION SUPPORT, COORDINATES ENHANCEMENTS AND MAINTENANCE OF WEB SYSTEMS AND SITES, REVIEWS CUSTOMER REQUESTS FOR INFORMATION ACCESS AND USAGE, PROVIDES TECHNICAL ADVICE.
AND EXPERTISE TO INFORMATION TECHNOLOGY PROFESSIONALS IN THE INSTALLATION, ACCEPTANCE TESTING AND EVALUATION OR NEWLY RELEASED AND BETA SOFTWARE, AND ASSISTS/MENTORS CUSTOMERS IN THE DESIGN AND CONSTRUCTION OF THEIR WEB PAGES.

WEB SITE ADMINISTRATOR: RESPONSIBILITIES INCLUDE THE FOLLOWING: BUILDS, MANAGES AND MAINTAINS INTERNET AND INTRANET WEB SERVERS IN DESIGNATED COMPUTING ENVIRONMENT, PERFORMS TECHNICAL FUNCTIONS SUCH AS PERFORMANCE MONITORING AND TUNING (E.G., IDENTIFIES AND RESOLVES BOTTLENECKS; TUNES COMMON WEB QUERIES TO LEVERAGE INFORMATION DEMAND; PROACTIVELY RESEARCHES AND LOCATES NECESSARY TOOLS AND PROCESSES TO IDENTIFY TROUBLESOME TRENDS AS THEY DEVELOP; ANALYZES TRENDS AND WORKS WITH OTHER WEB PROFESSIONALS TO DEVELOP LONG-RANGE PLAN DESIGNED TO RESOLVE PROBLEMS AND PREVENT THEM FROM RECURRING), CAPACITY PLANNING (E.G., MONITORS FILE SYSTEM SPACE AND DATA BASE ALLOCATION; VERIFIES EFFICIENT USE OF DISK STORAGE, OPTIMIZES SPACE ALLOCATION AND AVOIDS OUT-OF-SPACE CONDITIONS; PROVIDES APPROPRIATE HARDWARE/SOFTWARE RESOURCES FOR WEB APPLICATIONS, INCLUDING THOSE WITH BACK-END RDBMS LINKS TO ENSURE ENOUGH RESOURCES FOR SHORT-TERM AND LONG-TERM GROWTH), SYSTEMS SUPPORT (E.G., PLANS, SETS PROCEDURES AND PROVIDES TECHNICAL OVERSIGHT TO ENSURE WEB SYSTEMS ARE MAINTAINED AT HIGHEST LEVEL OF SUPPORT; PROVIDES RELIABLE AND SECURE SYSTEMS FOR BUSINESS APPLICATIONS), PROBLEM RESOLUTION TRACKING (E.G., COORDINATES ROLE OF ENTERPRISE HELP DESK TO SUPPORT WEB COMPUTING ENVIRONMENT; ENSURES DATA PERTAINING TO STATUS OF PROBLEMS AND SERVICE REQUESTS AND CONCERNING INTERNAL AND EXTERNAL WEB USE IS ENTERED INTO PROBLEM TRACKING SYSTEM; PROVIDES CURRENT PICTURE OF SERVICE DELIVERY STATUS AND BACKLOG; ASSISTS IN CONTENT AND PRODUCTION OF ON-LINE HELP; PROVIDES APPLICATION SUPPORT AND OPTIMIZATION (E.G., ENSURES WEB APPLICATIONS RUN SUCCESSFULLY AND ARE OPTIMALLY TUNED TO MAXIMIZE USE OF SYSTEM RESOURCES WHILE MINIMIZING USER IMPACT; ASSISTS APPLICATION DEVELOPERS IN DETERMINING FIRST-LEVEL SUPPORT ROLE; PROVIDES TECHNICAL CONSULTATION, FACILITATION AND PERFORMANCE ANALYSIS SKILLS TO APPLICATION DEVELOPMENT GROUPS; RESOLVES PROBLEMS AND ANSWERS QUESTIONS RELATED TO WEB SYSTEM PLATFORM ENVIRONMENT), SOFTWARE UPGRADES AND PLANNING (E.G., ENSURES WEB ENVIRONMENT IS UPDATED WITH CURRENT, STABLE VERSIONS OF SOFTWARE PRODUCTS; MAINTAINS CURRENCY WITH OPERATING SYSTEM AND SUPPORT SOFTWARE; PLANS AND IMPLEMENTS MAJOR SOFTWARE UPGRADES; ENSURES CHANGE MANAGEMENT PROCEDURES AND METHODOLOGIES ARE IMPLEMENTED AND FOLLOWED), AND MAINTAINS THE DATA BACKUP/RECOVERY ENVIRONMENT (E.G., DEVELOPS TRANSACTION LOGGING AND BACKUP/RECOVERY FACILITIES AND PROCEDURES TO MAXIMIZE RECOVERABILITY FROM LOSS OF DATA CAUSED BY USER OF SYSTEM ERROR AND REDUCES HUMAN INTERVENTION AND MARGIN OF ERROR; RESPONDS QUICKLY TO REFRESH DATA; VERIFIES IMPLEMENTATION OF CORRECT BACKUP STRATEGY).

NOTE: ALL REQUIRED COURSES/COURSEWORK, TRAINING AND/OR EXPERIENCE CITED IN THE MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT MUST BE AT THE POST-SECONDARY EDUCATION LEVEL WHICH MEANS AFTER COMPLETION OF HIGH SCHOOL OR ITS EQUIVALENT.

CLASS TITLE: INFORMATION TECHNOLOGY SPECIALIST 1
CLASS NUMBER: 64111S
EFFECTIVE DATE: 05/05/2002
CLASS CONCEPT: THE ENTRY LEVEL CLASS WORKS UNDER IMMEDIATE SUPERVISION & REQUIRES SOME KNOWLEDGE OF COMPUTER SCIENCE, BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY, OR COMPARABLE FIELD OF STUDY, COMPUTER PROGRAMMING STANDARDS & METHODS, ADVANCED COMPUTER PROGRAMMING LANGUAGE, LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, COMPUTER SYSTEMS ANALYSIS & DESIGN IN ORDER TO LEARN TO WRITE, TEST, DEBUG & CORRECT/MODIFY SIMPLE/ELEMENTARY COMPUTER PROGRAMS & TO ASSIST HIGHER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS/ANALYSTS IN PROGRAM DEVELOPMENT OR PROBLEM-SOLVING.
CLASS TITLE: INFORMATION TECHNOLOGY SPECIALIST 2  CLASS NUMBER: 64112S

EFFECTIVE DATE: 05/05/2002

CLASS CONCEPT: THE DEVELOPMENTAL LEVEL CLASS WORKS UNDER GENERAL SUPERVISION & REQUIRES WORKING KNOWLEDGE OF COMPUTER SCIENCE, BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN COMPUTER PROGRAMMING STANDARDS & METHODS, ADVANCED COMPUTER PROGRAMMING LANGUAGE, LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, COMPUTER SYSTEMS ANALYSIS & DESIGN & BASIC DATA PROCESSING CONCEPTS IN ORDER TO WRITE, TEST, DEBUG & CORRECT/MODIFY SIMPLE/ELEMENTARY COMPUTER PROGRAMS ACCORDING TO SPECIFIC INSTRUCTIONS & UTILIZING HIGH-LEVEL COMPUTER LANGUAGE INDEPENDENTLY OR AS PART OF TEAM OF INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF, &/OR TO ASSIST HIGHER-LEVEL INFORMATION TECHNOLOGY PROFESSIONAL IN MAINTAINING DEVELOPED WEB ENVIRONMENT TO OPTIMIZE PERFORMANCE, RESOLVE PRODUCTION PROBLEMS, & MONITOR & CONTROL INFRASTRUCTURE PERFORMANCE IN AREAS OF RESPONSE, THROUGHPUT & AVAILABILITY, &/OR IN DESIGNING & ARCHITECTING WELL-INTEGRATED & COST EFFECTIVE SOLUTIONS FOR INTERNAL & EXTERNAL WEB SYSTEMS.

CLASS TITLE: INFORMATION TECHNOLOGY SPECIALIST 3  CLASS NUMBER: 64113S

EFFECTIVE DATE: 05/05/2002

CLASS CONCEPT: THE FULL PERFORMANCE LEVEL CLASS WORKS UNDER DIRECTION & REQUIRES CONSIDERABLE KNOWLEDGE OF COMPUTER SCIENCE, BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN COMPUTER PROGRAMMING STANDARDS & METHODS, ADVANCED PROGRAMMING LANGUAGE, LOGIC - BASED MATHEMATICS, DATA BASE CONCEPTS, COMPUTER SYSTEMS ANALYSIS & DESIGN & BASIC DATA PROCESSING CONCEPTS IN ORDER TO WRITE, ANALYZE & DESIGN SIMPLE TO MEDIUM COMPUTER PROGRAMS INDEPENDENTLY OR AS PART OF TEAM OF INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF, &/OR INDEPENDENTLY MAINTAIN DEVELOPED WEB ENVIRONMENT TO OPTIMIZE PERFORMANCE, RESOLVE PRODUCTION PROBLEMS, & MONITOR & CONTROL INFRASTRUCTURE PERFORMANCE IN AREAS OF RESPONSE, THROUGHPUT & AVAILABILITY.

CLASS TITLE: INFORMATION TECHNOLOGY ANALYST 1  CLASS NUMBER: 64114S

EFFECTIVE DATE: 05/05/2002

CLASS CONCEPT: THE FIRST ADVANCED LEVEL CLASS WORKS UNDER DIRECTION & REQUIRES THOROUGH KNOWLEDGE OF COMPUTER SCIENCE, BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN ADVANCED COMPUTER PROGRAMMING LANGUAGE, LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, BASIC DATA PROCESSING CONCEPTS; COMPUTER SYSTEMS ANALYSIS & PROGRAMMING STANDARDS & METHODS IN ORDER TO ASSIST IN DEVELOPING PROGRAM SPECIFICATIONS & WRITE, ANALYZE, DESIGN & TEST MEDIUM TO LARGE COMPUTER PROGRAMS UTILIZING HIGH-LEVEL COMPUTER LANGUAGE INDEPENDENTLY OR AS PART OF TEAM OF INFORMATION TECHNOLOGY SPECIALISTS & ANALYSTS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF, &/OR ANALYZE & DESIGN SMALL &/OR SIMPLE AUTOMATED INFORMATION SYSTEMS INDEPENDENTLY OR WITH ASSISTANCE FROM HIGHER-LEVEL ANALYSTS OR AS PART OF TEAM, &/OR ACT AS WEB ARCHITECT WITH RESPONSIBILITY FOR DESIGNING & ARCHITECTING WELL INTEGRATED & COST
EFFECTIVE SOLUTIONS FOR INTERNAL & EXTERNAL WEB SYSTEMS ENTERPRISE WIDE OR FOR ASSIGNED DIVISION OF EMPLOYING AGENCY.

**CLASS TITLE:**
INFORMATION TECHNOLOGY ANALYST 2

**CLASS NUMBER:**
64115S

**EFFECTIVE DATE:**
05/05/2002

**CLASS CONCEPT:**
THE SECOND ADVANCED LEVEL CLASS WORKS UNDER DIRECTION & REQUIRES THOROUGH KNOWLEDGE OF COMPUTER SCIENCE, BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, BASIC DATA PROCESSING CONCEPTS, COMPUTER SYSTEMS ANALYSIS & COMPUTER PROGRAMMING STANDARDS & METHODS IN ORDER TO WORK WITH END USERS TO DEFINE USER REQUIREMENTS & PROGRAM SPECIFICATIONS TO BE USED TO DEVELOP & WRITE/MODIFY LARGE &/OR COMPLEX COMPUTER PROGRAMS INDEPENDENTLY, AS PART OF TEAM OF OR AS TEAM LEADER OVER INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF, &/OR ANALYZE & DESIGN LARGE &/OR COMPLEX AUTOMATED INFORMATION SYSTEMS INDEPENDENTLY OR AS PART OF INFORMATION TECHNOLOGY TEAM, &/OR DESIGN WEB SITES TO INCLUDE RESPONSIBILITY FOR CONTENT, STYLE & QUALITY OF SITE IN COLLABORATION WITH AUTHORS, IMPLEMENT/INTEGRATE NEW TECHNOLOGIES TO INTERACT WITH DATA BASES & ACT AS WEB ADMINISTRATOR WITH LEAD RESPONSIBILITY FOR DAILY SYSTEMS ADMINISTRATION DUTIES RELATED TO EMPLOYING AGENCY’S INTERNAL & EXTERNAL WEB SITES ENCOMPASSING WEB SYSTEMS HARDWARE & OPERATING SYSTEM SERVER SOFTWARE.

**CLASS TITLE:**
INFORMATION TECHNOLOGY ANALYST 3

**CLASS NUMBER:**
64116S

**EFFECTIVE DATE:**
05/05/2002

**CLASS CONCEPT:**
THE THIRD ADVANCED LEVEL CLASS WORKS UNDER DIRECTION & REQUIRES THOROUGH KNOWLEDGE OF COMPUTER SCIENCE, BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN ADVANCED PROGRAMMING LANGUAGE, LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, BASIC DATA PROCESSING CONCEPTS, COMPUTER SYSTEMS ANALYSIS & COMPUTER PROGRAMMING STANDARDS & METHODS IN ORDER TO LEAD TEAM OF LOWER-LEVEL INFORMATION TECHNOLOGY ANALYSTS IN ANALYZING & DESIGNING FULL RANGE OF INFORMATION SYSTEMS; OR ANALYZE & DESIGN FULL RANGE OF INFORMATION SYSTEMS (E.G., CLIENT SERVER, MULTIPLE PLATFORMS & MAINFRAME) ALONE OR AS PART OF TEAM OR AS TEAM LEADER OVER INFORMATION TECHNOLOGY PERSONNEL &/OR CONTRACT EMPLOYEES & IF ASSIGNED, PERFORM SOME PROJECT MANAGEMENT FUNCTIONS (I.E., EXCLUDING FORMULATION &/OR IMPLEMENTATION OF POLICIES) IN ADDITION TO ONE OF PRECEDING OPTIONS.
EFFECTIVE DATE
05/05/2002

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

ATTENDS SEMINARS & CLASS CLASSES FOR TRAINING IN PROGRAMMING LANGUAGES & TECHNIQUES (I.E., PURPOSE OF TRAINING IS TO LEARN ELEMENTAL PROGRAM DESIGN & OR ELEMENTAL MAINTENANCE OF DEVELOPED WEB ENVIRONMENT & DESIGN REQUIRE USE OF ADVANCED PROGRAMMING LANGUAGE) & RESEARCHES & REFERS TO PROGRAMMING STANDARDS MANUAL OR TECHNICAL COMPUTER DOCUMENTATION TO ASSIST IN PROGRAM DEVELOPMENT OR PROBLEM-SOLVING.

SERVES ON TEAM WITH HIGHER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS & OR ANALYSTS, SYSTEMS PROGRAMMERS & OR OTHER TECHNICAL STAFF IN ORDER TO ASSIST IN MAINTENANCE, MODIFICATION & OR TESTING OF EXISTING COMPUTER PROGRAMS; ASSISTS IN PROBLEM ANALYSIS & CORRECTION; RESPONDS, UNDER DIRECTION OF SUPERVISOR & OR TEAM LEADER, TO REQUESTS FROM USERS FOR SAMPLE DATA EXTRACTS & SPECIAL REPORTS; ASSISTS IN INSTALLATION OF SYSTEM & TRAINING OF END USERS & COMMUNICATE IDEAS & PROBLEMS REGARDING PROGRAM DEVELOPMENT TO SUPERVISOR.

WRITES SIMPLE ON-LINE & OR BATCH COMPUTER PROGRAMS UTILIZING HIGH-LEVEL COMPUTER LANGUAGE (E.G., COBOL, DELPHI, DBASE, VISUAL C++] & OR JOB CONTROL LANGUAGE (I.E., JCL); LEARNS TO DEVELOP, DEBUG & TEST PROGRAMS WITH ASSISTANCE FROM HIGHER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS; WRITES BASIC PROGRAM DOCUMENTATION TO RECORD FUNCTION, PURPOSE & SPECIFICATIONS OF PROGRAMS & WRITES BASIC USER DOCUMENTATION & OR INSTRUCTION MANUALS.

MAJOR WORKER CHARACTERISTICS:

KNOWLEDGE OF DATA BASE CONCEPTS; BASIC DATA PROCESSING CONCEPTS; ADVANCED COMPUTER PROGRAMMING LANGUAGE; COMPUTER SYSTEMS ANALYSIS & DESIGN*; LOGIC-BASED MATHEMATICS. SKILL IN OPERATION OF COMPUTER TERMINAL & OR PERSONAL COMPUTER & PERIPHERAL EQUIPMENT (E.G., PRINTERS, MODEMS). ABILITY TO INTERPRET VARIETY OF INSTRUCTIONS IN WRITTEN, ORAL, PICTURE OR SCHEDULE FORM; READ TECHNICAL MANUALS & INSTRUCTIONS; GATHER, COLLATE & CLASSIFY INFORMATION ABOUT DATA, PEOPLE OR THINGS; COOPERATE WITH OTHERS ON GROUP PROJECTS.

(*) DEVELOPED AFTER EMPLOYMENT

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

1 COURSE OR 3 MOS. EXP. IN ADVANCED-LEVEL PROGRAMMING LANGUAGE (FOR EXAMPLE COBOL, DELPHI, JAVA, POWERBUILDER, VISUAL BASIC, PL 1, SAS PCS, PACBASE, FULL VISUAL SUITE, DESIGNER 2000, DEVELOPER 2000, C, C++, VISUAL C, ECL, OR VISUAL STUDIO) & OR JOB CONTROL LANGUAGE; 1 COURSE OR 3 MOS. EXP. IN LOGIC-BASED MATHEMATICS; 1 COURSE OR 3 MOS. ECP. IN DATA BASE CONCEPTS (FOR EXAMPLE ORACLE, MICROSOFT ACCESS, PARADOX, SYBASE, IMS DB, DB 2, CACHE, DMS, OR RDMS); 1 COURSE OR 3 MOS. EXP. IN BASIC DATA PROCESSING CONCEPTS. ALL COURSEWORK MUST BE COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AT OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

- OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

NOT APPLICABLE.
UNUSUAL WORKING CONDITIONS:
WORK INVOLVES OPERATION OF COMPUTER TERMINAL FOR LONG PERIODS OF TIME; OVERTIME MAY BE REQUIRED; TRAVEL MAY BE REQUIRED WHICH MAY INCLUDE OVERNIGHT STAY; MAY BE REQUIRED TO BE ON CALL 24 HOURS PER DAY, 7 DAYS PER WEEK.
JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

ADHERING TO DETAILED PROGRAM SPECIFICATIONS OR SUPERVISORY INSTRUCTIONS, INDEPENDENTLY WRITES NEW &/OR MODIFIES EXISTING SIMPLE COMPUTER PROGRAMS INDEPENDENTLY &/OR AS PART OF TEAM OF INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS, SYSTEMS PROGRAMMERS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF, DESIGNS LOGICAL FLOW OF PROGRAMS & DOCUMENTS DATA FLOW WITH SOME ASSISTANCE FROM HIGHER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS, DEBUGS & TESTS PROGRAM ADEQUACY, RECOMMENDS CHANGES TO PROGRAMS, TESTS COMPUTER GENERATED OUTPUTS, WRITES JOB CONTROL LANGUAGE TO CREATE PROGRAM PARAMETERS &/OR TO EXECUTE PROGRAMS, WRITES PROGRAM DOCUMENTATION & WRITES USER DOCUMENTATION &/OR INSTRUCTION MANUALS;

&/OR

ASSISTS HIGHER-LEVEL INFORMATION TECHNOLOGY PROFESSIONALS IN MAINTAINING DEVELOPED WEB ENVIRONMENT TO OPTIMIZE PERFORMANCE, RESOLVE PRODUCTION PROBLEMS, & MONITOR & CONTROL INFRASTRUCTURE PERFORMANCE IN AREAS OF RESPONSE, THROUGHPUT, & AVAILABILITY, &/OR IN DESIGNING & ARCHITECTING WELL INTEGRATED & COST EFFECTIVE SOLUTIONS FOR INTERNAL & EXTERNAL WEB SYSTEMS.

ATTENDS SEMINARS &/OR CLASSES FOR TRAINING IN PROGRAMMING LANGUAGES & TECHNIQUES OR IN NEW SOFTWARE DEVELOPMENTS (I.E., PURPOSE OF TRAINING IS TO DEVELOP & REFINE ESTABLISHED PROGRAMMING SKILLS & ENABLE INCUMBENTS TO WRITE MORE DIFFICULT PROGRAMS); RESEARCHES & REFERS TO PROGRAMMING STANDARDS MANUALS OR TECHNICAL COMPUTER DOCUMENTATION TO ASSIST IN PROGRAM DEVELOPMENT OR PROBLEM-SOLVING.

ANSWERS INQUIRIES FROM USERS & TROUBLESHOOTS COMPUTER-RELATED PROBLEMS (E.G., INCORRECT OUTPUT; HARDWARE DIFFICULTIES); TRAINS USERS IN USE OF PROGRAMS & COORDINATES WORK WITH DATA ENTRY &/OR PRODUCTION STAFF.

MAJOR WORKER CHARACTERISTICS:

KNOWLEDGE OF COMPUTER SCIENCE, OR BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY, MATHEMATICS OR COMPARABLE ACADEMIC MAJOR WHICH INCLUDED COURSEWORK IN ADVANCED COMPUTER PROGRAMMING LANGUAGE, LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, COMPUTER SYSTEMS ANALYSIS & DESIGN & BASIC DATA PROCESSING CONCEPTS. SKILL IN OPERATION OF COMPUTER TERMINAL &/ OR PERSONAL COMPUTER & PERIPHERAL EQUIPMENT (E.G., PRINTERS, MODEMS). ABILITY TO INTERPRET VARIETY OF TECHNICAL COMPUTER MANUALS & DOCUMENTATION; WRITE COMPUTER PROGRAM DOCUMENTATION & INSTRUCTION MANUALS; COMMUNICATE VERBALLY & IN WRITING ON TECHNICAL & NON-TECHNICAL MATTERS; GATHER, COLLATE & CLASSIFY INFORMATION ABOUT DATA, PEOPLE OR THINGS; WORK INDEPENDENTLY &/OR COOPERATE WITH OTHERS ON GROUP PROJECTS.

(*) DEVELOPED AFTER EMPLOYMENT
MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN COMPUTER SCIENCE, OR COMPLETION OF
UNDERGRADUATE CORE COURSEWORK IN ANY ACADEMIC MAJOR WHICH INCLUDED AT LEAST ONE COURSE
IN EACH OF FOLLOWING: ADVANCED-LEVEL PROGRAMMING LANGUAGE (FOR EXAMPLE, COBOL, DELPHI,
JAVA, POWERBUILDER, VISUAL BASIC, PL 1, SAS PCS, PACBASE, FULL VISUAL SUITE, DESIGNER 2000,
DEVELOPER 2000, C, C++, VISUAL C, ECL, OR VISUAL STUDIO), LOGIC-BASED MATHEMATICS, DATA BASE
CONCEPTS (FOR EXAMPLE, ORACLE, MICROSOFT ACCESS, PARADOX, SYBASE, IMS DB, DB2, CACHE, DMS,
OR RDMS), COMPUTER SYSTEMS ANALYSIS & DESIGN, & BASIC DATA PROCESSING CONCEPTS; ADDITIONAL
6 MOS. EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED
AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED
IN JOB POSTING.

-OR 2 1/2 YEARS (30 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES &
SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED
AS ADVERTISED IN JOB POSTING.

-OR 18 MOS. EXP. AS INFORMATION TECHNOLOGY SPECIALIST 1, 64111S.

-OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
NOT APPLICABLE.

UNUSUAL WORKING CONDITIONS:
WORK INVOLVES OPERATIONS OF COMPUTER TERMINAL FOR LONG PERIODS OF TIME; OVERTIME MAY BE
REQUIRED; TRAVEL MAY BE REQUIRED WHICH MAY INCLUDE OVERNIGHT STAY; MAY BE REQUIRED TO BE
ON-CALL 24 HOURS PER DAY, 7 DAYS PER WEEK.
JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

UTILIZING PROGRAM SPECIFICATIONS, WRITES NEW &/OR MODIFIES EXISTING SIMPLE TO MEDIUM COMPUTER PROGRAMS UTILIZING HIGH-LEVEL COMPUTER LANGUAGE INDEPENDENTLY &/OR AS PART OF TEAM OF INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS, SYSTEMS PROGRAMMERS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF, DESIGNS LOGICAL FLOW OF PROGRAMS & SEQUENTIAL OR INDEX FILES, DEBUGS & TESTS PROGRAM ADEQUACY, PERFORMS PROGRAMMING FUNCTIONS (E.G., COMPILE, FILE MAINTENANCE) WITH PROGRAM UTILITIES, TEST COMPUTER-GENERATED OUTPUTS, WRITES JOB CONTROL LANGUAGE TO CREATE PROGRAM PARAMETERS &/OR TO EXECUTE PROGRAMS, WRITES PROGRAM DOCUMENTATION & WRITES USER DOCUMENTATION &/OR INSTRUCTION MANUALS;

&/OR

INDEPENDENTLY MAINTAINS DEVELOPED WEB ENVIRONMENT TO OPTIMIZE PERFORMANCE, RESOLVE PRODUCTION PROBLEMS & MONITOR & CONTROL INFRASTRUCTURE IN AREAS OF RESPONSE, THROUGHPUT & AVAILABILITY SUCH AS CHECKING LINKAGES FOR CURRENCY, TROUBLESHOOTING BUGS & PROBLEMS, & DIAGNOSING & RESOLVING THEM, KEEPING LINKS TO INTERNET CURRENT, SEARCHING/FINDING NEW LINKS & ADDING THEM; ADDING STAFF LINKS & LINKS TO STAFF PAGE, CARRYING OUT WEB BROWSER FUNCTIONS TO INCLUDE WEB SEARCH, CREATING & EDITING GIF & JPG PICTURES, CREATING TRANSPARENT GIFS, CREATING CLICKABLE MAPS, SENDING EDITED WORK TO WEB SERVER, ASSISTING IN MONITORING PERFORMANCE/UTILIZATION TO SUPPORT CAPACITY, CONTENT & PRESENTATION PLANNING, ASSISTING HIGH-LEVEL INFORMATION TECHNOLOGY PROFESSIONALS IN MAINTAINING SITE-MAPPING FOR INTEGRITY & STABILITY OF CONTENT PUBLISHED ON PRODUCTION SERVER, ESTABLISHING METHOD TO EASILY COMPARE INSTALLATION PERFORMANCE AGAINST OBJECTIVES & CODING, TESTING & IMPLEMENTING METHODS, & DOCUMENTING CHANGES IN ACCORDANCE TO ESTABLISHED INFORMATION TECHNOLOGY STANDARDS.

ANALYZES & DESIGNS SMALL OR SIMPLE COMPUTER SYSTEMS OR PORTIONS OF LARGER SYSTEMS WITH SOME ASSISTANCE FROM HIGHER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS/ANALYSTS OR SUPERVISOR OR TEAM LEAD; ANALYZES USER NEEDS & EXISTING FUNCTIONS; ANALYZES HARDWARE & SOFTWARE ALTERNATIVES & RECOMMENDS SELECTION TO HIGHER-LEVEL AUTHORITY; WRITES SYSTEM DOCUMENTATION &/OR DESIGNS DATA BASE FILES.

PROVIDES TECHNICAL COMPUTER ASSISTANCE/INFORMATION TO USERS, LOWER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS &/OR OTHER TECHNICAL STAFF; TROUBLESHOOTS COMPUTER-RELATED PROBLEMS (E.G., INCORRECT OUTPUT, HARDWARE FAILURES); PERFORMS ROUTINE MAINTENANCE &/OR MINOR REPAIRS TO COMPUTER-RELATED EQUIPMENT (E.G., PRINTERS, CABLES) &/OR INSTALLS EQUIPMENT; TRAINS USERS IN USE OF PROGRAMS & COORDINATES WORK WITH DATA ENTRY &/OR PRODUCTION STAFF.

ATTENDS SEMINARS &/OR CLASSES FOR COMPUTER PROGRAMMING-RELATED TRAINING; READS LITERATURE TO STAY ABREAST OF EMERGING TRENDS & TECHNOLOGY; RESEARCHES & REFERS TO PROGRAMMING STANDARDS MANUALS OR TECHNICAL COMPUTER DOCUMENTATION TO ASSIST IN PROGRAM DEVELOPMENT, SYSTEM DESIGN &/OR PROBLEM-SOLVING & ATTENDS MEETINGS TO DISCUSS PROJECTS, POLICIES &/OR PROCEDURES; ASSISTS LOWER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS IN COMPUTER PROGRAMMING; LEARNS TO DESIGN WEB PAGES & INTEGRATE WITH OTHER TECHNOLOGIES; RESPONDS TO ON-LINE GENERATED QUESTIONS CONCERNING TECHNICAL OPERATIONS.

MAJOR WORKER CHARACTERISTICS:
KNOWLEDGE OF COMPUTER SCIENCE, OR BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS & BASIC DATA PROCESSING CONCEPTS & HIGH-LEVEL LANGUAGE COMPUTER PROGRAMMING; COMPUTER SYSTEMS ANALYSIS & DESIGN; COMPUTER HARDWARE SYSTEMS.
SKILL IN OPERATION OF COMPUTER TERMINAL &/OR PERSONAL COMPUTER & PERIPHERAL EQUIPMENT (E.G., PRINTERS, MODEMS). ABILITY TO INTERPRET VARIETY OF TECHNICAL COMPUTER MANUALS & DOCUMENTATION; WRITE COMPUTER PROGRAMS & SYSTEM DOCUMENTATION & INSTRUCTION MANUALS; COMMUNICATE VERBALLY & IN WRITING ON TECHNICAL & NON-TECHNICAL MATTERS; GATHER, COLLATE & CLASSIFY INFORMATION ABOUT DATA, PEOPLE OR THINGS; WORK INDEPENDENTLY &/OR COOPERATE WITH OTHERS ON GROUP PROJECTS.

(*) DEVELOPED AFTER EMPLOYMENT

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN COMPUTER SCIENCE, OR COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN ANY ACADEMIC MAJOR WHICH INCLUDED AT LEAST ONE COURSE IN EACH OF THE FOLLOWING: ADVANCED-LEVEL COMPUTER PROGRAMMING LANGUAGE (FOR EXAMPLE, COBOL, DELPHI, JAVA, POWERBUILDER, VISUAL BASIC, PL 1, SAS PCS, PACBASE, FULL VISUAL SUITE, DESIGNER 2000, DEVELOPER 2000, C, C++, VISUAL C, ECL, OR VISUAL STUDIO), LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS (FOR EXAMPLE, ORACLE, MICROSOFT ACCESS, PARADOX, SYBASE, IMS DB, DB2, CACHE, DMS, OR RDMS), COMPUTER SYSTEMS ANALYSIS & DESIGN, & BASIC DATA PROCESSING CONCEPTS; ADDITIONAL 18 MOS. EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 3 1/2 YEARS (42 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 12 MOS. EXP. AS INFORMATION TECHNOLOGY SPECIALIST 2, 64112S.

-OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
NOT APPLICABLE.

UNUSUAL WORKING CONDITIONS:
WORK INVOLVES OPERATIONS OF COMPUTER TERMINAL FOR LONG PERIODS OF TIME; OVERTIME MAY BE REQUIRED; TRAVEL MAY BE REQUIRED WHICH MAY INCLUDE OVERNIGHT STAY; MAY BE REQUIRED TO BE ON-CALL 24 HOURS PER DAY, 7 DAYS PER WEEK.
JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

ASSISTS IN DEVELOPMENT OF PROGRAM SPECIFICATIONS FOR & WRITES NEW &/OR MODIFIES EXISTING MEDIUM TO LARGE COMPUTER PROGRAMS INDEPENDENTLY &/OR AS PART OF TEAM OF INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS, SYSTEM PROGRAMMERS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF UTILIZING ADVANCE PROGRAMMING TECHNIQUES, PROGRAMMING LOGIC &/OR DATA BASE MANAGEMENT SYSTEMS PROGRAMMING & HIGH-LEVEL LANGUAGE COMPUTER PROGRAMMING (E.G., COBOL, DELPHI, DBASE, VISUAL C++), DESIGNS LOGICAL FLOW OF PROGRAMS & SEQUENTIAL OR INDEX FILES, DEBUGS & TESTS PROGRAM ADEQUACY, PERFORMS PROGRAM FUNCTIONS (E.G., COMPILE FILE MAINTENANCE) WITH PROGRAM UTILITIES, TESTS COMPUTER-GENERATED OUTPUTS, WRITES JOB CONTROL LANGUAGE TO CREATE PROGRAM PARAMETERS &/OR TO EXECUTE PROGRAMS, WRITES PROGRAM DOCUMENTATION & WRITES USER DOCUMENTATION &/OR INSTRUCTION MANUALS;

&/OR

ANALYZES & DESIGNS SMALL &/OR SIMPLE INFORMATION SYSTEMS INDEPENDENTLY OR WITH ASSISTANCE FROM HIGHER-LEVEL INFORMATION TECHNOLOGY ANALYSTS OR AS PART OF TEAM OF INFORMATION TECHNOLOGY PERSONNEL &/OR CONTRACT EMPLOYEES & ASSISTS IN ANALYSIS & DESIGN OF LARGE &/OR COMPLEX INFORMATION SYSTEMS (E.G., MEETS WITH USERS TO DISCUSS COMPUTER NEEDS; DEVELOPS SYSTEMS FOR PERSONAL COMPUTERS OR SYSTEMS TO GENERATE REPORTS IN PRODUCTION MODE; PREPARES ESTIMATES OF TIME, COST, SUPPLIES &/OR PERSONNEL; ANALYZES HARDWARE & SOFTWARE ALTERNATIVES & RECOMMENDS SELECTION TO USERS & HIGHER-LEVEL AUTHORITIES; DEVELOPS SYSTEM FLOW CHARTS; WRITES SYSTEM DOCUMENTATION, PROGRAM SPECIFICATIONS &/OR PRODUCTION PROCEDURES; DESIGNS SYSTEM TEST PROCEDURES; DESIGNS STORAGE FILES) & PROVIDES ON-GOING SYSTEM MAINTENANCE & EVALUATION;

&/OR

ACTS AS WEB ARCHITECT WITH RESPONSIBILITY FOR DESIGNING & ARCHITECTING WELL-INTEGRATED & COST-EFFECTIVE SOLUTIONS FOR INTERNAL & EXTERNAL WEB SYSTEMS ENTERPRISE WIDE OR FOR ASSIGNED DIVISION OF EMPLOYING AGENCY.

ANALYZES & DESIGNS LARGE COMPUTER SYSTEMS; ANALYZES USER NEEDS & EXISTING FUNCTIONS; ANALYZES HARDWARE & SOFTWARE ALTERNATIVES; WRITES SYSTEM DOCUMENTATION; DEVELOPS SYSTEM TEST DATA, MONITORS TEST RESULTS &/OR DESIGNS DATA BASE FILES; MAINTAINS DEVELOPED WEB ENVIRONMENT.

PROVIDES TECHNICAL COMPUTER ASSISTANCE/INFORMATION TO USERS; LEADS, ASSISTS &/OR TRAINS LOWER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS IN COMPUTER PROGRAMMING & SYSTEMS DESIGN; TROUBLESHOOTS & CORRECTS COMPUTER-RELATED PROBLEMS; PERFORMS ROUTINE MAINTENANCE &/OR INSTALLS EQUIPMENT; TRAINS USERS, COORDINATES WORK WITH DATA ENTRY &/OR PRODUCTION STAFF, RESEARCHES & REFERS TO TECHNICAL COMPUTER MANUALS FOR PROBLEM RESOLUTION; ATTENDS TRAINING CLASSES & SEMINARS; READS LITERATURE TO KEEP ABREAST OF EMERGING TRENDS & TECHNOLOGY; ATTENDS MEETINGS TO DISCUSS PROJECTS, POLICIES & PROCEDURES; ACTS AS TEAM LEADER OVER LOWER-LEVEL INFORMATION TECHNOLOGY PERSONNEL &/OR CONTRACT STAFF IN ABSENCE OF REGULAR TEAM LEADER OR FOR SPECIFIC COMPONENTS OF PROJECTS &/OR AS ASSIGNED.

MAJOR WORKER CHARACTERISTICS:

KNOWLEDGE OF COMPUTER SCIENCE, OR BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, BASIC DATA PROCESSING CONCEPTS & HIGH-LEVEL LANGUAGE COMPUTER PROGRAMMING; COMPUTER SYSTEMS ANALYSIS & DESIGN; COMPUTER HARDWARE SYSTEMS. SKILL IN OPERATION OF COMPUTER TERMINAL &/OR PERSONAL COMPUTER & PERIPHERAL EQUIPMENT
(E.G., PRINTERS, MODEMS). ABILITY TO INTERPRET VARIETY OF TECHNICAL COMPUTER MANUALS & DOCUMENTATION; WRITE COMPUTER PROGRAMS & SYSTEM DOCUMENTATION & INSTRUCTION MANUALS; COMMUNICATE VERBALLY & IN WRITING ON TECHNICAL & NON-TECHNICAL MATTERS; GATHER, COLLATE & CLASSIFY INFORMATION ABOUT DATA, PEOPLE OR THINGS; WORK INDEPENDENTLY &/OR COOPERATE WITH OTHERS ON GROUP PROJECTS.

(*) DEVELOPED AFTER EMPLOYMENT

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN COMPUTER SCIENCE, OR COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN ANY ACADEMIC MAJOR WHICH INCLUDED AT LEAST ONE COURSE IN EACH OF THE FOLLOWING: ADVANCED-LEVEL COMPUTER PROGRAMMING LANGUAGE (FOR EXAMPLE, COBOL, DELPHI, JAVA, POWERBUILDER, VISUAL BASIC, PL 1, SAS PCS, PACBASE, FULL VISUAL SUITE, DESIGNER 2000, DEVELOPER 2000, C, C++, VISUAL C, ECL, OR VISUAL STUDIO), LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS (FOR EXAMPLE, ORACLE, MICROSOFT ACCESS, PARADOX, SYBASE, IMS DB, DB2, CACHE, DMS, OR RDMS), COMPUTER SYSTEMS ANALYSIS & DESIGN, & BASIC DATA PROCESSING CONCEPTS; ADDITIONAL 2 1/2 YEARS (30 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 4 1/2 YEARS (54 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 12 MOS. EXP. AS INFORMATION TECHNOLOGY SPECIALIST 3, 64113S.

-OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
NOT APPLICABLE.

UNUSUAL WORKING CONDITIONS:
WORK INVOLVES OPERATIONS OF COMPUTER TERMINAL FOR LONG PERIODS OF TIME; OVERTIME MAY BE REQUIRED; TRAVEL MAY BE REQUIRED WHICH MAY INCLUDE OVERNIGHT STAY; MAY BE REQUIRED TO BE ON-CALL 24 HOURS PER DAY, 7 DAYS PER WEEK.
EFFECTIVE DATE
05/05/2002

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

WORKS WITH END USERS TO DEFINE USER REQUIREMENTS IN ORDER TO DEVELOP PROGRAM SPECIFICATIONS & DEVELOP & WRITE LARGE COMPUTER PROGRAMS INDEPENDENTLY OR AS PART OF TEAM OF OR AS TEAM LEADER OVER INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS, SYSTEMS PROGRAMMERS &/OR OTHER PROGRAM/TECHNICAL STAFF &/OR CONTRACT STAFF, TRAINS LOWER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS &/OR ANALYSTS IN WORK FUNCTIONS & STANDARDS, ASSISTS STAFF IN SOLVING PROBLEMS & PARTICIPATES IN DEVELOPING AUTOMATED SYSTEMS, UNIT &/OR PROJECT STANDARDS, POLICIES &/OR PROCEDURES;

ANALYZES & DESIGNS LARGE &/OR COMPLEX INFORMATION SYSTEMS ALONE OR AS PART OF TEAM OF INFORMATION TECHNOLOGY PERSONNEL &/OR CONTRACT EMPLOYEES (E.G., WORKS WITH END USERS TO DEFINE USER REQUIREMENTS; ANALYZES USER NEEDS & EXISTING FUNCTIONS TO DETERMINE FEASIBILITY & REQUIREMENTS FOR COMPUTERIZATION SUCH AS HARDWARE CONFIGURATIONS, PERIPHERAL EQUIPMENT, MAINTENANCE SUPPORT, MAINFRAME INTERFACE, MODEM COMMUNICATIONS & MEMORY STORAGE DEVICES; PREPARES ESTIMATES OF TIME, COST, SUPPLIES &/OR PERSONNEL; ANALYZES HARDWARE & SOFTWARE ALTERNATIVES & RECOMMENDS SELECTION TO USERS & HIGHER-LEVEL AUTHORITIES; DEVELOPS SYSTEM FLOW CHARTS; WRITES PROGRAM SPECIFICATIONS & SYSTEM DOCUMENTATION; DESIGNS SYSTEM TEST PROCEDURES & TESTS SYSTEM FOR VALIDITY & RELIABILITY; DESIGNS DATA BASE &/OR VSAM DATA FILES; DESIGNS SOFTWARE ADAPTATIONS) & PROVIDES ON-GOING SYSTEM MAINTENANCE & EVALUATION;

DESIGNS WEB SITES TO INCLUDE RESPONSIBILITY FOR CONTENT, STYLE & QUALITY OF SITES IN COLLABORATION WITH AUTHORS, IMPLEMENTS/INTEGRATES NEW TECHNOLOGIES TO INTERACT WITH DATA BASES, & ACTS AS WEB SITE ADMINISTRATOR WITH LEAD RESPONSIBILITY FOR DAILY SYSTEMS ADMINISTRATION DUTIES RELATED TO EMPLOYING AGENCY'S INTERNAL & EXTERNAL WEB SITES ENCOMPASSING WEB SYSTEMS HARDWARE & OPERATING SYSTEM SERVER SOFTWARE.

WRITES NEW &/OR MODIFIES EXISTING LARGE & COMPLEX COMPUTER PROGRAMS UTILIZING ADVANCE PROGRAMMING TECHNIQUES, PROGRAMMING LOGIC &/OR DATA BASE MANAGEMENT SYSTEMS PROGRAMMING & HIGH-LEVEL LANGUAGE COMPUTER PROGRAMMING (E.G., COBOL, DELPHI, DBASE, VISUAL C++); DESIGNS LOGICAL FLOW OF PROGRAMS & SEQUENTIAL OR INDEX FILES; DEBUGS & TESTS PROGRAM ADEQUACY; PERFORMS PROGRAMMING FUNCTIONS (E.G., COMPILE, FILE MAINTENANCE) WITH PROGRAM UTILITIES; TESTS COMPUTER-GENERATED OUTPUTS; WRITES JOB CONTROL LANGUAGE TO CREATE PROGRAM PARAMETERS &/OR TO EXECUTE PROGRAMS; WRITES PROGRAM DOCUMENTATION & WRITES USER DOCUMENTATION &/OR INSTRUCTION MANUALS; INTERACTS WITH CONTENT PROVIDERS; MAINTAINS DEVELOPED WEB ENVIRONMENT &/OR DESIGNS & ARCHITECTS INTERNAL & EXTERNAL WEB SYSTEMS ENTERPRISEWIDE.

ANALYZES & DESIGNS LARGE COMPUTER SYSTEMS; ANALYZES USER NEEDS & EXISTING FUNCTIONS; ANALYZES HARDWARE & SOFTWARE ALTERNATIVES; WRITES SYSTEM DOCUMENTATION; DEVELOPS SYSTEM TEST DATA, MONITORS TEST RESULTS &/OR DESIGNS DATA BASE FILES; MAINTAINS SITE-MAPPING FOR INTEGRITY & STABILITY OF CONTENT PUBLISHED ON PRODUCTION SERVER; RECOMMENDS POLICIES ON WEB STYLE, CONTENT, PROCEDURES, TECHNOLOGY &/OR SECURITY; MAKES RECOMMENDATIONS TO MANAGEMENT FOR BUDGETING TO SATISFY RESOURCE NEEDS; CONFIGURES, MONITORS & MAINTAINS WEB-SERVER; MAINTAINS WEB PAGES; CREATES & MAINTAINS CURRENT LINKS TO INTERNAL & EXTERNAL WEB-BASED INFORMATION; DESIGNS & PRODUCES GRAPHICS & PUBLICATIONS FOR ELECTRONIC PRINT MEDIA WHEN NECESSARY.

PROVIDES TECHNICAL COMPUTER ASSISTANCE/INFORMATION TO USERS; LEADS, ASSISTS &/OR TRAINS
LOWER-LEVEL INFORMATION TECHNOLOGY SPECIALISTS IN COMPUTER PROGRAMMING & SYSTEMS DESIGN; TROUBLESHOOTS & CORRECTS COMPUTER-RELATED PROBLEMS; PERFORMS ROUTINE MAINTENANCE &/OR INSTALLS EQUIPMENT; TRAINS USERS; COORDINATES WORK WITH DATA ENTRY &/OR PRODUCTION STAFF, RESEARCHES & REFERS TO TECHNICAL COMPUTER MANUALS FOR PROBLEM RESOLUTION; ATTENDS TRAINING CLASSES & SEMINARS & ATTENDS MEETINGS TO DISCUSS PROJECTS, POLICIES &/OR PROCEDURES; PARTICIPATES IN EVALUATION & SELECTION OF HARDWARE & SOFTWARE INFRASTRUCTURE; READS LITERATURE TO KEEP ABDREST OF EMERGING TRENDS & TECHNOLOGY; TAKES LEAD IN RESPONDING TO ON-LINE GENERATED QUESTIONS REGARDING ORGANIZATION & CONTENT OF WEB SPACE & COORDINATES OTHER STAFF REPLIES REGARDING TECHNICAL OPERATIONAL QUESTIONS & POLICY QUESTIONS.

MAJOR WORKER CHARACTERISTICS:
KNOWLEDGE OF COMPUTER SCIENCE, OR BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS, BASIC DATA PROCESSING CONCEPTS & HIGH-LEVEL LANGUAGE COMPUTER PROGRAMMING; COMPUTER SYSTEMS ANALYSIS & DESIGN; COMPUTER HARDWARE SYSTEMS. SKILL IN OPERATION OF COMPUTER TERMINAL &/OR PERSONAL COMPUTER & PERIPHERAL EQUIPMENT (E.G., PRINTERS, MODEMS). ABILITY TO INTERPRET VARIETY OF TECHNICAL COMPUTER MANUALS & DOCUMENTATION; WRITE COMPUTER PROGRAMS & SYSTEM DOCUMENTATION & INSTRUCTION MANUALS; COMMUNICATE VERBALLY & IN WRITING ON TECHNICAL & NON-TECHNICAL MATTERS; GATHER, COLLATE & CLASSIFY INFORMATION ABOUT DATA, PEOPLE OR THINGS; WORK INDEPENDENTLY &/OR COOPERATE WITH OTHERS ON GROUP PROJECTS.

(*) DEVELOPED AFTER EMPLOYMENT

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN COMPUTER SCIENCE, OR COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN ANY ACADEMIC MAJOR WHICH INCLUDED AT LEAST ONE COURSE IN EACH OF THE FOLLOWING: ADVANCED-LEVEL COMPUTER PROGRAMMING LANGUAGE (FOR EXAMPLE, COBOL, DELPHI, JAVA, POWERBUILDER, VISUAL BASIC, PL 1, SAS PCS, PACBASE, FULL VISUAL SUITE, DESIGNER 2000, DEVELOPER 2000, C, C++, VISUAL C, ECL, OR VISUAL STUDIO), LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS (FOR EXAMPLE, ORACLE, MICROSOFT ACCESS, PARADOX, SYBASE, IMS DB, DB2, CACHE, DMS, OR RDMS), COMPUTER SYSTEMS ANALYSIS & DESIGN, & BASIC DATA PROCESSING CONCEPTS; ADDITIONAL 3 1/2 YEARS (42 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 5 1/2 YEARS (66 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 12 MOS. EXP. AS INFORMATION TECHNOLOGY ANALYST 1, 64114S.

-OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
NOT APPLICABLE.

UNUSUAL WORKING CONDITIONS:
WORK INVOLVES OPERATIONS OF COMPUTER TERMINAL FOR LONG PERIODS OF TIME; OVERTIME MAY BE REQUIRED; TRAVEL MAY BE REQUIRED WHICH MAY INCLUDE OVERNIGHT STAY; MAY BE REQUIRED TO BE ON-CALL 24 HOURS PER DAY, 7 DAYS PER WEEK.
EFFECTIVE DATE
05/05/2002

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)
LEADS (I.E., PROVIDES WORK DIRECTION & TRAINING) TEAM OF LOWER-LEVEL INFORMATION TECHNOLOGY ANALYSTS IN ANALYZING & DESIGNING FULL RANGE OF INFORMATION SYSTEM, ASSISTS STAFF IN RESOLVING DIFFICULT PROBLEMS BY PROVIDING TECHNICAL ASSISTANCE, RECEIVES USER REQUESTS & ASSIGN & OR REVIEWS WORK, OVERSEES PREPARATION OF SYSTEM & USER DOCUMENTATION, ENFORCES COMPLIANCE WITH SYSTEM DESIGN STANDARDS & RECOMMENDS CHANGES IN UNIT/SECTION PROCEDURES & OR STANDARDS;

OR

ANALYZES & DESIGNS FULL RANGE OF INFORMATION SYSTEMS (E.G., CLIENT SERVER, MULTIPLE PLATFORMS & MAINFRAME).

ANALYZES & DESIGNS LARGE & OR COMPLEX INFORMATION SYSTEMS (E.G., ANALYZES USER NEEDS & EXISTING FUNCTIONS TO DETERMINE FEASIBILITY & REQUIREMENTS FOR COMPUTERIZATION SUCH AS HARDWARE CONFIGURATIONS, PERIPHERAL EQUIPMENT, MAINTENANCE SUPPORT, MAINFRAME INTERFACE, MODEM COMMUNICATIONS, MEMORY STORAGE DEVICES; PREPARES ESTIMATES OF TIME, COST, SUPPLIES & OR PERSONNEL; ANALYZES HARDWARE & SOFTWARE ALTERNATIVES & DETERMINES SELECTION; DEVELOPS SYSTEM FLOW CHARTS; WRITES PROGRAM SPECIFICATIONS & SYSTEM DOCUMENTATION; DESIGNS TEST PROCEDURES & TESTS SYSTEM FOR VALIDITY & RELIABILITY; DESIGNS DATA BASE & OR VSAM DATA FILES; DESIGNS SOFTWARE ADAPTATIONS, PROVIDES ON-GOING SYSTEM MAINTENANCE & EVALUATION & WRITES COMPUTER PROGRAMS IN HIGH-LEVEL COMPUTER LANGUAGE; ON IN DAS’ OFFICE OF POLICY & PLANNING, CARRIES OUT RELATED TASKS TO FACILITATE STATEWIDE POLICY & PLANNING FUNCTIONS (E.G., INVESTIGATES INFORMATION SYSTEMS TECHNOLOGY FOR POSSIBLE APPLICATIONS IN STATE GOVERNMENT; CONSULTS WITH AGENCY REPRESENTATIVES TO ENSURE EFFECTIVE USE OF INFORMATION SYSTEM RESOURCES).

ESTABLISHES & MAINTAINS USER CONTACTS; SERVES AS LIAISON WITH STATE, COUNTY & OR FEDERAL REPRESENTATIVES, VENDORS & OR CONTRACTORS; INSTRUCTS & TRAINS USERS IN OPERATION & PROCEDURES FOR NEW SYSTEMS; ATTENDS SEMINARS & OR CLASSES.

MAJOR WORKER CHARACTERISTICS:
KNOWLEDGE OF COMPUTER SCIENCE, OR BUSINESS OR PUBLIC ADMINISTRATION, DATA PROCESSING, ENGINEERING, GEOLOGY OR COMPARABLE FIELD WHICH INCLUDED COURSEWORK IN FOLLOWING: LOGIC-BASED MATHEMATICS, DATA BASE CONCEPTS & BASIC DATA PROCESSING CONCEPTS & HIGH-LEVEL LANGUAGE COMPUTER PROGRAMMING; COMPUTER SYSTEMS ANALYSIS, DESIGN; COMPUTER HARDWARE SYSTEMS; PROJECT MANAGEMENT*, SKILL IN OPERATION OF COMPUTER TERMINAL & OR PERSONAL COMPUTER & PERIPHERAL EQUIPMENT (E.G., PRINTERS, MODEMS). ABILITY TO INTERPRET VARIETY OF TECHNICAL COMPUTER MANUALS & DOCUMENTATION; WRITE COMPUTER PROGRAMS & SYSTEM DOCUMENTATION & INSTRUCTION MANUALS; COMMUNICATE VERBALLY & IN WRITING ON TECHNICAL & NON-TECHNICAL MATTERS; GATHER, COLLATE & CLASSIFY INFORMATION ABOUT DATA, PEOPLE OR THINGS; WORK INDEPENDENTLY & OR COOPERATE WITH OTHERS ON GROUP PROJECTS.

(*) DEVELOPED AFTER EMPLOYMENT.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN COMPUTER SCIENCE, OR COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN ANY ACADEMIC MAJOR WHICH INCLUDED AT LEAST ONE COURSE IN EACH OF THE FOLLOWING: ADVANCED-LEVEL COMPUTER PROGRAMMING LANGUAGE (FOR EXAMPLE, COBOL, DELPHI, JAVA, POWERBUILDER, VISUAL BASIC, PL 1, SAS PCS, PACBASE, FULL VISUAL SUITE, DESIGNER 2000, DEVELOPER 2000, C, C++, VISUAL C, ECL, OR VISUAL STUDIO), LOGIC-BASED MATHEMATICS,
DATA BASE CONCEPTS (FOR EXAMPLE, ORACLE, MICROSOFT ACCESS, PARADOX, SYBASE, IMS DB, DB2, CACHE, DMS, OR RDMS), COMPUTER SYSTEMS ANALYSIS & DESIGN, & BASIC DATA PROCESSING CONCEPTS; ADDITIONAL 4 1/2 YEARS (54 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 6 1/2 YEARS. (78 MOS.) EXP. COMMENSURATE WITH JOB DUTIES TO BE PERFORMED & KNOWLEDGES & SKILLS REQUIRED AS OUTLINED IN APPROVED POSITION DESCRIPTION ON FILE FOR POSITION TO BE FILLED AS ADVERTISED IN JOB POSTING.

-OR 12 MOS. EXP. AS INFORMATION TECHNOLOGY ANALYST 2, 64115S.

-OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT: NOT APPLICABLE.

UNUSUAL WORKING CONDITIONS:
WORK INVOLVES OPERATIONS OF COMPUTER TERMINAL FOR LONG PERIODS OF TIME; OVERTIME MAY BE REQUIRED; TRAVEL MAY BE REQUIRED WHICH MAY INCLUDE OVERNIGHT STAY; MAY BE REQUIRED TO BE ON-CALL 24 HOURS PER DAY, 7 DAYS PER WEEK.