

## Draft Classification Standards – Rev 11/15/2024

### Instructional Support Technician – Science & Engineering

Class Title	Class Code	Issue Date	FLSA
<i>Instructional Support Technician I – Science &amp; Engineering</i>	XXXX	XXXX	<i>Non-Exempt</i>
<i>Instructional Support Technician II – Science &amp; Engineering</i>	XXXX	XXXX	<i>Non-Exempt</i>
<i>Instructional Support Technician III – Science &amp; Engineering</i>	XXXX	XXXX	<i>Non-Exempt</i>

#### OVERVIEW:

Positions classified within the Instructional Support Technician – Science & Engineering classification series are responsible for providing a range of laboratory and instructional support functions to faculty and students within the following disciplines: life science, physical science, social science, engineering, health and medicine, and related science fields such as kinesiology and environmental science. Incumbents support classroom and laboratory instruction by developing and implementing laboratory/technical exercises; procuring equipment and supplies; scheduling; maintaining, configuring, and repairing laboratory/technical equipment; providing instruction and assistance to students; and performing operations specific to the science and engineering disciplines. Incumbents ensure compliance of laboratory functions with all relevant federal and state standards and university policies.

#### TYPICAL PROGRAMS, ACTIVITIES, AND CORE FUNCTIONS/DISCIPLINES (*May include but are not limited to*):

- **Technology and Equipment Support:** Provides technical support and assistance to faculty, staff, and students in the use of scientific equipment and technology for teaching and research purposes. Sets up, maintains, and troubleshoots laboratory equipment and specialized equipment specific to area of responsibility, ensuring that it is working properly and meets safety standards. Stays updated on the latest advancements in scientific equipment and technology as well as provides recommendations for equipment upgrades or replacements.
- **Laboratory Preparation:** Collaborates with faculty to prepare and organize laboratory materials, supplies, exercises, and experiments, ensuring they are ready for instructional purposes. Prepares chemicals and materials for instructional or research purposes at the request of faculty. Maintains clean and safe working practices and spaces in all laboratories.
- **Instructional Support:** Collaborates with faculty to develop and implement instructional strategies. Provides subject matter specific instruction to students. Oversees and assigns work to students and student employees. Conducts laboratory and classroom demonstrations when appropriate.
- **Compliance:** Enforces and monitors compliance with safety regulations, including compliance with specific regulations and documentation such as hazardous and radioactive material use standards. Maintains required documentation for department

assets. Responsible for collection, proper handling, and safe disposal of chemicals and other hazardous materials used in labs and research.

- **Administration:** Coordinates with other departments and units. Schedules instructional spaces and equipment, acting as a point of contact for students needing access to materials. Maintains organization of instructional spaces inclusive of all equipment and materials.
- **Training:** Conducts training sessions and workshops for faculty, staff, and students on the proper use and maintenance of laboratory and discipline specific equipment. Provides demonstrations of laboratory exercises when required.
- **Supply Management and Procurement:** Procures or assists in the procurement process for materials, supplies, and equipment required for laboratory and/or courses. Maintains inventory records of laboratory/instructional equipment, supplies, and materials. Ensures proper storage of all potentially hazardous materials. Assists in stockroom requests from various parties.

## **INSTRUCTIONAL SUPPORT TECHNICIAN I – SCIENCE & ENGINEERING**

Under general supervision, provides materials, supplies, equipment, and instruction support. Utilizes knowledge of classroom methods, procedures, and practices as well as knowledge of science and engineering instruction and laboratory practices to perform laboratory and equipment setup and maintenance tasks following established procedures. Work is reviewed for understanding of concepts and adherence to policies and procedures.

### ***Work assignments typically include some or all of the following:***

- ◆ Collaborates with faculty to support classroom management and instruction.
- ◆ Assists faculty in the development of new and existing laboratory exercises.
- ◆ Responsible for cleanliness and proper maintenance of all laboratory and storage facilities including participating in year-end lab cleanup.
- ◆ Collects, handles, and records disposal of hazardous materials in the appropriate manner.
- ◆ Issues, stores, orders, and inventories materials, supplies, and equipment including participating in year-end inventory of all materials.
- ◆ Coordinates schedules for use of laboratory rooms, computer labs, and related instructional resources.
- ◆ Operates scientific equipment and provides faculty and students with assistance in interpreting results.
- ◆ Conducts routine maintenance on laboratory and scientific equipment.
- ◆ Provides support services for classroom management and instruction such as distributing equipment and maintaining records and files.
- ◆ Monitors laboratory compliance with university safety policies and procedures.

## **MINIMUM QUALIFICATIONS:**

### ***Knowledge and Skill:***

- ◆ General knowledge of laboratory methods and instructional support services including university safety protocols.

- ◆ General knowledge of the relevant scientific curriculum, techniques, and skills necessary to prepare specialized materials for assigned lab/instruction.
- ◆ Proficiency in operating standard office equipment as well as computer skills to include use of word processing, spreadsheet, and related software packages.
- ◆ Strong attention to detail and accuracy in record-keeping.
- ◆ Organizational and time management skills to organize and prioritize work.
- ◆ Ability to work independently and as part of a team and exercise tact and courtesy with diverse stakeholders.
- ◆ Ability to evaluate materials and supplies to meet instructional needs.
- ◆ Ability to adjust and make minor repairs to scientific equipment and/or laboratory equipment.
- ◆ Ability to operate scientific and/or technical equipment.
- ◆ Good written, verbal, and interpersonal skills to provide explanation and interpretation of procedures.

***Experience and Education:***

A combination of experience and education which provides the above knowledge and abilities which at minimum includes two years of experience providing instructional support services, acting as a student employee, or providing laboratory technician experience to include producing materials or supplies related to the discipline. Equivalency of two years of college with 16 semester units in relevant courses may be substituted for one year of required experience, or four years of college with 16 semester units in relevant courses may be substituted for two years of required experience.

**INSTRUCTIONAL SUPPORT TECHNICIAN II – SCIENCE & ENGINEERING**

Under general supervision, performs duties in a wide range of procedures. Work is reviewed for soundness of technical judgment. Applies thorough knowledge and understanding of laboratory methods and practices. Responsible for providing technical support for laboratories and resources affiliated with science and engineering disciplines. May be involved in oversight and maintenance for one of the smaller laboratories, instructional facilities, or related assets within science and engineering.

***In addition to duties performed by the Instructional Support Technician I – Science & Engineering, the Instructional Support Technician II – Science & Engineering typically performs the following duties:***

- ◆ Works with faculty to design and implement laboratory exercises, including providing teaching support when necessary.
- ◆ Troubleshoots and adapts experiments that do not work according to instructions.
- ◆ Oversees maintenance of all assigned laboratory spaces and is directly responsible for the organization of the laboratory.
- ◆ Oversees the maintenance of instructional and laboratory equipment with the ability to conduct minor repairs on scientific equipment and related systems.
- ◆ Creates chemical compounds, cultures, and other necessary pre-creation materials for student use in labs.
- ◆ Maintains viability and quality control of compounds, cultures, and other pre-creation materials and ensures appropriate stockroom conditions.

- ◆ Develops data collection programs as needed to support laboratory and classroom instruction and activities.
- ◆ Provides instructional and safety training to all students and student employees, including training on how to use essential laboratory equipment.
- ◆ Maintains training and related compliance documentation.
- ◆ Directly supervises and trains student employees in the safe handling of hazardous or technical materials and equipment.
- ◆ Provides guidance to student employees and students for instructional exercises.
- ◆ Provides resolution to problems that require judgment within defined practices and procedures to determine appropriate action.
- ◆ Sources and orders required materials for instructional/laboratory exercises ensuring suitability of materials to meet specific requirements.
- ◆ Develops and maintains a system for inventory to ensure appropriate availability of supplies without excess inventory.
- ◆ Maintains financial records for the assigned laboratory or facility.

#### **MINIMUM QUALIFICATIONS:**

#### ***In addition to Instructional Support Technician I – Science & Engineering knowledge and skill requirements, work assignments typically require:***

- ◆ Working knowledge and understanding of laboratory methods and instructional support services.
- ◆ Working knowledge of the relevant science and/or engineering curriculum necessary for assigned lab/classroom. Inclusive of ability to conduct any required laboratory demonstrations.
- ◆ Strong organizational and time management skills to organize and prioritize work.
- ◆ Strong written, verbal, and interpersonal skills to provide explanation and interpretation of procedures.
- ◆ Ability to provide detailed technical instruction to diverse audiences.
- ◆ Ability to adjust and make repairs to scientific equipment and/or highly technical laboratory equipment.
- ◆ Knowledge of relevant safety procedures and protocols relevant to discipline.
- ◆ Mathematical ability to perform all calculations relevant and required by the position.

#### ***Experience and Education:***

A combination of experience and education which provides the above knowledge and abilities which at minimum includes three years of experience providing instructional support services, acting as a student employee, or providing laboratory technician experience to include producing materials or supplies related to the discipline. Equivalency of two years of college with 16 semester units in relevant courses may be substituted for one year of required experience, or four years of college with 16 semester units in relevant courses may be substituted for two years of required experience.

### **INSTRUCTIONAL SUPPORT TECHNICIAN III – SCIENCE & ENGINEERING**

Working independently under general supervision, applies comprehensive knowledge of laboratory and instructional procedures and practices. Oversees the operations of one or multiple aspects of science and engineering laboratories, instructional facilities, or related assets.

Responsibilities often span multiple curriculums and require extensive knowledge. Explains practices, procedures, and policies. Often provides guidance and coaching to others.

***In addition to duties performed by the Instructional Support Technician II – Science & Engineering, the Instructional Support Technician III – Science & Engineering typically performs the following duties:***

- ♦ Works with faculty and students to develop new instructional offerings and/or complex laboratory experiences.
- ♦ Works independently and directly with vendors, departments, and procurement services to ensure required materials are available and ready for use. Plans and develops systems for acquisition and dispensing of materials. Develops specifications for new equipment. Frequently researches resources and vendors to purchase unique materials or equipment.
- ♦ Responsible for oversight, maintenance and service of living specimens, cultures, and related compounds. Ensures laboratories and stockrooms maintain appropriate conditions including being on call to address emergencies. Researches the requirements needed for unique situations or substances.
- ♦ Provides direction and training to staff and student employees including other instructional support technicians.
- ♦ Reviews and approves schedules and documentation prepared by less-experienced staff.
- ♦ Maintains laboratory financial records and prepares reports for the assigned laboratory or facility.
- ♦ Oversees and monitors the maintenance of instructional and laboratory equipment. Maintains maintenance schedule for all laboratory and technical equipment, including service contracts, processing annual renewals, maintaining service records, and auditing records for accuracy.
- ♦ Oversees selection, installation, and maintenance of discipline specific technology on department owned computers.
- ♦ Supports graduate student and faculty research activities by providing documentation and data analysis.
- ♦ Guides faculty, staff, and students on unique safety protocols and concerns as well as ensures compliance. Maintains and updates lab specific safety manuals and procedures.
- ♦ Performs all functions related to laboratory oversight.

**MINIMUM QUALIFICATIONS:**

***In addition to Instructional Support Technician II – Science & Engineering knowledge and skill requirements, work assignments typically require:***

- ♦ Thorough and advanced knowledge and understanding of laboratory methods, procedures, and policies as well as support services.
- ♦ Thorough and advanced knowledge of relevant laboratory, scientific, and instructional equipment, including the ability to instruct others on its uses and perform both routine and complex repairs.
- ♦ Thorough and advanced knowledge of relevant curriculum within the science and engineering disciplines as well as relevant laboratory curriculum.
- ♦ Thorough knowledge of university safety policies and procedures.
- ♦ Advanced organizational and time management skills.
- ♦ Advanced communication and interpersonal skills.

- ◆ Thorough knowledge of relevant safety procedures and protocols.
- ◆ Skill in mentoring, training, or overseeing the work of other staff.

***Experience and Education:***

A combination of experience and education which provides the above knowledge and abilities which at minimum includes four years of experience providing instructional support services, acting as a student employee, or providing laboratory technician experience to include producing materials or supplies related to the discipline. Equivalency of two years of college with 16 semester units in relevant courses may be substituted for one year of required experience, or four years of college with 16 semester units in relevant courses may be substituted for two years of required experience.

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