

Position Description Form (PDF)

College: Sir Sandford Fleming

Incumbent's Name:

Position Title: HVAC/HRAC/Plumbing Technologist

Pay band: J

Position Code/Number (if applicable): S00595

Scheduled No. of Hours: 37.5 per week

Appointment Type: ☒ 12 months ☐ Less than 12 months (please specify # months: _____)

Supervisor's Name and Title: Operations Manager, School of Trades and Technology

Completed by:

PDF Date: November 24, 2021

Signatures:

Incumbent:
(Indicates the incumbent has read and understood the PDF)

Date:

Supervisor:

Date:

Instructions for Completing the PDF

1. Read the form carefully before completing any of the sections.
2. Answer each section as completely as you can based on the typical activities or requirements of the position and not on exceptional or rare requirements.
3. If you have any questions, refer to the document entitled "A Guide on How to Write Support Staff Position Description Forms" or contact your Human Resources representation for clarification.
4. Ensure the PDF is legible.
5. Responses should be **straightforward and concise using simple factual statements**.

Position Summary

Provide a concise description of the overall purpose of the position.

This position supports academic program delivery by:

- Supporting lab activities to facilitate student success, while working to ensure a safe environment for students, faculty, and staff.
- Ensuring Heating, Refrigeration, Ventilation and Plumbing related equipment and supplies are maintained and functioning for use as per the academic schedule.
- Providing assistance to faculty in the labs by reinforcing previously taught concepts.
- Maintaining purchasing and inventory of materials for Heating, Refrigeration, Ventilation and Plumbing programs that are required for Academic delivery and safe working of labs.
- Support the capital planning process by working with faculty and Operations Manager to execute approved capital plan by purchasing, installing, maintaining records (financial and equipment information) to support student learning outcomes.
- Working with faculty to develop and prototype new lab equipment, trainers and simulators to support development and delivery of courses in the Heating, Refrigeration, Ventilation and Plumbing programs. Incorporate any curriculum/project changes based on curriculum and any newly developed labs.
- Work with Dual Credit program and subject coordinators to organize, order, prepare tools, equipment and consumables. Logistical planning with more than 15 high schools for delivery at their sites and in person at Fleming College to ensure all job boxes containing tools, equipment and orders of consumables arrive on time. Work directly with faculty delivering courses to ensure student learning outcomes are met.

The main areas of focus are identified as:

- Maintain, repair and update applied learning and/or lab equipment, tools, work stations, trainers in support of student learning.

- Order and inventory lab related equipment and supplies includes capital purchases and consumables for all HVT, Plumbing and Dual Credit courses.
- Provide learning and program delivery support and technical services for faculty and students.
- Health & Safety Compliance and Review related to Labs.

Duties and Responsibilities

Indicate as clearly as possible the significant duties and responsibilities associated with the position. Indicate the approximate percentage of time for each duty. Describe duties rather than detailed work routines.

1. Order and inventory lab related equipment, tools, consumables and supplies. Consults with faculty and Chair on equipment, tools, consumables and other supplies to be purchased and collaborates with the Financial and Apprenticeship Officer and Operations Manager regarding budget for all purchases including Apprenticeship Enhancement Fund. Following college procedures and guidelines, orders equipment and supplies through purchasing and/or direct from vendors, obtaining quotes as applicable. Prepare purchase order requisitions, manage and receive products and assign department #'s and account codes. Financially responsible for a corporate Visa card, and ensures spending within limits and reconciles account monthly. Consults suppliers to ensure best value for products and equipment on a regular basis. Maintains an inventory of equipment and supplies sufficient to support ongoing course and lab requirements, and maintains inventory records using school processes. Performs cost/benefit analysis for inventory or equipment options as required. Continuously works to reduce our material waste (by reducing consumable purchases) and improve recycling programs within the HVT and Plumbing labs. Works with faculty to update labs with the intention to use consumables within labs, then reuse the pieces in another lab (with a shorter length) reducing overall course and program costs. Regularly picks up and delivers equipment and supplies as required. Operates a forklift to put received supplies into appropriate lab or storage area. Working with faculty, creates bills of materials (and costs each item 1200+) for all lab projects and for each course (20+) and facilitating creating kits or class packages where appropriate. Assesses current trainer boards and recommends cost saving solutions for upgrades and modifications as required. Works with the bookstore to provide students kits and required course materials. Works with outside specialty suppliers/vendors to provide donations, demonstrations on leading edge industry technology. Collaborates with faculty on capital plan submissions, capital plan purchases and implements capital plan projects in HVT and Plumbing labs. Assists with determining capital requirements due to new programming or end-of-life projections of equipment, completes life-cycle analysis to feed back into the capital planning process. Works with purchasing on OECEM purchases, request for quotes, competitive tender documents, awarding purchase orders and following up on delivery schedules.	Approximate % of time annually* 20%
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2. Maintain and repair applied learning and/or lab equipment. Inspect, troubleshoot, repair, calibrate, replace all equipment, tools and workstations (boilers, furnaces, air handlers, water heaters, air conditioners, oil tanks, refrigeration trainers, pumps, gas stoves, gas dryers, roof tops air handling units, fuel supply systems). When necessary arrange for external repairs where necessary. Fabricates parts, tools and other items as required. Equipment types typically include a variety of electrical and hand tools e.g. HVAC trainers, Specialized Plumbing Equipment etc. Maintains the digital collection of supplier operator manuals, service manuals, parts catalogs, repair history records and equipment inventory records. Establishes and follows preventative maintenance schedules and processes. Arranges for the inspection and certification of equipment and tools in accordance with industry regulations and standards. Makes lab alterations for deliver of projects within each lab.	20%
3. Provide Learning and Program Delivery Support and Technical services for Faculty and Students. Works with faculty in the lab, to reinforce to students concepts taught by faculty. Collaborates and works with faculty to improve labs for students to enhance learning outcomes (i.e. creates wiring diagrams, piping schematics, visual aids, etc.). Demonstrates the appropriate use of equipment, supplies and services and provides training as required to faculty and students. Works with faculty to design/build new training equipment or devices. Researches equipment requests from faculty that support a wide variety of new classroom initiatives, student projects and curriculum. Assists students in researching and procuring parts for special or applied projects and any lab or equipment modifications to align with curriculum development, and provides input in design or construction where appropriate. Assists students with difficulties related to classroom assignments by reinforcing previously taught concepts. Design solutions to equipment and inventory challenges. Incorporate all Capital Plan projects within the lab, modify lab/equipmnet layout to enhance the student learning outcomes (including equipment or projects funded by other sources). Diagnose and repair equipment on demand during lab sessions. Obtain and set up special lab equipment and supplies. Perform tests and/or dry runs on lab exercises to verify the desired outcome and results. Creates equipment operating instructions (e.g. reference guides) for faculty and student reference. Collaborates with suppliers/vendors to arrange training seminars of leading-edge technology/equipment/tools to enhance student learning outcomes. Assists in orientation of new faculty and students to the lab operations. Collaborates with the Operations Manager and assists with assigning work to part-time technicians and student workers. Supports and ensures safe lab delivery as required.	50%
4. Health & Safety. Facilitates implementation of safety and cleanliness standards per College and School requirements. Creates and update equipment work instructions, safety manuals and the SDS library. Identifies potential safety issues and recommends/ implements appropriate solutions. Conducts laboratory inspections and implements and coordinates corrective action to ensure compliance with external governing bodies (TSSA and College of Trades 3rd party program and lab audits). Ensures the safe storage, handling and disposal of hazardous waste materials. Follows the College WHMIS process and administers the MSDS library for the HRAC	5%

and plumbing programs, ensuring newly acquired materials have current MSDS forms on file. Updates H&S Information board as required.	
Other related duties as assigned	5%

* To help you estimate approximate percentages:

½ hour a day is 7%

1 hour a day is 14%

1 hour a week is 3%

½ day a week is 10%

½ day a month is 2%

1 day a month is 4%

1 week a year is 2%

1. Education

A. Check the box that best describes the **minimum** level of **formal** education that is required for the position and specify the field(s) of study. Do not include on-the-job training in this information.

- | | | |
|--|--|---|
| ☐ Up to High School or equivalent | ☐ 1 year certificate or equivalent | ☒ 2 year diploma or equivalent |
| ☐ Trade certification or equivalent | ☐ 3 year diploma / degree or equivalent | ☐ 4 year degree or 3 year diploma / degree plus professional certification or equivalent |
| ☐ Post graduate degree (e.g. Masters) or 4 years degree plus professional certification or equivalent | | |
| ☐ Doctoral degree or equivalent | | |

Field(s) of Study:

One or more of the following trades represented in the School: Heating, Refrigeration, Ventilation and Plumbing or equivalent

B. Check the box that best describes the requirement for specific course(s), certification, qualification, formal training or accreditation in addition to and not part of the education level noted above and in the space provided specify the additional requirement(s). Include only the requirement that would typically be included in the job posting and would be acquired prior to the commencement of the position. Do not include courses that are needed to maintain a professional designation.

- ☐ No additional requirements

- ☐ Additional requirements obtained by

course(s) of a total of 100 hours or less	
☐ Additional requirements obtained by course(s) of a total between 101 and 520 hours	
☒ Additional requirements obtained by course(s) of a total of more than 520 hours	Gas Technician License (G2), Air Conditioning Technician (313D), Oil Burner Technician (OBT3)

2. Experience

Experience refers to the minimum time required in prior position(s) to understand how to apply the techniques, methods and practices necessary to perform this job. This experience may be less than experience possessed by the incumbent, as it refers only to the minimum level required on the first day of work.

Check the box that best captures the typical number of year of experience, in addition to the necessary education level, required to perform the responsibilities of the position and, in the space provided, describe the type of experience. Include any experience that is part of a certification process, but only if the work experience or on-the-job training occurs after the conclusion of the educational course or program.

- ☐ Less than one (1) year
- ☐ Minimum of one (1) year
- ☐ Minimum of two (2) years
- ☐ Minimum of three (3) years

☒ Minimum of five (5) years

Experience troubleshooting, maintaining and repairing a variety of equipment related to the Plumbing or Heating, Refrigeration, Ventilation trades. Experience working independently with minimum supervision within a team environment. Experience with various computer software programs including spreadsheets, word processing and inventory software. Experience with inventory systems/control and purchasing. Experienced problem solver with excellent interpersonal skills and strong oral and written communication skills. Experience planning and organizing own work as well as setting and meeting deadlines. Experience working in an environment where health and safety is a main consideration. Experience reading blueprints and schematics. Analytical and

calculation abilities. Knowledge of the best practices and MOL standards for maintenance of equipment such as fume extraction, gas detection etc. Experience fabricating and constructing various devices and assemblies. Leadership experience.

Preferred:

Experience in an educational or training environment, especially providing faculty and student assistance in a learning environment. Training in Ozone Depletion Prevention, Heating Refrigeration Air Conditioning Institute (HRAI), Standard First Aid and Operation of Small Drinking Water Systems are assets.

- Minimum of eight (8) years

3. Analysis and Problem Solving

This section relates to the application of analysis and judgement within the scope of the position.

The following charts help to define the level of complexity involved in the analysis or identification of situations, information or problems, the steps taken to develop options, solutions or other actions and the judgement required to do so.

Please provide up to three (3) examples of analysis and problem solving that are regular and recurring and, if present in the position, up to two (2) examples that occur occasionally:

#1 regular & recurring

Key issue or problem encountered.

Machine malfunction requiring attention or equipment replacement while classes are in session.

Decisions must be made during repair as to the advisability of continuing (and risking damage to the equipment) or calling in expert technicians. Also, care must be exercised not to violate manufacturer's warranties.

How is it identified?

Contact from faculty / students

Observation – equipment not working

Is further investigation required to define the situation and/or problem? If so, describe.

Yes, diagnostic, problem solving, and researching skills supported by knowledge or deduction of theory of operation required to define symptoms and isolate the root cause.

Explain the analysis used to determine a solution(s) for the situation and/or problem.

Identifying and isolating symptoms, diagnosing with test equipment, verifying causes, potential remedies and returning to safe use.

What sources are available to assist the incumbent finding solution(s)? (eg. past practices, established standards or guidelines).

- Machine/service manuals
- Past practices / experience
- Internet
- Engineering drawings

3. Analysis and Problem Solving

#2 regular & recurring

Key issue or problem encountered

During Program support activities in the labs, provide advice and guidance to students who are looking to clarify assignment particulars, obtain understanding of material presented in labs and lectures, obtain supplementary materials for completing assignments, and obtain assurance that study approach for assignments is correct.

How is it identified?

Observed by Faculty and/or Technologist
Student self identifies

Is further investigation required to define the situation and/or problem? If so, describe.

Assists the student through coaching to discover answers or a solution path to solve the problem, ensuring the student is satisfied and able to proceed with assignments.

Explain the analysis used to determine a solution(s) for the situation and/or problem.

Incumbent will explain concept, equipment or procedure and work through the problem with the student together. Will often loan student texts or advise how to research material to find resources/information to complete assignment. If dealing with unfamiliar material, will often research and learn material with the student assisting, then solve the problem together. Incumbent must respond to the student while considering their role in supporting student learning and reinforcing previously taught concepts, as opposed to introducing new material.

What sources are available to assist the incumbent finding solution(s)? (eg. past practices, established standards or guidelines).

Curriculum
Course Outlines.
Faculty
Internet
Personal knowledge and training, texts, equipment manuals, industry contacts, faculty handouts and notes
Past experience

#3 regular & recurring

Key issue or problem encountered	Issues relating to inventory e.g. unexpected shortage
How is it identified?	Inventory system reporting, inventory management system. Manual stock counting Outages reported by faculty or students. Technologist 's assessment of materials
Is further investigation required to define the situation and/or problem? If so, describe.	Yes – would need to assess the reasons for over-use or a shortfall, and provide feedback to Faculty. Verify what is required, the quantity and the required delivery date, time and location. Negotiate and ensure best price and delivery by obtaining quotes.
Explain the analysis used to determine a solution(s) for the situation and/or problem.	All inventory locations and labs to be checked for stock, verify the reason(s) for outages to prevent reoccurrence, identify improvements in the inventory system to prevent stock-outs, verify supplier delivery times
What sources are available to assist the incumbent finding solution(s)? (eg. past practices, established standards or guidelines).	Usage and order history, inventory tracking, lab exercises, bill of materials, cycle counting of inventory, course offering timing.

3. Analysis and Problem Solving

#4 regular and reoccurring

Key issue or problem encountered	Integration of new equipment or practices into the program. Incumbent will design, under Faculty direction, new student projects and assignments that are practical to deliver, cost effective and meet learning outcomes.
How is it identified?	New concepts or general ideas are identified by faculty, chair, technologists or students.
Is further investigation required to define the situation and/or problem? If so, describe.	Feedback is sought from others within the college, industry contacts, employers and technologists at other colleges to assist judging the appropriateness of the new technology for the program and course. Additional research is required to determine the best concepts to develop to a pilot stage to verify the required deliverables.
Explain the analysis used to determine a solution(s) for the situation and/or problem.	The project concept is developed into a project scope with clear documented deliverables. The team agrees on the approaches to be attempted to develop a pilot. Cost estimates

What sources are available to assist the incumbent finding solution(s)? (eg. past practices, established standards or guidelines).

are approved by the Chair to proceed with this stage.
The incumbent must research, create, develop and test prototypes and evaluate whether integration of the new material is practical and logistically possible. Considerations must be made for staffing resources, supply needs, ability to build in-house or contract out, cost and time constraints. The team evaluates the prototype(s) against the project scope to determine the final solution.
Once the solution is determined, the work plan and cost to construct all the required units must be put in place and implemented.

On-line research, equipment manufacturers and distributors, technical publications, other colleges and universities.

#1 occasional

Key issue or problem encountered

Co-operative projects with external agencies (WSIB, Ministry, TSSA, OWQA, OWWA, OPIA, OCOT) which may include external lab inspections, health and safety compliance audits.

How is it identified?

Contact by agency or Association.

Is further investigation required to define the situation and/or problem? If so, describe.

Incumbent is required to inspect the labs and equipment for preventative maintenance including pre-inspections before external audits When follow up action is correction is required, for example the lab does not pass inspection or equipment needs to be repaired prior to inspection, the Technologist would be responsible for implementing and coordinating corrective actions to ensure compliance and arranging for re-inspection by outside agency.

Explain the analysis used to determine a solution(s) for the situation and/or problem.

Incumbent would be required to research the most appropriate corrective action while collaborating with faculty and/or consult with others e.g.:regulatory bodies, best practices, policies of the College, proactive correction of potential hazards.

What sources are available to assist the incumbent finding solution(s)? (eg. past practices, established standards or guidelines).

- standards e.g. health and safety policies (Provincial and College), TSSA inspection codes, CSA Standards, Ontario Building Code, Regulations and Laws related to Ontario and Canadian Standards.
- past experience
- Consultation with Ministry of Labour officials, Chair, Program Coordinator, Operations Manager, other outside and external

stakeholders as required e.g. Finance re: insurance policies

4. Planning/Coordinating

Planning is a proactive activity as the incumbent must develop in advance a method of acting or proceeding, while coordinating can be more reactive in nature.

Using the following charts, provide up to three (3) examples of planning and/or coordinating that are regular and recurring and, if present in the position, up to two (2) examples that occur occasionally:

#1 regular & recurring

List the project and the role of the incumbent in this activity.

The incumbent plans and coordinates equipment purchasing and inventory to ensure an adequate supply of equipment and parts for existing direct replacement for the Heating, Refrigeration, Ventilation and Plumbing programs. New purchases will be coordinated with faculty input and management approval.

What are the organizational and/or project management skills needed to bring together and integrate this activity?

The incumbent must possess knowledge of each course's needs and the equipment on hand as well as a strong understanding of the capabilities of a variety of equipment/devices/parts. Must be very detail oriented and have excellent tracking and forecasting abilities.

List the types of resources required to complete this task, project or activity.

Written directions from course outlines, course schedules, lab plans, technical drawings from faculty and/or coordinators.

How is/are deadline(s) determined?

School and course schedules, budget timing.

Who determines if changes to the project or activity are required? And who determines whether these changes have an impact on others? Please provide concrete examples.

Technologist determines solution options, and discusses change with coordinators, Chair and Operations Manager to determine if others are affected, such as in the case of replacing a part in a student assignment that may affect the lab exercises or assessments.

Inventory levels should be maintained based on usage data as observed by the Technologist.

4. Planning/Coordinating

#2 regular & recurring

List the project and the role of the incumbent in this activity.

Maintaining equipment in safe and peak working order according to operator's instructions and preventative

What are the organizational and/or project management skills needed to bring together and integrate this activity?	maintenance schedule. Dependant on equipment and frequency of use per preventative maintenance (PM) schedules and processes. Incumbent will utilize tracking tools (e.g. spreadsheets, preventive maintenance programs) to record prior equipment repairs/maintenance and generate reports for upcoming preventive maintenance tasks. Develops new or modifies existing PM schedules based on frequency of use in a training environment versus a production environment. The process will identify if further action is required, such as repairs, calibration or replacement of components prior to failure.
List the types of resources required to complete this task, project or activity.	Equipment manuals, supplier resources, theory of operation information.
How is/are deadline(s) determined?	PM deadlines are determined by the incumbent based on published schedules and any changes required due to differences in training applications versus production use. For custom built equipment, the incumbent will determine the PM schedule.
Who determines if changes to the project or activity are required? And who determines whether these changes have an impact on others? Please provide concrete examples.	The incumbent determines if changes are required to the PM schedules based on Manufacturer's recommendations, internal documentation, industry practices, frequency of operation, and experience. An example of a PM schedule change made by the incumbent would be: if a piece of production machinery requires weekly lubrication, but in the school environment, the hours of service would determine this would equate to once per month. The incumbent has the authority to take a piece of equipment out of service due to imminent failure or a safety concern, and interpret and action Service and Safety Bulletins received from manufacturers. The incumbent will consult with coordinators and the Chair to determine whether changes have an impact on others. An example of this would be the timing of PM operations that coincided with a particular course needing the machine at the same time.

#3 regular & recurring

List the project and the role of the incumbent in this activity.

What are the organizational and/or project management skills needed to bring together and integrate this activity?

List the types of resources required to complete this task, project or activity.

How is/are deadline(s) determined?

Who determines if changes to the project or activity are required? And who determines whether these changes have an impact on others? Please provide concrete examples.

4. Planning/Coordinating

#1 occasional

List the project and the role of the incumbent in this activity.

What are the organizational and/or project management skills needed to bring together and integrate this activity?

List the types of resources required to complete this task, project or activity.

How is/are deadline(s) determined?

Who determines if changes to the project or activity are required? And who determines whether these changes have an impact on others? Please provide concrete examples.

Plan and implement retrofit or update to replace obsolete components with current equipment/resources.

Planning end of life cycles of equipment to forecast replacement cycles. Scheduling delivery of replacement parts and ancillary items required for the project.

Identifying activity schedule, tasks for each team member, timeline, pilot testing, rollout and faculty feedback.

Engineering drawings, manuals, tools, supplier resources

Deadlines are driven by course schedules, impact on others, and detailed action plan timing is determined by the incumbent. The incumbent will establish task deadlines, which includes providing deadlines to others on occasion, to ensure the overall course schedule deadlines are met.

Incumbent, along with Faculty and Coordinator determine if changes are required. Involvement of School budget manager and Chair

#2 occasional

~~List the project and the role of the incumbent in this activity.~~

~~What are the organizational and/or project management skills needed to bring together and integrate this activity?~~

~~List the types of resources required to complete this task, project or activity.~~

~~How is/are deadline(s) determined?~~

~~Who determines if changes to the project or activity are required? And who determines whether these changes have an impact on others? Please provide concrete examples.~~

5. Guiding/Advising Others

This section describes the **assigned responsibility** of the position to guide or advise others (e.g. other employees, students). Focus on the actions taken (rather than the communication skills) that directly assist others in the performance of their work or skill development.

Though Support Staff cannot formally "supervise" others, there may be a requirement to guide others using the incumbent's job expertise. This is beyond being helpful and providing ad hoc advice. It must be an assigned responsibility and must assist or enable others to be able to complete their own tasks.

Check the box(es) that best describe the level of responsibility assigned to the position and provide an example(s) to support the selection, including the positions that the incumbent guides or advises.

Regular & Recurring	Occasional	Level	Example
X	☐	Minimal requirement to guide/advise others. The incumbent may be required to explain procedures to other employees or students.	Instructing student on the safe use of equipment in the lab (i.e. threaders).
X	☐	There is a need for the incumbent to demonstrate correct processes/procedures to others so that they can complete specific tasks.	Orients new Faculty and students.
X	☐	The incumbent recommends a course of action or makes decisions so that others can perform their day-to-day activities	Recommends and decides upon parts, tools, components and supplies that would be appropriate for use by students and faculty in the classroom.
X	☐	The incumbent is an active participant and has ongoing involvement in the progress of others with whom he/she has the responsibility to demonstrate correct processes/procedures or provide direction.	Demonstrates equipment operation to faculty. Provides guidance to students with material that has been previously taught in the classroom, including demonstrating the correct use of equipment, explaining procedures, and/or assisting with project work.
☐	X	The incumbent is responsible for allocating tasks to others and recommending a course of action or making necessary decisions to ensure the tasks are completed.	Incumbent has the authority to assign work to Contract/Part-Time technicians and student workers as required.

6. Independence of Action

Please illustrate the type of independence or autonomy exercised in the position. Consideration is to be

given to the degree of freedom and constraints that define the parameters in which the incumbent works.

What are the instructions that are typically required or provided at the beginning of a work assignment?	
Regular and Recurring	Occasional (if none, please strike out this section)
Generally, no instructions are usually provided. The incumbent works in a self-directed manner and has significant autonomy to work directly with all necessary stakeholders to achieve successful task completion and work assignment outcomes.	Will regularly receive a very specific request from faculty to research availability and cost of a specific piece of new equipment not currently used by the College to support the potential of this being added to their curriculum.

What rules, procedures, past practices or guidelines are available to guide the incumbent?	
Regular and Recurring	Occasional (if none, please strike out this section)
Equipment repair and service manuals Parts catalogues Course outlines College procedures and guidelines Safety manuals Past practice Industry Regulations	

How is work reviewed or verified (eg. Feedback from others, work processes, Supervisor)?	
Regular and Recurring	Occasional (if none, please strike out this section)
Daily or routine work is not reviewed or checked. Incumbent has considerable ability to act free of supervision on a day-to-day basis.	Work may be verbally reviewed upon completion of major assignments by faculty involved with the course.

6. Independence of Action

Describe the type of decisions the incumbent will make in consultation with someone else other than the Supervisor?	
Regular and Recurring	Occasional (if none, please strike out this section)
Purchase of new equipment/resources Creating bills of materials for assignments/projects Sourcing replacements for obsolete components Design/build new student project prototypes Capital forecasting due to new programming or equipment end-of-life projections	Changes in safety protocol

Describe the type of decisions that would be decided in consultation with the Supervisor.	
Regular and Recurring	Occasional (if none, please strike out this section)
Decisions concerning workload.	Purchase of unanticipated, expensive equipment or repair outside of assigned spending limit. Solution of an employee or student conflict that the incumbent has been unable to resolve. School safety issues Budget concerns that are unplanned or unusual

Describe the type of decisions that would be decided by the incumbent.	
Regular and Recurring	Occasional (if none, please strike out this section)
Troubleshooting and repair of equipment Purchase of equipment up to assigned spending limit, component and supplies within guidelines of approved program budget Provide options/alternatives to faculty and students Deciding approach to take when mentoring or providing assistance to students Design and alteration of equipment to meet various requirements	Resolution to minor health and safety issues Decision to send equipment out for repair and appropriate supplier to provide service Establishing routine preventive maintenance schedules

7. Service Delivery

This section looks at the service relationship that is an assigned requirement of the position. It considers the required manner in which the position delivers service to customers. It is not intended to examine the incumbent's interpersonal relationship with those customers and the normal anticipation of what customers want and then supplying it efficiently. It considers how the request for service is received and the degree to which the position is required to design and fulfil the service requirement. A "customer" is defined in the broadest sense as a person or groups of people and can be internal or external to the College.

In the table below, list the key service(s) and its associated customers. Describe how the request for service is received by the incumbent, how the service is carried out and the frequency.

Information on the service		Customer	Frequency (D, W, M. I)*
How is it received?	How is it carried out?		
Provide tech support and expertise	Demonstrate equipment; performs tests and "dry-runs" to verify outcomes; design solutions to various challenges; troubleshoot difficulties related to experiments; fabricate parts, tools and other items after consulting with faculty to determine need.	Faculty	W
Inventory and purchase equipment, components and supplies	Research and choose appropriate materials/equipment and supplies to meet needs after consulting with client to determine needs. Maintain an appropriate inventory of supplies and components ensuring adequate re-order	Faculty, students	D
Provide assistance with educational needs, technical demonstrations or a piece of equipment	Usually involves direct contact with the individual to discuss and resolve the problem, research/explain solutions, demonstrate equipment, or provide resources/contacts to find solutions. Can involve	Students	D

	providing the individual with the necessary equipment or resources to accomplish the task		
Prepare, maintain and repair equipment	Conduct preventive maintenance on equipment. Determine repair required after troubleshooting and diagnosing the problem	Faculty	W
Provide information to equipment manufacturers and distributors, repair companies, sales reps, technical specialists	Direct contact with the individual or group, if possible. Frequent use of email and phone.	Equipment manufacturers and distributors, repair companies, sales reps, technical specialists	W
Provide health and safety leadership and guidance	Creates and updates safety manuals, MSDS library and work instructions; identifies safety issues and recommends solutions; ensure the safe storage of hazardous materials and waste	Faculty, students	M

* D = Daily W = Weekly M = Monthly I = Infrequently

8. Communication

In the table below indicate the type of communication skills required to deal effectively with others. Be sure to list both verbal (e.g. exchanging information, formal presentations) and written (e.g. initiate memos, reports, proposals) in the section(s) that best describes the method of communication.

Communication Skill/Method	Example	Audience	Frequency (D, W, M, I)*
Exchanging routine information, extending common courtesy	Updates on progress of projects/requests.	Faculty	W
	Obtain pricing, quotations, information on supplies and equipment	External supply companies, distributors	D
	Writing POs, receiving goods, authorizing payments	Purchasing Accounting	D
	Arranging for student purchases	Bookstores	I
Explanation and interpretation of information or ideas	Purchasing equipment and supplies	Suppliers	W
	Demonstrating new equipment	Faculty	M
	Write safety policies and discuss safety-related concerns and solutions.	Faculty, students	M
	Equipment repair and troubleshooting discussions	Manufacturers, suppliers	W
Imparting technical information and advice	Providing guidance and information to new faculty regarding the proper use of unfamiliar college equipment	New faculty	W
	Utilize technical expertise to justify and explain to non-technical individuals the need for capital and equipment purchases	Service Departments	M

Instructing or training	Demonstrating use of equipment/reinforcing application of material previously introduced in classroom environment	Students	D
Obtaining cooperation or consent			
Negotiating			

* D = Daily W = Weekly M = Monthly I = Infrequently

9. Physical Effort

In the tables below, describe the type of physical activity that is required on a regular basis. Please indicate the activity as well as the frequency, the average duration of each activity and whether there is the ability to reduce any strain by changing positions or performing another activity. Activities to be considered are sitting, standing, walking, climbing, crouching, lifting and/or carrying light, medium or heavy objects, pushing, pulling, working in an awkward position or maintaining one position for a long period.

Physical Activity	Frequency (D, W, M, I)*	Duration			Ability to reduce strain		
		< 1 hr at a time	1 - 2 hrs at a time	> 2 hrs at a time	Yes	No	N/A
Lifting light objects such as hand tools	D		X				X
Lifting medium objects such as tools and packages including component parts (approx. 30 min/day)	D	X			X		
Lifting heavy objects such as duct work, tools/machinery (approx. 15 min/day)	D	X			X		
Standing (during demonstrations/labs)	D			X	X		
Driving (local – short distances)	M	X			X		

Sitting – computer work, repair work	D			X	X		
Pushing/pulling	D	X			X		
Bending and crouching	D	X				X	

* D = Daily W = Weekly M = Monthly I = Infrequently

If lifting is required, please indicate the weights below and provide examples.

X Light (up to 5 kg or 11 lbs)

X Medium (between 5 to 20 kg or 11 to 44 lbs)

X Heavy (over 20 kg or 44 lbs)

Hand tools

Tools, packages including component parts

Piping

Duct work

Machine components

Equipment

Shelving

Ladders

Benches

General machinery

10. Audio Visual Effort

Describe the degree of attention or focus required to perform tasks taking into consideration:

- the audio/visual effort and the focus or concentration needed to perform a task and the duration of the task, including breaks (eg. up to 2 hours at one time including scheduled breaks)
- impact on attention or focus due to changes to deadlines or priorities
- the need for the incumbent to switch attention between tasks (eg. multi-tasking where each task requires focus or concentration)
- whether the level of concentration can be maintained throughout the task or is broken due to the number of disruptions

Provide up to three (3) examples of activities that require a higher than usual need for focus and

concentration.

Activity #1	Frequency (D, W, M, I)*	Average Duration		
		Short < 30 mins	Long up to 2 hrs	Extended > 2 hrs
Demonstrating to groups of students and listening to students so as to understand the issue/needs and provide effective support requires mental concentration and attention to detail. Often projects have significant safety concerns as they involve power tools and electricity.	D			X
Can concentration or focus be maintained throughout the duration of the activity? If not, why? ☐ Usually ☒ No, need to assist other students, faculty, deliveries to the docks, other staff needing support.				

Activity #2	Frequency (D, W, M, I)*	Average Duration		
		Short < 30 mins	Long up to 2 hrs	Extended > 2 hrs
Incumbent works on saws, pipe cutters, lathes, gases when testing equipment. This requires additional concentration for safety in case of moving parts, gas volatility	D		X	
Can concentration or focus be maintained throughout the duration of the activity? If not, why? ☒ Usually ☐ No				

* D = Daily W = Weekly M = Monthly I = Infrequently

Activity #3	Frequency (D, W, M, I)*	Average Duration		
		Short < 30 mins	Long up to 2 hrs	Extended > 2 hrs

Purchasing, quoting, bill of materials, receiving	D		X	
Can concentration or focus be maintained throughout the duration of the activity? If not, why?				
☐ Usually ☒ No, need to assist other students, faculty, deliveries to the docks, other staff needing support.				

* D = Daily W = Weekly M = Monthly I = Infrequently

11. Working Environment

Please check the appropriate box(es) that best describes the work environment and the corresponding frequency and provide an example of the condition.

Working Conditions	Examples	Frequency (D, W, M, I)*
☐ acceptable working conditions (minimal exposure to the conditions listed below)		
☒ accessing crawl spaces/confined spaces	Plumbing trough	W
☒ dealing with abusive people	Students using inappropriate language directed at incumbent, throwing tools, engaging in altercations, etc.	I
☐ dealing with abusive people who pose a threat of physical harm		
☒ difficult weather conditions	Outside labs, plumbing trough	I
☒ exposure to extreme weather conditions	Outside labs, plumbing trough	I
☒ exposure to very high or low temperatures (e.g. freezers)	KUBE and Skills Arena are not air conditioned- during summer hot climate. Outside labs.	D during summer months; I during other times of the year
☒ handling hazardous substances	Gases, oils, fuels, solvents, cements.	D
☒ smelly, dirty or noisy environment	Sawdust, loud equipment, smell of gases, etc.	D
☒ travel	To pick up supplies and purchases (approx.. once a month)	M
☐ working in isolated or crowded situations		

X other (explain)	Working at Heights	W
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* D = Daily M = Monthly W = Weekly I = Infrequently