



## **STATE OF COLORADO**

### **CLASS SERIES DESCRIPTION**

**July 1, 2001**

### **LABORATORY TECHNOLOGY**

C8D1TX TO C8D4XX

#### **DESCRIPTION OF OCCUPATIONAL WORK**

This class series uses four levels in the Health Care Services Occupational Group and describes technical and professional laboratory duties in support of medical, dental, academic, and research staff. The work involves collecting and preparing tissues and samples for testing and evaluation, processing specimens, performing tests, analyzing and reporting test results, calibrating and maintaining precision laboratory equipment, preparing standard and non-standard culture media and reagents, and maintaining quality assurance standards. This series includes positions that design, fabricate, maintain, and repair specialized medical equipment or fixed and removable dental appliances and prosthodontics. The work may include classroom and laboratory instruction and demonstration. Some positions may require certification.

**INDEX:** Laboratory Technology I begins on this page, Laboratory Technology II begins on page 2, Laboratory Technology III begins on page 4, Laboratory Technology IV begins on page 5.

#### **LABORATORY TECHNOLOGY I**

C8D1TX

#### **CONCEPT OF CLASS**

This class describes the full-operating technician responsible for performing routine tests and procedures and/or preparing specimens and tissue for testing. Positions operate independently in performing the full scope of routine, standardized tests, procedures and problem solving. Positions follow established work procedures and operate within standard guidelines and alternatives. Some assignments will not move beyond this level.

## **CLASS SERIES DESCRIPTION (Cont'd.)**

### **LABORATORY TECHNOLOGY**

**July 1, 2001**

#### **FACTORS**

**Allocation must be based on meeting all of the four factors as described below.**

**Decision Making** -- The decisions regularly made are at the defined level as described here. Within limits prescribed by the operation, choices involve selecting alternatives that affect the manner and speed with which tasks are carried out. These choices do not affect the standards or results of the operation itself because there is typically only one correct way to carry out the operation. These alternatives include independent choice of such things as priority and personal preference for organizing and processing the work, proper tools or equipment, speed, and appropriate steps in the operation to apply. By nature, the data needed to make decisions can be numerous but are clear and understandable so logic is needed to apply the prescribed alternative. Positions can be taught what to do to carry out assignments and any deviation in the manner in which the work is performed does not change the end result of the operation.

**Complexity** -- The nature of, and need for, analysis and judgment is prescribed as described here. Positions apply established, standard guidelines that cover work situations and alternatives. Action taken is based on learned, specific guidelines that permit little deviation or change as the task is repeated. Any alternatives to choose from are clearly right or wrong at each step.

**Purpose of Contact** -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication are for the purpose of exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve factual problems, errors, or complaints.

**Line/Staff Authority** -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

## **LABORATORY TECHNOLOGY II**

**C8D2XX**

#### **CONCEPT OF CLASS**

This class describes the full-operating technician responsible for performing non-routine tests and procedures. Positions operate independently in performing the full scope of non-routine tests and procedures. Work requires determining solutions to practical problems using specified professional standards and established criteria. Judgment is used to select and apply existing guidelines to solve problems and accomplish the assignment. Some assignments do not move beyond this level. Laboratory Technology II differs from Laboratory Technology I on Decision Making, Complexity, Purpose of Contact and possibly on Line/Staff Authority.

## **CLASS SERIES DESCRIPTION (Cont'd.)**

### **LABORATORY TECHNOLOGY**

**July 1, 2001**

#### **FACTORS**

**Allocation must be based on meeting all of the four factors as described below.**

**Decision Making** -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices.

**Complexity** -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study information to determine what it means and how it fits together in order to get practical solutions to problems. Guidelines in the form of standard operating procedures, methods, and techniques exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines that may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation.

**Purpose of Contact** -- The purpose of contacts with outside the supervisory chain, regardless of the method of communication, are for the purpose of detecting or discovering information or problems by interviewing or investigating where the issues or results of the contact are not known ahead of time.

**Line/Staff Authority** -- The direct field of influence the work of a position has on the organization is as an individual contributor or work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

**OR**

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and workflow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

**CLASS SERIES DESCRIPTION (Cont'd.)**

**LABORATORY TECHNOLOGY**

**July 1, 2001**

**LABORATORY TECHNOLOGY III**

C8D3XX

**CONCEPT OF CLASS**

This class describes the fully operational professional technologist level. At this level, positions perform non-routine analytical techniques that require the modification of laboratory or testing procedures in order to accomplish the work. Judgment is used in the adaptation and skilled application of guidelines to solve the full range of problems related to the assignment. Laboratory Technology III differs from Laboratory Technology II on Complexity and possibly Line/Staff Authority.

**FACTORS**

**Allocation must be based on meeting all of the four factors as described below.**

**Decision Making** -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices.

**Complexity** -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies.

**Purpose of Contact** -- The purpose of contacts with outside the supervisory chain, regardless of the method of communication, are for the purpose of detecting or discovering information or problems by interviewing or investigating where the issues or results of the contact are not known ahead of time.

**Line/Staff Authority** -- The direct field of influence the work of a position has on the organization is as an individual contributor or work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

**OR**

## **CLASS SERIES DESCRIPTION (Cont'd.)**

### **LABORATORY TECHNOLOGY**

**July 1, 2001**

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and workflow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

### **LABORATORY TECHNOLOGY IV**

C8D4XX

#### **CONCEPT OF CLASS**

This class describes the unit supervisor. Positions have responsibility for administering a laboratory including staffing, training, quality control, and developing and implementing laboratory processes, operations and standards. Laboratory Technology IV differs from Laboratory Technology on Decision Making and Line/Staff Authority.

#### **FACTORS**

**Allocation must be based on meeting all of the four factors as described below.**

**Decision Making** -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

**Complexity** -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies.

**Purpose of Contact** -- The purpose of contacts with outside the supervisory chain, regardless of the method of communication, are for the purpose of detecting or discovering information or problems by interviewing or investigating where the issues or results of the contact are not known ahead of time.

## **CLASS SERIES DESCRIPTION (Cont'd.)**

### **LABORATORY TECHNOLOGY**

**July 1, 2001**

**Line/Staff Authority** -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

### **DEFINITIONS**

Technician – A person who is trained in specific process or technique.

Technologist – A person who applies the entire body of methods, materials, processes, and techniques of an applied science.

### **ENTRANCE REQUIREMENTS**

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

### **CLASS SERIES HISTORY**

Effective 7/1/01 (LLB). HCS Consolidation Study consolidated Dental Lab Tech (C3G), Histology Tech (C4A), Lab Tech (C4B5-6) and Med Tech (C4C). Draft published 2/21/01, proposed 5/10/01, and final 7/1/01.

Effective 9/1/93 (KAS). Job Evaluation System Revision project. Created Dental Lab Tech (C3G1). Converted Dental Lab Tech/Instructor from A5206 to C3G2. Converted Histology Tech from A5413-5 to C4A. Converted Lab Tech from A5427-8,11 to C4B5-6. Converted Med Tech A5421-4,6 to C4C. Published as proposed 5/10/93.

Revised 9/1/86. Converted Lab Tech from A5410 to A5428.

Created 7/1/83. Med Tech (A5423).

Created 7/1/77. Dental Lab Tech (55206).

Created 7/1/75. Med Tech (55421,2,4,6). Lab Tech (55411, 27-8), Histology Tech (55413-5).

**CLASS SERIES DESCRIPTION (Cont'd.)**

**LABORATORY TECHNOLOGY**

**July 1, 2001**

**SUMMARY OF FACTOR RATINGS**

<b>Class Level</b>	<b>Decision Making</b>	<b>Complexity</b>	<b>Purpose of Contact</b>	<b>Line/Staff Authority</b>
Laboratory Technology I	Defined	Prescribed	Exchange	Indiv. Contributor
Laboratory Technology II	Operational	Patterned	Detect	Indiv. Contributor or Work Leader
Laboratory Technology III	Operational	Formulative	Detect	Indiv. Contributor or Work Leader
Laboratory Technology IV	Process	Formulative	Detect	Unit Supervisor

ISSUING AUTHORITY: Colorado Department of Personnel/General Support Services