

Position Description Form (PDF)

College: Sir Sandford Fleming

Incumbent's Name: **Vacant**

Position Title: Heavy Equipment Operator Technologist

Payband: I

Position Code/Number: S00520

Scheduled No. of Hours 40

Appointment Type: X 12 months less than 12 months

Supervisor's Name and Title: Marc Patenaude, Operations Manager

Completed by: Linda Skilton

PDF Date: July 2013

Last Revision: July 2013

JEC Review: August 15, 2013

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 for 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 provides technical expertise and academic delivery support to the Heavy Equipment Operator program, which includes providing input into the design, development and implementation of course material and the design and delivery of scenario-based field exercises. The incumbent demonstrates techniques and equipment to students, supervises students in the field and is responsible for student safety and ensuring that all safety procedures are followed. The incumbent also tests and evaluates all machinery and equipment used for field work and ensures that maintenance is performed as needed. The position is also responsible for providing program promotion and placement support, participating in various program teams, overseeing program supply and equipment inventory as well as providing day-to-day direction for part-time technologists.

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.

	Approximate % of time annually*
<p>1. Learning Support & Technological Services for Students</p> <p>Demonstrates and reinforces the practical application of previously-taught concepts, methods, procedures and theories during simulation and field work. Responsible for student safety. Supervises students during a variety of potentially dangerous field exercises (e.g. working with dangerous machinery). Reinforces safe field procedures and protocols. Accessible to students during set times outside of classroom hours. Student issues dealt with during this time include but are not limited to: reinforcement of course content, demonstration of techniques and equipment, supervising independent work, advising students of employment opportunities in the heavy equipment field. Conducts routine evaluation of students and provides input to the course professor who assigns final grades.</p>	60%
<p>2. Technological Services for Faculty</p> <p>Provides technical expertise in the planning, design, development and implementation of course material, including the design and delivery of scenario-based learning exercises in the field. Provides orientation and support on appropriate use of equipment and techniques. Plans, organizes, implements and provides technical expertise for daily labs and field work including developing field schedules. Troubleshoots and provides technical solutions in classroom and field situations. Researches techniques and instrumentation in the heavy equipment field as well as changes to regulations and reports findings to the team.</p>	10%
<p>3. Maintaining Equipment and Learning Facilities</p> <p>Ensures that all equipment and machinery is in good, safe, operating condition. Tests and evaluates all machinery and equipment that is used for field work. Communicates with the shop technicians to arrange equipment maintenance and repairs. Ensures learning facilities and equipment are maintained to appropriate standards with attention to health and safety, cleanliness and organization. Performs minor preventative maintenance on machinery and equipment that is used for field work.</p>	5%
<p>4. Control of Budget and Inventory</p> <p>Inventories and ensures replacement of field equipment, machinery and supplies as needed. May assist in the Purchasing of new equipment and in researching options. Consults with faculty and other technologists about specific equipment or supply needs for the HEO program. Assists with the equipment rental agreements. Assists in the Planning for the future needs of the program.</p>	5%

<p>5. Member of the Centre for Heavy Equipment Technology Team and SENRS Teams Actively participates as a member of the program team in order to support the delivery of the Heavy Equipment Operator curriculum. Attends program meetings, retreats and promotional events. Attends Advisory Committee and Staff meetings in support of the Heavy Equipment Operator program. Participates in various project and task teams as required.</p>	<p>5%</p>
<p>6. Program Promotion and Placement/Career Support Provides leadership and logistical support for the organization of program information and displays for events such as College Information Days, Showcase Days and Open Houses. Conducts Heavy Equipment Centre tours and responds to inquiries about the program. Updates social media with job postings and liaises with industry contacts to secure student field placements and graduate job opportunities.</p>	<p>5%</p>
<p>7. Part-time Workers Participates in the orientation and training of part-time workers. Provides direction and assigns part-time workers daily duties, in coordination with supervisor.</p>	<p>5%</p>
<p>Other duties as assigned.</p>	<p>5%</p>

* 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 ** 1 year certificate 2 year diploma

- Trade certification 3 year diploma / degree 4 year degree or 3 year diploma / degree plus professional certification

- Post graduate degree (e.g. Masters) or 4 years degree plus professional certification

- Doctoral degree

Field(s) of Study:

**** Note:** Heavy Equipment Operator Certificate is the minimum level of formal education required for the position. This is a compressed 12-week program.

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

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
- Minimum of eight (8) years

	<p>Experience working as a heavy equipment operator including performing preventive maintenance.</p> <p>Experience with minor troubleshooting and repair of heavy equipment.</p> <p>Experience using spreadsheet and word processing software as well as email and the internet.</p> <p>Experience working independently within a team environment, organizing and planning own work.</p> <p>Experience demonstrating skills to learners.</p> <p>Leadership experience.</p> <p>Proven oral and written communication skills.</p> <p>Demonstrated knowledge of health and safety requirements in the field.</p> <p>Valid Class G drivers' license as well as acceptable driver's abstract</p>

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.	A machine has failed in the field and must be repaired for the field exercises to continue. The incumbent may perform minor repairs to the equipment on a mobile basis to ensure the equipment is accessible to faculty and students.
How is it identified?	The incumbent or a student will identify the faulty equipment.
Is further investigation required to define the situation and/or problem? If so, describe.	The incumbent will troubleshoot the equipment in the field, analyze symptoms and, if minor, establish methods of repair or workarounds to ensure the equipment is accessible to faculty and students.
Explain the analysis used to determine a solution(s) for the situation and/or problem.	The incumbent will be required to adapt techniques and practices or arrive at creative solutions to keep the machinery available. If the repair is major, the incumbent will notify the Heavy Equipment Technologist.
What sources are available to assist the incumbent finding solution(s)? (eg. past practices, established standards or guidelines).	Manuals, past practice, internet research, other Technicians

3. Analysis and Problem Solving

#2 regular & recurring

Key issue or problem encountered

Assist a new student with the operation of a bulldozer, excavator or other piece of heavy equipment.

How is it identified?

Student seems reluctant, insecure or is using the wrong techniques.

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

Ask the student if they are having problems and if you can help in any way. Probe thoroughly with questions (particularly if they say they don't need help) to check understanding of theory and to determine areas where additional demonstration and practice is required. Provide positive reinforcement and analysis.

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

Visually check the equipment to ensure no repairs are needed. Reinforce the safety features and key points from the lecture and then demonstrate the safe technique to operate the equipment. Foresee safety problems associated with limited experience, poor technique or hazardous situations involving the student and be pro-active in preventing injury or damage to the equipment. Keep in constant verbal communication with the student to guide them while performing the particular technique.

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

Course outline, course handouts, safety manuals, course Professor and/or other support staff

#3 regular & recurring

Key issue or problem encountered

Integration of new technology or practices in the Heavy Equipment Operator program. Designing applications of the new technology to make it "deliverable" in courses.

How is it identified?

Feedback from liaising with industry contacts, employers or government. Sometimes receive feedback from employers that grads are lacking certain field skills. Students will also request exposure to new technologies.

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

Yes. The College must keep up-to-date with industry standards and skills training; otherwise, grads will not obtain employment. The incumbent must first investigate and learn the new technology and determine if it is appropriate for the program.

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

The incumbent must make an assessment to determine if integration of the new material is practical and logistically possible. S/he must consider existing staffing resources, equipment, financial and time constraints. If it is determined that it is feasible to proceed, the incumbent must design a delivery module/plan that will allow the new technology to be smoothly integrated into field exercises. The incumbent must also consult with the course professor to see if they are receptive to the introduction of the new material.

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

On-line research, training/professional development sessions, equipment manufacturers and distributors, direct contact with industry partners and government agencies.

3. Analysis and Problem Solving

#1 occasional (if none, please strike out this section)

Key issue or problem encountered

Inclement weather during field exercises resulting in potential cancellation of the day's activities and loss of practical skills training for students.

How is it identified?

Prior warning by monitoring weather reports. Observation of weather conditions while in the field. Feedback from students suffering signs and symptoms of weather-induced illness (e.g. heat stroke).

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

Yes. Weather conditions can seriously threaten staff and student safety, compromise learning objectives and/or make it impossible to complete daily work assignments. The incumbent will need to assess the potential duration of the inclement weather and also investigate the number and severity of student who may be suffering from weather-related illness.

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

The incumbent must make an immediate judgement call regarding student and staff safety. Students are removed from the field if conditions are deemed to be unsafe. The incumbent must assess the impact that the cancellation will have, then make decisions to change the work plan for the day and determine how best to keep the students learning so that objectives can be met.

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

Personal experience working in inclement weather
 Consultation with students to ensure that they feel safe and are comfortable with the working conditions
 Weather reports
 Consultation with course professor and/or other staff

#2 occasional (if none, please strike out this section)

Key issue or problem encountered

Injury to a student during a field exercise located on Fleming Campus property.

How is it identified?

Receive a call on the two-way radio from a student.

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

Yes. Shut down the field exercises and quickly walk to the area where the injured student was working. Must thoroughly assess the casualty to determine the extent of the injury. Survey the situation to ensure that no further injury can occur to the student or anyone else in the immediate area.

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

Incumbent must collect and analyze information including the following to assess the appropriate solution/next steps for the situation:

- Check the casualty for a response
- Do primary survey including airway, bleeding, pulse
- Call 911 or Emergency Medical Services
- Give first aid for life threatening injury.
- Do secondary survey for further injury. Give first aid if needed.
- Monitor breathing and circulation until EMS arrives

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

Standard First Aid and CPR certification/training
 College emergency procedure

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.

In collaboration with the HEO team, the incumbent is responsible for the creation of plans, and the implementation and modification of new procedures, techniques, and field exercises in the Heavy Equipment Operator Program (e.g. high technology training simulator and software program for instruction, constructing ponds for Fish and Wildlife program team, new trenching techniques, etc.).

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

Time management, lead-time planning, and multi-tasking are required for this activity as well as research and interpersonal skills

The incumbent must be able to coordinate a team (part-time Techs) and track progress towards established goals within a schedule pre-set by the supervisor .

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

Course outline, academic timetable, safety checklist, input from course professor. The incumbent would work with other members of the team to ensure all aspects have been considered and that others are aware of what is being planned.

How is/are deadline(s) determined?

Deadlines are driven by the academic delivery schedule. Changes would need to be implemented prior to the intake of new students. The incumbent establishes task deadlines, which includes providing deadlines to others on occasion, to ensure the overall project deadline is met.

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, in collaboration with the course professor and other HEO team members, will determine if changes to the activity are required. The Project Leader, which could be the incumbent, would determine whether the changes have impact on others. For example, the incumbent identifies or is notified that changes need to be made to standard trenching practices (e.g. moving to sloping rather than stepping). The incumbent would notify the course professor, determine the changes that are required to the field exercises and would discuss the required modifications with the course professor and other HEO team members. The incumbent would determine whether this change has an impact on the other part-time technologists and would notify them of the change.

4. Planning/Coordinating

#2 regular & recurring

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

Provide technical expertise and support during field exercises. Responsible for supervising and demonstrating equipment to one section of students at a time.

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

Excellent time management, multi-tasking, observation and communication skills are required to be able to coordinate and supervise the activities of several students. Must be able to assess the abilities, knowledge level and needs of the student group and then accordingly adjust delivery speed and content.

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

Course outline and schedule; personal knowledge, education and work experience

How is/are deadline(s) determined?

Deadlines are determined by the course outline and academic delivery timetable. Students are required to complete a certain number of hours in the field in order to be eligible to graduate.

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 or modifications to the field activity are required. For example, the incumbent will speed up or slow down the pace of the field exercises depending upon the students and may change the order of equipment demonstrations. The incumbent will communicate this to the course professor. The incumbent also has the authority to cancel field activities if personal or student safety is in jeopardy. The incumbent would be responsible for planning to ensure that the students can "make up" any missed time in the field.

#3 regular & recurring

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

When planning field exercises and daily field routines, the incumbent has the authority to delegate and assign work details to part-time technologists within a schedule pre-set by the supervisor to ensure that the field exercises run smoothly.

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

Incumbent requires organizational skills, communication skills, ability to coordinate and multi-task as well as delegate tasks effectively

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

Course outline and schedule

How is/are deadline(s) determined?

Deadlines are determined according to academic delivery timelines.

Incumbent has the authority to assign work deadlines to part-time technologists.

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.

Changes are determined by team and final approval by course professor. For example, an inter-school project such as the duck pond, is being constructed by students. If time permits and learning outcomes are being met for the students, normal course learning activities could be replaced by the inter-school project. The incumbent would be responsible for communicating the changes to the part-time technologists and making the necessary modifications to their work schedules.

4. Planning/Coordinating

#1 occasional (if none, please strike out this section)

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

Incumbent is responsible for planning/developing the field schedules prior to each intake of new students.

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

Must have previous experience coordinating field schedules so the training time for students is maximized and additional staffing requirements are minimized. Must have subject matter expertise, strong communication skills and be able to effectively utilize resources.

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

Student/enrollment numbers; course outline; Program Coordinator

How is/are deadline(s) determined?

Deadlines are determined by the academic delivery schedule. The field schedules must be determined well in advance of the start date of the new intake in order to determine the number of part-time technologists required to assist with the field delivery.

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.

Incumbent will determine if the field schedules need to change based on student enrollment and equipment availability. Incumbent will communicate changes to the Program Coordinator as this has a potential impact on staffing and the requirement to rent equipment. For example, if enrollment increases then additional part-time technologists may need to be hired and equipment may need to be rented in order to accommodate the additional students.

#2 occasional (if none, please strike out this section)

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

Plan logistics for Open House.

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

When assigned as the team leader the incumbent would be responsible for: organizing regular team meetings; identifying timelines for completion of tasks; determining resources required; following up and tracking progress of activities; effectively working with others; assigning or delegating tasks to be completed.

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

Facilities staff; Marketing and Liaison staff; student volunteers (which would be recruited by the incumbent)

How is/are deadline(s) determined?

Deadlines are determined by dates of activities established by the College

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.

Changes are determined by the team and final approval by course professor/Coordinator. For example, if plans for the Open House change to exclude a certain piece of equipment the team would make recommendations and discuss options with the final decision being made by the course professor or Coordinator.

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
<input type="checkbox"/>	<input type="checkbox"/>	Minimal requirement to guide/advise others. The incumbent may be required to explain procedures to other employees or students.	
<input type="checkbox"/>	<input type="checkbox"/>	There is a need for the incumbent to demonstrate correct processes/procedures to others so that they can complete specific tasks.	
X	<input type="checkbox"/>	The incumbent recommends a course of action or makes decisions so that others can perform their day-to-day activities.	The incumbent has the authority to assign work to part-time technologists and make decisions that would impact their activities.
X	<input type="checkbox"/>	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.	Incumbent demonstrates the safe approach to theoretical and practical aspects of previously taught curriculum. Demonstrates correct technical skills then oversees/trains students to practise and learn the technique. Heavily involved in the delivery of field exercises. Conducts routine evaluation of students and provides input to the course professor who assigns final grades.

□

□

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.



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)
No instructions are usually provided. The majority of activities are planned in advance for the academic year and the incumbent is expected to independently ensure that all of the supports required for those activities are in place. The incumbent has significant freedom to develop and plan program course delivery materials for faculty planned field activities and act independently without supervision.	Incumbent freely "networks" with external government and private sector staff and takes incentive to research new technologies for faculty that will keep the program's training relevant.

What rules, procedures, past practices or guidelines are available to guide the incumbent?	
Regular and Recurring	Occasional (if none, please strike out this section)
Course outlines, standard methods, reference textbooks, equipment supplier catalogues, Ministry of Labour Health and Safety guidelines, government websites and databases, college policies.	

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	Verbal assessment on an exception basis from supervisor

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)
Design and delivery of field exercises. Selection and purchase of instructional supplies and capital equipment.	Consult with program team when deciding on content of course outlines and evaluations. Consult with program team regarding decisions to change or add curriculum for program courses.

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)
Staffing requirements (part-time technologist staffing requirements are determined approximately every 12 weeks in preparation for the next intake of students)	Management of an employee or student conflict that the incumbent has been unable to resolve. Major health and safety issues Handling of theft of college property Authorization for large capital equipment purchases Authorization for large unanticipated repairs and/or to fix major damage to equipment

Describe the type of decisions that would be decided by the incumbent.	
Regular and Recurring	Occasional (if none, please strike out this section)
Improvising field activities to adjust to changing climatic and equipment condition. Research new technologies, best practices and changes in regulations and recommend incorporation into the course curriculum. Decide what approach to take when mentoring or providing assistance to students. Determine daily tasks requiring completion by part-time Technologists.	Decision to cancel a field exercise if safety is an issue (e.g. lightning) Development of field schedules Notification to Technologists when equipment is in need of repair Minor health and safety issues

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 during field exercises	Direct contact with the group. Demonstrate the skill or procedure, supply materials and supervise student operations. Recommend enhancements/improvements. After consultation with the program team to assess needs and curriculum requirements, designs and implements scenario-based field exercises.	Program team (professor and techs)	D
Provide assistance with educational needs and/or technical demonstrations.	Usually direct contact with the student in the field if need results from lack of knowledge with equipment operation. Other forms of assistance such as difficulty with an assignment, career information, job contacts, etc. is handled by sitting down with the individual and providing resources or additional information to assist with a solution.	Students	D
Enquiries about the program or career paths	Respond to the inquiry immediately if the individual arrives in person; otherwise, return their phone call or email. May arrange to meet in person depending on the circumstances. Usually call back to follow up with the individual.	Public – future students, guidance counsellors, parents	W
Enquiries about graduate job opportunities	Respond directly to the individual either by phone or email.	Industry partners	M

Provide information to equipment manufacturers and distributors, repair companies, rental companies, sales reps and technical specialists	Direct contact with the individual or group, if possible. Frequent use of email and phone. May deal in person.	Equipment manufacturers and distributors, sales reps, technical specialists, repair companies	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 activities	Co-ordinator	W
	Write POs, receive goods	Staff, faculty, suppliers	M
	Obtain pricing, quotations, information on supplies and equipment	External supply companies; manufacturers	M
	Arrange placement and employment opportunities for students/graduates	Industry partners	M
	Provide program information in response to email and telephone inquiries as well as promotional events such as Open Houses, Information Days, etc.	Public	W
Explanation and interpretation of information or ideas	Provide technical assistance, and advice; recommend curriculum changes/enhancements	Faculty	W

Support Staff PDF

Imparting technical information and advice	Utilize technical expertise to justify and explain to non-technical individuals the need for capital and equipment purchases	Dean/Principal SENRS/Frost Financial Officer	M
Instructing or training	Provide technical advice and expertise; demonstrate skills and procedures during field exercises.	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
Climbing on and off large heavy equipment	D	√				√	
Lifting heavy objects such as large rocks, stones and equipment attachments	W	√			√		
Lifting medium objects such as rolls of silt fence, t-posts and pails of oil	M				√		
Lifting light objects such as sledge hammers, shovels, and bars	D	√				√	
Crouch, kneel, stoop and bend in various positions to facilitate preventive maintenance and perform pre-trip inspections on mobile equipment. Bending and stooping also occurs while using shovels for digging.	D	√				√	
Sitting while driving and operating heavy equipment	D	√				√	
Standing during field exercises	D			√		√	
Pushing and pulling levers and pedals while operating heavy equipment	D	√				√	
Walking during field exercises	D		√			√	

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

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

√ Light (up to 5 kg or 11 lbs)

Sledge hammers, shovels, bars

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

Rolls of silt fence, t-posts, pails of oil

√ Heavy (over 20 kg or 44 lbs)

Large rocks or stones, equipment attachments

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 and supervising a large number of students operating heavy equipment in the field. Incumbent will switch attention between tasks. Requires concentration to ensure safety as the incumbent is expected to monitor student techniques and safety as well as address questions.	D			√
Can concentration or focus be maintained throughout the duration of the activity? If not, why? <input type="checkbox"/> Usually <input checked="" type="checkbox"/> No, due to interruptions from students during field exercises. To ensure safety, need to maximize performance despite interruptions.				

Activity #2	Frequency (D, W, M, I)*	Average Duration		
		Short < 30 mins	Long up to 2 hrs	Extended > 2 hrs
Operation and manipulation of heavy equipment for the set up and preparation of field exercises. Generally students are not present; however, focus on activity is required to ensure safety.	D		√	
Can concentration or focus be maintained throughout the duration of the activity? If not, why? <input checked="" type="checkbox"/> Usually <input type="checkbox"/> No				

Activity #3	Frequency (D, W, M, I)*	Average Duration		
		Short < 30 mins	Long up to 2 hrs	Extended > 2 hrs
Can concentration or focus be maintained throughout the duration of the activity? If not, why? <input type="checkbox"/> Usually <input type="checkbox"/> No				

* 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)*
<input type="checkbox"/> acceptable working conditions (minimal exposure to the conditions listed below)		
<input type="checkbox"/> accessing crawl spaces/confined spaces		
<input checked="" type="checkbox"/> dealing with abusive people	Students unhappy with their marks or tasks assigned	M
<input type="checkbox"/> dealing with abusive people who pose a threat of physical harm		
<input checked="" type="checkbox"/> difficult weather conditions	Majority of work involves walking, standing and working in the field in difficult weather conditions, including snow, rain, heat, humidity, cold, wind	D/W depending on time of year
<input checked="" type="checkbox"/> exposure to extreme weather conditions	Field exercises occur 4 days out of 5 in all types of weather conditions including prolonged exposure to elements – sun, wind, frigid temperatures, rain.	D/W depending on time of year
<input checked="" type="checkbox"/> exposure to very high or low temperatures (e.g. freezers)	Majority of work involves walking, standing and working in the field for extended periods of time during the cold winter (March-April) and the hot summer (July-August)	W during March-April, July-Aug; M during other times
<input checked="" type="checkbox"/> handling hazardous substances	Hazardous fluids and liquids, such as diesel fuel, antifreeze, oils, and grease	W
<input checked="" type="checkbox"/> smelly, dirty or noisy environment	Loud engine noise from heavy equipment, exposure to diesel fumes and muddy and dusty field conditions	D
<input type="checkbox"/> travel		
<input type="checkbox"/> working in isolated or crowded situations		
<input type="checkbox"/> other (explain)		

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