

# 2021 Work Study Application

## Job Title

The Culture and Environment Media Archive Toolkit Designer

## Summer Session (May-Aug) hours requested

680

## Winter Session (Sept-Apr) hours requested

816

## Choose Position Classification

Research

## Job Description

The Centre for Culture and Technology (CCT) recruits students to develop a data-driven Culture and Environment Media Archive Toolkit (CEMAT) for Museum exhibit applications. The successful candidates will participate in the design and development of museum toolkit archives. The project is a cross-sectional collaboration with four regional museums: the Kelowna Heritage Museum, Penticton Museum, Naramata Museum, and Sncewips Heritage Museum, to be a plug and play for other museums.

Students with strong hands-on skills in digital media and programming are needed to work on this project. Students will work alongside the multidisciplinary team and learn from the supervisor, graduate students, and research associates that will provide training, guidance, support, and further collaboration opportunities.

Students responsibilities:

(1) Conducting hands-on research activities: literature reviews, collecting and interpreting museum archives, gathering expert knowledge using qualitative methods collecting and interpreting museum archives to develop design of the toolkit.

(2) Communicating and presenting research results to audiences, including students, faculties, and partners at workshops and conferences. The public presentation of the museum project will provide real-world output for the students' work.

(3) Participating and organizing group meetings, discussion sessions, and workshops.

(4) Initiating and leading collaboration within the research group and other research labs on campus through various networking opportunities.

(5) Learning essential skills, including project management, time management, leadership, and communications, and developing professional expertise in areas complementing their primary studies.

(6) Attend training in required skills for the job that is available in the lab.

## Qualifications

The candidate must be an upper-level undergraduate or graduate student with a solid background in collaborative design, given that the project will provide students with unique opportunities to interact with multiple organizations and team members. The foundational skills include human computer interaction design and computer programming for media applications, specifically HTML 5 and javascript programming environments. Training will be provided as necessary for the student researcher throughout the project. The candidate must enjoy independent problem solving and hands-on experimentation. The candidate should demonstrate observational, analytical, and organizational skills and the ability to handle technical troubleshooting and equipment and pay attention to details. The student researcher will need strong communications and interpersonal skills to facilitate positive working relationships and information sharing with other team members.

## Student Learning Outcomes

### 1. Personal growth and professional development

In the first week, students will receive orientations that complement their classroom learning, including safety training, team building, project management, and leadership development. Students will identify any training needs and individual professional development goals that become a critical aspect of project planning. Weekly meetings with the supervisor will help students develop clear project goals, timelines, and milestones. The supervisor and the lab team support student learning of research and transferable skills through weekly discussions and refinement of project goals.

We will provide one-on-one support to the students' personal growth and professional development by:

- (1) Providing an environment that encourages independent problem-solving: students will take ownership of their project and develop solutions independently.
- (2) Providing opportunities for teamwork and communication: weekly group meetings enable students to present their progress. Two-way feedback is provided during meetings for progress updates, receiving advice and feedback as appropriate, and recalibrate schedules for deliverables if necessary.
- (3) Providing a safe environment to learn from mistakes: students will learn to think critically and reflect on their experience each week through group discussions.

Through these exercises, students will make critiques and receive constructive feedback to improve their work in the following week.

- (4) Providing leadership training: students take ownership of their projects and are encouraged to initiate and lead collaborations with other researchers in the lab.
- 5) Providing learning opportunities: students learn about interactive museums, cross-cultural, and Indigenous knowledge representation. Students will connect with local experts and develop a strong understanding of cross-sectional collaboration with four regional museums.

### 2. Workplace Skills

The work-study program will help students gain several transferable soft workplace skills and work-specific skills. The student will develop skills essential for collaboration with interdisciplinary research teams and community partners through regular team meetings and collaboration. Necessary workplace skills developed include:

1. Critical thinking and problem-solving.
2. Leadership, teamwork, and multidisciplinary collaboration.
3. Understanding differences in disciplinary approaches.
4. Time management.
5. Developing creativity in a dynamic team environment.

These skills will be developed through team project planning, attending weekly production meetings, and having an active voice in the technical and design contributions to the project. Students will directly engage in activities that share expertise and provide constructive feedback. Students develop leadership, teamwork, and collaboration skills as they lead their projects and collaborate with other group members. The student will acquire time management skills when designing project milestones and coordinating programming tasks with the research assistants responsible for museum toolkit development and creative design. Job-specific skills acquired through the project, include digital archive data mining and development for interactive museum toolkit, and cross-cultural and environmental communication. These skills will significantly complement the academic skills acquired through the regular university curriculum. The additional skills will boost future career opportunities for students employed here. The supervisor will oversee the proper development of all these skills.

### **3. Career Exploration**

Students benefit from a hands-on opportunity to develop the Culture and Environment Media Archive Toolkit from its conceptual stage to the public presentation. The position provides the students with valuable technical skills and an interdisciplinary research experience critical for employment in a professional digital media and creative media industries, governmental or non-governmental research, and digital media project management positions. Combining the multidisciplinary experience will support the student's opportunity to pursue several career options, including academic jobs, research positions with governmental or non-governmental organizations, or employment as a research and communications consultant. This experience is a key requirement in further training opportunities (graduate / postdoctoral studies). Students can choose career paths as researchers, technical specialists, media archive developers, and communication specialists.

To help the students explore career paths, the supervisor will:

- (1) Discuss the potential and requirement for each career path;
- (2) Introduce students to the supervisor's personal academic and industry connections in media development and help students establish professional networks;
- (3) Invite students to meet with invited speakers from other universities and industries to explore research and career opportunities;
- (4) Encourage students to establish new collaborations and take the leadership role to build their networks;
- (5) Provide students the opportunities to organize and attend conferences and workshops.

Undergraduate students will get first-hand experience working in academia and understand how graduate school works. Through these interactions, students will better understand their career options in academia, government, and industry.

### **4. Hands on Learning**

Students will gain hands-on research experience, enabling them to translate skills learned in classes to a public museum setting. Students will develop a methodological plan that suits the rigor of research-creation and the needs of museum partners. Students will face the challenge of developing tools to be used in a public setting and in collaboration with diverse community organizations. The supervisor will oversee these learning experiences to support the students throughout potentially challenging conversations, tight deadlines, and prepare students well in advance of these likely situations. Within weekly lab meetings, team members will share their research and development experiences and work with the team to brainstorm solutions to possible challenges. Students will take ownership of the Culture and Environment Media Archive Toolkit development, which requires data collection, data interpretation, development of tool affordances, designing an interaction framework and tool development. Students will present their work regularly to the project partners leading to a public museum presentation.

The supervisor and team members will work with the student researchers to support a systematic approach with realistic expectations. A training pattern, mentoring, goal setting, and feedback for each research task will be shared at weekly meetings. This process defines student success criteria. Students will be supported in all aspects of this project - from creating design plans, data collection, interpretation, and prototype development presented at lab meetings and in the public museum context. Opportunities to publish student work will also be offered and encouraged.

### **5. Mentorship and Support**

The supervisor will provide a clear outline of the project and specific expectations of the position for students. Learning objectives and student goals will be agreed upon course of action and associated timelines for achieving set goals will be reviewed and revised in weekly meetings with the supervisor. The supervisor will provide critical interactive museum exhibit techniques and digital media design in the interdisciplinary and cross-sector context. Graduate students and research fellows will provide day-to-day guidance on project development, strategies for work-life balance, and software support.

The team provides a supportive environment where open, 2-way communication is valued and practiced. Additional peer support and interactions with the current team will help the student feel incorporated into the research team. The level of guidance and mentorship will be tuned according to individual style and needs so that students will be challenged enough to think independently but not challenged too much that they are overwhelmed. Care will be taken during research planning and debriefing sessions to assess workload issues with the student and ensure the position's demands are in balance with other demands on the student's time and energy, both personal and academic. The supervisor fosters support, teamwork, and continued learning by encouraging lab members to engage in team-building activities, attend project management and team-building workshops. During monthly project meetings that involve the entire faculty, museum professionals, and student team, everyone learns how their contributions progress the larger overarching project, highlighting recognition and successes achieved by individual team members. Prioritizing personal health and well-being is a core vision of the lab.

#### **6. Contribution to the University as a whole**

This position aligns well with several key UBCO Aspire principles and with the UBCO Place & Promise strategic plan: it is part of an innovative, collaborative, multidisciplinary project focused on cross-cultural and environmental communications in the digital museum context. It includes close collaboration with museum professionals as a core member of the research team.

The position offers the student researcher the opportunity to be a change agent within the Okanagan - helping us move towards a more sustainable relationship to our local environment through intercultural research and dissemination to the general public in the form of interactive museum exhibitions. Given the global importance of cross-cultural understanding critical for environmental protection, the student also has the opportunity to contribute to international efforts in ecological sustainability in a socially just manner.

Faculty of Creative and Critical studies have initiated comprehensive development of digital media design education at UBCO. In the last two years, the new undergraduate program, Bachelors of Media Studies, and Digital Arts and Humanities Interdisciplinary Graduate Studies theme demonstrate faculty commitment to the field of digital media design. These programs attract interdisciplinary students who hold a strong skillset in digital media design, art, and computer programming. The students in these programs directly benefit from prosed research and development. This project will contribute to faculty initiatives in promoting and disseminating students' work in the local public setting and position our students as leading local experts in digital media design.