CAAT Job Evaluation System for Non-Bargaining Unit Employees

Ontario Colleges of Applied Arts and Technology

The Job Fact Sheet Questionnaire (JFS) is used to gather information for job evaluation purposes for the Colleges= Administrative Staff, Part-Time Support Staff, Part-Time and Sessional Academic Staff positions. Please read each section carefully before completing.

The Education and Experience sections are to be completed by the College according to the College=s recruitment standards.

Upon completion by an incumbent, the JFS is reviewed and, when necessary, adjusted by the position=s Manager and the Senior Manager responsible for the position. Any changes to the JFS are to be reviewed with the incumbent prior to evaluation. The JFS is then submitted to the appropriate College official for job evaluation purposes.

The JFS is not finalized until it has gone through the job evaluation process and the results have been confirmed by the College. A copy of the finalized JFS will be provided the incumbent for information purposes and as a job description.

1. POSITION IDENTIFICATION

Position Title:	Principal Researcher - CIAP
Position Number:	A00250
Pay Band:	12
Incumbent:	
Location/Campus:	Frost Campus
Division/Department:	Applied Research & Innovation
Immediate Supervisor (title):	Research & School Operations Manager
Date of JFS:	September 9, 2024
Last Evaluated:	September 11, 2024

Type of Position:

☒Administrative ☐Part-Time Administrative

☐Sessional Academic ☐Part-Time Academic

☐Part-Time Support ☐Other

I have read and understood the contents of the Job Fact Sheet (if completed by an incumbent):

Incumbent: _____ Date: _____

Recommended by:

Position's Manager: _____ Date: _____

Approved by:

Senior Manager: _____ Date: _____

2. POSITION SUMMARY

Provide a concise description of the position by identifying its most significant responsibilities and/or accountabilities.

Reporting to the Research & School Operations Manager, the Principal Researcher is responsible for managing and coordinating the formulation and execution of effective research projects by consulting and engaging with industry partners with a view to ensuring the financial sustainability for their research centre. The incumbent will provide strategic direction, scientific leadership and manage a range of applied research and related activities, including partner liaison activities, applied research business development activities, grant and proposal development for all projects, budget tracking, and human resources management as assigned. The incumbent will be responsible for overseeing and implementing both field-based and laboratory research projects; compiling and analyzing results; developing and testing models; developing decision-support tools; publishing results of work in scientific journals, writing detailed technical reports, annual reports and other publications. The Principal Researcher works closely with the Research & School Operations Manager, and Director, Applied Research & Innovation to implement projects and address variances in budgets, project outcomes, and activities with a view to long term sustainability of the research area.

3. KEY DUTIES

Provide a description of the position's key duties. Estimate the percentage of time spent on each duty (to the nearest 5%). Add an extra page if necessary.

Key Duties **% of Time**

Scientific Leadership **40%**

- Provide direction to researchers and other technical and professional staff on experimental design, methods of data collection and analysis for research studies where required.
- Implement both field-based and laboratory research projects; compile and analyze results; develop and tests models; develop decision-support tools; prepare project documentation.
- Publish results of work in scientific journals, newsletters, annual reports, technical reports, and other publications
- Present at scientific meetings, workshops, training courses, field tours, seminars and other forums.

Business Development & Partner Relations **35%**

- The incumbent helps to ensure the availability of adequate financial resources to support the on-going research agenda and operational requirements of the research area. through a continued pursuit of relevant research funding, fee-for service business opportunities (including RFPs), corporate sponsorships, and donations.
- Coordinates the formulation of effective research projects by developing research proposals, consulting with Fleming faculty and staff and submitting grant applications.
- Builds and maintains relationships with individuals, industry, community partners and other post-secondary institutions to identify potential strategic research proposals and partnerships.

- Ensure the Research Business Developer is provided with regular updates and technical information related to the Centre's capabilities.
- Initiates collaborative projects with other post-secondary institutions in Ontario, Canada and abroad.
- Establishes and maintains effective networks, alliances and joint ventures with other organizations that share similar goals, including research and innovation agencies, universities and colleges, governments, and environmental professionals and their professional organizations.
- Works collaboratively with faculty, administration and staff and the broader Advancement and Alumni team to develop priorities and funding opportunities, solicitation strategies, proposals and other research funding materials.
- Establishes a systematic, strategic approach to research funder pipeline development and management.

Management & Strategic Guidance **10%**

- Provides scientific leadership, direction, coaching and encouragement to the full research team at the research centre
- Supervises and manages the temporary part-time and casual employees (including student workers), who are hired for specific research projects, ensuring the smooth operation and delivery of objectives for these projects.
- Provide day to day scientific and project guidance to the full research team, monitoring their work and troubleshooting issues as they arise.
- Leads efforts to provide opportunities for students and faculty to carry out applied research projects in the research area and ensures compliance with funder expectations and requirements (e.g. NSERC, Fed Dev, OCI, etc.).
- Provides strong internal controls and oversight as it relates to equity, diversity and inclusion principals in research practice and dissemination.
- Helps Fleming develop, document and implement best practices with regards to securing external funding and implementing and disseminating research results.
- Acts as Principal Investigator on strategic grants as assigned by Executive Vice-President, Applied Research & Innovation
- Develops methods and protocols for coordinating communications planning and execution of research publications.
- Provides high level expertise, input on strategic direction in the development and implementation of research clusters.

Financial & Project Management **10%**

- Ensures the long-term financial viability of the research area by establishing and maintaining a systematic, strategic approach to research funder pipeline development and management.
- Scopes, tracks and manages all projects within the research area.
- Tracks and manages research project budgets in coordination with the Research Grants Financial Officer

Other Duties as Assigned **5%**

TOTAL:	**100%**

1. COMPLEXITY - JUDGEMENT (DECISION MAKING)

Complexity refers to the **variety** and relative **difficulty** of **comprehending** and **critically analyzing** the material, information, situations and/or processes upon which decisions are based.

Judgement refers to the **process** of identifying and reviewing the available options involved in decision making and then choosing the most appropriate option. Judgement involves the application of the knowledge and experience expected of an individual performing the position.

Provide up to **three examples** of the most important and difficult decisions that an incumbent is typically required to make.

i. Conduct research: Conducting research in the field of aquaculture entails a multifaceted set of responsibilities and duties. The incumbent is tasked with developing and overseeing research projects focused on aquaculture practices, aquatic animal health, genetics, nutrition, or environmental impact as well as designing experiments, methodologies and protocols for data collection and analysis. The incumbent must utilize various research methods, including genetic analysis, water quality testing and statistical analysis, to interpret data and draw meaningful conclusions.

ii. Funding Priorities and Proposals: Developing strategic and compelling proposals for grant funding that aligns with both organizational priorities and grant criteria. Efforts need to be undertaken to determine the overall strategy, gather information and position a successful grant proposal. This requires the incumbent to meet with academic and administrative leaders and seek the appropriate approvals in a timely fashion and then clearly articulate the research objectives in compelling applications. This can be complex as the organization, faculty and other leaders may not be experienced in grant funding guidelines and requirements, have information or time to develop the information required to put forward in applications, and rely on OARI expertise to do so, which is often done under situations where there are limited resources and timeframes to do so.

iii. Partnership Development: Identifying prospective industry and academic partnership opportunities that will lead to successful grant proposals and valuable research outcomes. This is undertaken by conducting research and analysis of potential partner/industry challenges by examining interest, affinity, and capacity to carrying out research. By reviewing the research, the incumbent connects partnership opportunities to the best funding priorities. The incumbent must have a potential funding pipeline of prospective grants and partners based on various criteria and indicators, identify potential ways to connect with them and determine which are the best projects to put forward to them for their consideration and likely acceptance leading to financial support. This is a complex process, and it involves various work systems, processes, and steps as well as College staff and administration, senior industry executives, and union and non-union faculty members.

2. EDUCATION (to be completed by the College)

Education refers to the **minimum level** of formal education and/or the type of training or its equivalent that is required of an incumbent at the **point of hire** for the position. This may or may not match an incumbent=s actual education or training.

The College is to identify the minimum level of education and/or type of training or its equivalent that is required for the position based upon the College's recruitment standards.

Non-Post Secondary

☐Partial Secondary School ☐Secondary School Completion

Post Secondary

☐1-Year Certificate ☐4-Year Degree

☐2-Year Diploma ☐Masters Degree,

☐3-Year Diploma/Degree ☒Post Graduate Degree (PhD)

☐Professional Designation Specify: _____

☐Other Specify:_____

Specify and describe any program speciality, certification or professional designation necessary to fulfil the requirements of the position.

PhD in aquaculture or related field

Specify and describe any special skills or type of training necessary to fulfil the requirements of the position (e.g., computer software, client service skills, conflict resolution, and operating equipment).

3. EXPERIENCE (to be completed by the College)

Experience refers to the amount of **related**, **progressive** work experience required to obtain the essential techniques, skills and abilities necessary to fulfil the requirements of the job at the **point of hire** into the position. This may or may not match the incumbent=s actual amount of experience.

The College is to identify the minimum amount and type of experience appropriate for the position based upon the College's recruitment requirements.

Experience required at the point of hire. Up to and including:

☐0 - no experience	☐3 years
☐1 month	☒5 years***employment experience. Does not include years of graduate work***
☐3 months	☐7 years
☐6 months	☐9 years
☐1 year	☐12 years
☐18 months	☐15 years
☐2 years	☐17 years

Specify and describe any specialized type of work experience necessary to fulfil the requirements of the position.

- Significant experience in the design, organization and implementation of applied research experiments and demonstrated scientific leadership experience.
- Strong background and skills in mechanical engineering including knowledge of mechanical systems, fluid dynamics, thermodynamics and instrumentation
- Proficiency in statistical analysis (such a R, Python, or specialized software used in biological research) for analysing data collected from experiments.
- Ability to identify issues in existing aquaculture systems and design mechanical solutions to improve efficiency, sustainability and productivity.
- Ability to communicate complex scientific concepts both in writing (for research papers, grants, etc.) and verbally (for presentations at conferences, workshop and seminars)
- Practical experience in aquaculture farms or facilities and an understanding of the real-world challenges faced by the aquaculture industry.
- Knowledge and experience with the protocols set out by the Canadian Council on Animal Care
- Experience leading the day-to-day operations of a recirculating fish hatchery, including rearing healthy fish, troubleshooting complications that arise with fish rearing, related disease pathogens or systems issues which impact fish health.

4. INITIATIVE - INDEPENDENCE OF ACTION

Initiative - Independence of action refers to the **amount of responsibility** inherent in a position and the **degree of freedom** that an incumbent has to **initiate** or **take action** to complete the requirements of the position. An incumbent is required to foresee activities and decisions to be made, then take the appropriate action(s) to ensure successful outcomes. This factor recognizes the established levels of authority which may restrict the incumbent=s ability to initiate or take action, e.g., obtaining direction or approval from a supervisor, reliance on established procedures/methods of operation or professional practices/standards, and/or built-in-controls dictated by computer/ management systems.

Briefly describe up to three typical job duties/types of decisions that the incumbent is required to perform using their initiative without first having to obtain direction or approval from a supervisor.

1. Initiates and establishes partnerships with industry partners and other post-secondary

institutions for the purpose of engaging in collaborative research projects.
2. Makes decisions about a specific goal of a research project and intended outcomes.
3. In the course of a research project, decides to change the course of the research as a result of outcomes to date.

Briefly describe up to three typical job duties/types of decisions that the incumbent is required to perform which required the direction or approval from a supervisor.

1. Terminating or major disciplining of employees
2. Changing the strategic direction of the research centre
3. Going over budget on a project

Give specific examples of guidelines, procedures, manuals (formal or informal), computer systems/programs that are used in performing job duties and in making decisions, e.g., Government regulations, professional or trade standards, College policies or procedures, department or program procedures, computerized/manual programs/systems and any other defined methods or procedures.

- Fleming College Strategic Plan
- Fleming College Business Plan
- Fleming College Intellectual Property Policy
- Fleming College Commercialization Policy
- Fleming College Research Data Management Policy
- Fleming College internal Service Level Agreements
- Fleming College's Animal Care Policies
- CFI Policy Guide
- Canadian Council on Animal Care Policies & Guidelines
- Ontario government/PBS directives, policies and operating procedures
- Guidelines from funding organizations (e.g. NSERC, CFI, Fed Dev, OCI)
- Standards of applied science and technology professional practice
- CSA Standards (Canadian Standards Association)
- Ontario Health and Safety Act
- Procedures, manuals and guidelines do not readily exist for work related to business development.

5. POTENTIAL IMPACT OF DECISIONS

Potential Impact of Decisions recognizes the **potential consequences** that **errors in judgement** made by an incumbent, despite due care**,** could have on the College. Usually, the higher the level of accountability inherent in a position, the greater the potential consequences there are on the College from errors in judgement.

Give up to three examples of the typical types of errors in judgement that an incumbent could make in performing the requirements of the position. Do not describe errors which could occur as a result of poor performance, or ones that are rare or extreme. Indicate the probable effects of those errors on the College, e.g., loss of reputation of program/College, waste of resources, financial losses, injury, property damage, affects on staff, students, clients or public.

- As the Principal Researcher, the incumbent is responsible for adhering to animal care guidelines as set out by the Canadian Council of Animal Care and the college's Animal Care Committee. Failure to adhere to these guidelines can lead to poor living conditions, stress, illness and suffering among the aquatic animals. This is not only ethically concerning but can also lead to legal consequences. In addition, inadequate care practices can lead to disease outbreaks that can spread rapidly in a confined aquatic environment and may results in high mortality rates, negatively affectively the research objectives and the relationship with the industry partner. This can result in the reputation of the Principal Researcher, the college which can lead to a loss of credibility, funding opportunities and collaborative partnerships.
- Development of projects that are non-feasible, non-eligible or not supported could result in waste of human/fiscal resources, impact on morale, and loss of reputation of research center, OARI and/or College.
- Failure to capture and store data according to the college's Research Data Management Policy puts the college at risk for being non-compliant with the Tri-Council, which could result in being ineligible for research funding.

6. CONTACTS AND WORKING RELATIONSHIPS

Contacts and Working Relationships refers to the **types**, **importance** and **intended outcomes** of the contacts and working relationships required by an incumbent to perform the responsibilities of a position. It also measures the skill level required to be effective in dealing with contacts and being involved in working relationships. This factor does **not** focus on the level of the contact, but on the **nature** of the contact.

Indicate by job title, with whom an incumbent is required to interact to perform the duties and responsibilities of the positions. Describe the nature, purpose and frequency of the interaction, e.g., exchanging information, teaching, conflict resolution, team consultation, counselling.

Contacts	Contacts by Job Title	Nature and Purpose of Contact	Frequency of Contact	
			Occasional	Frequent
Internal to the College, e.g., students, staff, management, colleagues.	Executive Vice President, Applied Research & Innovation	Strategic Direction, exchanging information		X
	Director, Applied Research & Innovation	Problem solving exchanging information, grant viability, advice on procedures, conflict resolution		X
	Research & School Operations Manager	Assessing resources, employee feedback, student workers, exchanging information		X
	Chair, Animal Care Committee	When seeking approval for animal use protocols	X	
	Research Grants Financial Officer	Budget questions, eligibility questions, exchanging information		X
	Operations Officer, (OARI)	Meeting requests, coordinating and planning events		X
	Researchers & Technologists	Providing direction, exchanging information		X
External to the College, e.g., business and industry representatives, suppliers, advisory committee members, staff at other colleges, government officials, and general public.	Industry Partners	Establishing and maintaining relationships, exchanging information and ideas, brainstorming		X
	Researchers at other institutions	Establishing and maintaining relationships, exchanging information and ideas, brainstorming		X
	Government officials, such as the Chief Veterinarian at OMAFRA	Establishing and maintaining relationships, exchanging information, promoting the research centre	X	
	Funders	Establishing and maintaining relationships, exchanging information, promoting the research centre	X	
	Suppliers	Investigating products and equipment, exchanging ideas		X

Occasional (O) **Contacts are made once in a while over a period of time.**
Frequent (F) **Contacts are made repeatedly and often over a period of time.**

7. A) CHARACTER OF SUPERVISION/FUNCTIONAL GUIDANCE

Character of Supervision identifies the **degree and type** of supervisory responsibility in a position or the nature of functional/program supervision, technical direction or advice involved in staff relationships.

Required to coordinate, control and provide general supervision for the entire division including the quality and quantity of work, and overall achievements. Responsible for hiring, motivating, promoting, appraisal, discipline and terminating staff.

(/) Check the applicable box(es) to describe the type of supervisory responsibility required by an incumbent in the position:

☐Not responsible for supervising or providing guidance to anyone.

☒Provides technical and/or functional guidance to staff and/or students.

☒Instructs students and supervises various learning environments.

☒Assigns and checks work of others doing similar work.

☒Supervises a work group. Assigns work to be done, methods to be used, and is responsible for the work performed by the group.

☐Manages the staff and operations of a program area/department.*****

☐Manages the staff and operations of a division/major department.*****

☐Manages the staff and operations of several divisions/major departments.*****

☐Acts as a consultant to College management.

☐Other e.g., counselling, coaching. Please specify:

_____

***** Includes management responsibilities for hiring, assignment of duties and work to be performed, performance management, and recommending the termination of staff.

Specify staff (by title) or groups who are supervised/given functional guidance by an incumbent:
Research Technologist (2)

Direct Reports: All non-full-time employees of the CIAP including casual and part-time research staff such as technologist, technicians, researchers and student workers.

Indirect Reports: Full-time Research Technologists of the CIAP and SENRS teaching hatchery

7. **B) SPAN OF CONTROL**

Span of Control is complementary to **Character of Supervision/Functional Guidance**. Span of Control refers to the **total number of staff** for which the position has supervisory responsibility, (i.e., subordinates, plus all staff reporting to these subordinates).

Enter the total number of full time and full time equivalent staff reporting through to the position. Also identify the number of staff for whom the position has indirect responsibility (contract for service), if applicable.

Type of Staff	Number of Staff
Full-Time Staff	0
Non Full Time Staff (FTE) *	2.7
Contract for Service **	
Total:	2.7

*** Full Time Equivalency (FTE) conversions for non-full time staff are as follows:**

Academic Staff

Identify the total average annual teaching hours taught by all non-full time teachers (part-time, partial load and sessional) for which the position is accountable and divide by 648 hours for post-secondary teachers and 760 hours for non-post-secondary teachers.

Support Staff

Identify the total average annual hours worked by part-time support staff for which the position is accountable and divide by 1820 hours.

Administrative Staff

Identify the total average annual hours worked by non-full time administrative staff for which the position is accountable and divide by 1820 hours.

**** Contract for Services**

When considering contracts for services, review the nature of the contractual arrangements to determine the degree of supervisory responsibility the position has for contract employees. This could range from no credit for supervising staff when the contracting company takes full responsibility for all staffing issues to prorated credit for supervising staff when the position is required to handle the initial step(s) when contract staffing issues arise.

8. PHYSICAL AND SENSORY DEMANDS

Physical/Sensory Demands considers the **degree** and **severity** of exertion associated with the position. The factor considers the intensity and severity of the physical effort rather than the strength or energy needed to perform the task. It also considers the sensory attention required by the job as well as the frequency of that effort and the length of time spent on tasks that cause sensory fatigue.

Identify the types of physical and/or sensory demands that are required by an incumbent. Indicate the frequency of the physical demands as well as the frequency and duration of the sensory demands. Use the frequency and duration definitions following the tables to assist with the descriptions.

PHYSICAL DEMANDS

Describe the types of activities and provide examples that demonstrate the physical effort that is required in the position on a regular basis, i.e., sitting, standing, walking, climbing, lifting and/or carrying light, medium or heavy objects, pushing, pulling, working in an awkward position or maintaining one position for a long period of time.

Types of Activities that Demonstrate Physical Effort Required	**Frequency** (note definitions below)				
	Occasional	**Moderate**	**Considerable**	**Extended**	**Continuous**
Prolonged sitting at meetings		X			
Driving watercraft, motor vehicles		X			
Working in hatchery setting up experiments or trouble shooting systems		X			

SENSORY DEMANDS

Describe the types of activities and provide examples that demonstrate the sensory effort that is required in the position on a concentrated basis, i.e., reading information/data without interruption, inputting data, report writing, operating a computer or calculator, fine electrical or mechanical work, taking minutes of meetings, counselling, tasting, smelling etc.

Types of Activities that Demonstrate Sensory Effort Required	**Frequency** (note definitions below)					**Duration**
	Occasional	**Moderate**	**Considerable**	**Extended**	**Continuous**	**Short Intermediate or Long**
Listening in meetings			x			
Reading and analyzing information			x			
Labour relations/dispute resolution	x					

FREQUENCY:

Occasional:	Occurs once in a while, sporadically.
Moderate:	Occurs on a regular, ongoing basis for up to a quarter of the work period.
Considerable:	Occurs on a regular, ongoing basis for up to a half of the work period.
Extended:	Occurs on a regular, ongoing basis for up to three-quarters of the work period.
Continuous:	Occurs on a regular, ongoing basis throughout the entire work period except for regulated breaks.

DURATION:

Short:	Up to one hour at a time without the opportunity to change to another task or take a break.
Intermediate:	More than one hour and up to two hours at a time without the opportunity to change to another task or take a break.
Long:	More than two hours at a time without the opportunity to change to another task or take a break.

9. WORKING CONDITIONS

Working Conditions considers the frequency and type of exposure to undesirable, disagreeable environmental conditions or hazards, under which the work is performed.

Describe any unpleasant environmental conditions and work hazards that the incumbent is exposed to during the performance of the job.

Environment

Describe the types of activities and provide examples that demonstrate exposure to unpleasant environmental conditions in the day-to-day activities that are required in the job on a regular basis, e.g., exposure to dirt, chemical substances, grease, extreme temperatures, odours, noise, travel, verbal abuse, body fluid, etc. Indicate the activity as well as the frequency of exposure to undesirable working conditions.

Types of Activities That Involve Job Related Unpleasant Environmental Conditions	**Frequency** (note definitions below)		
	Occasional	**Frequent**	**Continuous**
Working in fish hatchery that is cold, damp, wet and smelly		x	
Working on bodies of water in all seasons			

Hazards

Describe the types of activities and provide examples that demonstrate the hazards in the day-to-day activities that are required in the job on a regular basis, e.g. chemical substance, electrical shocks, acids, noise, exposure to infectious disease, violence, body fluids, etc. Indicate the activity as well as the frequency of exposure to hazards.

Types of Activities That Involve Job Related Hazards	**Frequency** (note definitions below)		
	Occasional	**Frequent**	**Continuous**

Frequency:

Occasional	Occurs once in a while, sporadically.
Frequent	Occurs regularly throughout the work period.
Continuous	Occurs regularly, on an ongoing basis, throughout most of the work period.