

Job Description



Job Title:	Instructional Digital Media Developer
Department:	Centre for Extended Learning
Reports To:	Online Learning Group Manager
Jobs Reporting:	None
Salary Grade:	USG 8-11
Effective Date:	August 2023

Primary Purpose

The Instructional Digital Media Developer, referred to here as the Developer, has foundational working knowledge in a range of digital media development tools, educational technologies and associated best practices, and is responsible for providing time-sensitive digital media production and production support to CEL clients and projects, front-line relationship management, and exceptional service to all stakeholders.

The Developer primarily works to ensure that provided content and instructional concepts are interpreted, shaped, and translated into digital media in such a way as to provide an effective online learning experience. The Developer must combine technical knowledge of multimedia and web authoring tools and techniques with visual design and interaction design skills and remain current regarding best practices for optimal user experience and web accessibility, ensuring the use of digital media is effective for all learners.

For Developers working on STEM (Science, Technology, Engineering, and Math) courses, a relevant education background is often required to be able to work effectively with the content.

A high degree of specialization and expertise garnered through a combination of considerable formal education and substantial industry experience is required for senior specialist positions. At this level, the Developer is highly specialized in, typically, one area of advanced digital media development outside the core development platforms/methods (e.g., Extended Reality (XR) development) and is required to independently lead development projects through all phases of the project lifecycle.

Key Accountabilities

Technical/Production support – fully online/blended course development/delivery

- Contribute to pre-term and in-term technical/production/digital learning design support for faculty in fully online/blended courses across all departments.
- Advise internal and external stakeholders on a wide range of current and emerging educational technologies and digital media authoring technologies and techniques that promote effective online/blended teaching and learning.
- Support instructors and course development teams with the design, creation, and maintenance of digital assets (e.g., learning materials) and setup of tools within prescribed course delivery platforms¹.
- Complete setup and testing of CEL-supported educational technologies.
- Implement prescribed digital learning principles and web accessibility standards and leverage broader digital teaching/learning design expertise in pursuit of solutions to meet desired learning objectives.

Pre-Production

¹ <https://uwaterloo.ca/extended-learning/teach-online/creating-online-course/course-delivery-platforms>

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- Provide consultation to stakeholders, as required, regarding feasibility and suitability of digital media development approaches to meet desired learning objectives and design vision.
- Provide accurate development time estimates to stakeholders as required for completion of discrete course components; contribute to establishing project milestones.
- Curate third-party multimedia searches for stakeholder evaluation.
- Create lo-fi prototype mock-ups and revise accordingly to meet project lead and client requirements.
- Provide client with one-to-one technical training (e.g., audio recording, screen recording, multimedia authoring software) as necessary.
- Work with the Learning Environment Architect to complete environmental scan and cost/benefit analysis of atypical development strategies.

Production

- Create digital media components for prescribed course delivery platforms² utilizing prescribed development methods and tools³.
- Apply CEL-adopted UX principles⁴ to the creation of all materials and interfaces and leverage broader digital teaching/learning design expertise in pursuit of solutions to meet desired learning objectives.
- Apply all CEL course development standards, including those addressing copyright and web accessibility.
- Revise digital media accordingly to incorporate revisions required by stakeholders.
- Conduct all necessary and prescribed proofing and testing of created components.
- Source digital media assets following all standards and best-practices for using third-party materials.
- Complete copyright records for sourced digital media assets.
- Contribute to the acquisition of copyright permissions when necessary.
- May be required to work with cognitively advanced, specialist, or sensitive subject matter.
- May be required to create custom assets and interfaces using non-standard development technologies and techniques.

Communication/Organization

- Present clear, concise language in all communications (oral, written, technical).
- Contribute to project team discussions and liaise with client directly, as needed.
- Meet work order completion target dates and ensure individual development tasks are completed efficiently, on time, according to established methods and standards.
- Use appropriate time-management strategies to balance priorities and tasks.
- Complete project/course documentation as required.
- Document user manuals, training manuals, and FAQs for new technologies/services and proactively update existing to ensure integrity, accuracy, and relevance.
- Provide regular reports to CEL project lead regarding the status of development tasks.
- Provide regular reports to manager and escalate issues in a timely manner.
- May be required to provide appropriate and effective direction to junior staff.
- May be required to provide mentoring to new Developers.
- Contribute to team growth through one-to-many training.
- Contribute to wider Production group discussions with regards to course development technologies/methods.
- Contribute to change management activities related to digital media development.
- Investigate and evaluate new/cutting edge educational technologies for use in online/blended course delivery.
- Contribute to the development of CEL production and delivery standards and processes through cross-functional working group participation and leadership in Production group projects and initiatives.
- Lead Production group projects and initiatives as assigned.

² <https://uwaterloo.ca/extended-learning/teach-online/creating-online-course/course-delivery-platforms>

³ <https://uwaterloo.ca/extended-learning/teach-online/digital-media-development>

⁴ <https://cms.cel.uwaterloo.ca/honeycomb/>

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- Represent CEL on university committees and working groups as assigned.
- Keep informed of, through self-directed study and professional development, and apply deeper understanding of:
 - new and emerging digital media authoring tools and techniques.
 - UX and web accessibility principles beyond CEL-adopted standards; and
 - online learning instructional design principles and best practices.
- Keep informed of sources and repositories for open educational resources (OERs).

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- An undergraduate degree in human-computer interaction, interaction design or related discipline (e.g., educational technology, user experience design, digital media design); or
- A post-secondary diploma in human-computer interaction, interaction design or related discipline (e.g., educational technology, user experience design, digital media design); and
- 2–5 years of relevant experience in industry or academic institutions, depending upon level of responsibility.
- A STEM degree is a requirement for some STEM specialist positions.
- A graduate degree in a relevant field is required for some senior specialist positions.
- A degree in Education is an asset.

Experience

- 2–5 years of experience with a proven record of accomplishment in producing and supporting the production of digital media (including some or all of: web design, graphic design, audio and video editing, motion graphics); with portfolio demonstrating a range of projects and applications.
- Experience developing specifically in an online learning context would be an asset.
- Experience developing within a Learning Management System (LMS), such as Brightspace, edX, Moodle, and Canvas, or within a Content Management System (CMS) would be an asset.
- Experience developing using a variety of web technologies including, but not limited to: HTML, CSS, JavaScript, JSON, and/or XML.
- Experience creating assets using industry-specific tools, e.g., Adobe Creative Suite.
- Experience with LaTeX, Maple, Möbius, MATLAB, and/or other specialist STEM software and technologies may be required, depending upon specific responsibilities.
- Experience in R, SPSS, Python, or other coding languages may be required, depending upon specific responsibilities.
- Familiarity using SharePoint Online and Office 365 would be an asset.

Knowledge/Skills/Abilities

- Extensive knowledge of digital media authoring tools and production techniques.
- Superior verbal and written communication skills; ability to communicate technical concepts to both technical and non-technical audiences.
- Ability to assess the adoption of leading-edge technologies through various production lenses (e.g., future maintainability, copyright, ownership).
- Strong technical and creative design skills and insights with a passionate approach to effective asset creation.
- Knowledge of project management and related software tools is an asset.
- Knowledge of digital media production practices for teaching and learning and a good understanding of the current technology landscape and associated issues.

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- Knowledge of user experience (UX) design; familiarity with instructional design for online learning and universal design is an asset.
- A keen ability to problem solve and creatively identify effective and efficient solutions within complex systems and processes.
- Sensitivity and discretion towards the challenges of working with various stakeholders in an institutional setting.
- Excellent organization and time-management skills.
- Strong 'people skills' for building relationships with colleagues at all levels.
- Demonstrated superior work ethic, initiative, dependability, and the ability to work independently with occasional direction, excellent attention to detail.
- Continuous improvement mindset; proven adaptability for managing change.

Nature and Scope

- **Contacts:** CEL clients, including faculty (course authors/instructors), CEL design/development staff, IST/ITMS Production Studio staff, UW Subject Librarians, other campus partners, various copyright holders (Developers may be required to request copyright from third party authors, publishers etc.).
- **Level of Responsibility:** The position performs specialized work with minimal supervision and provides functional guidance, direction and/or training to junior staff. Responsible for meeting project milestones/deadlines. Responsible for providing exceptional front-line support to Waterloo clients in a timely manner.
- **Decision-Making Authority:** Creative and technical direction of digital media build to meet desired learning objectives, day-to-day schedule (Developers must manage their time and prioritize tasks accordingly to effectively meet milestones and established turnaround times for concurrent projects/tasks).
- **Physical and Sensory Demands:** Must be able to focus on data and screens for extended periods of time, while maintaining near perfect accuracy and attention to detail. Much of the time is spent sitting in a comfortable position with frequent opportunity to move about. Located in a comfortable indoor area. There is a frequent need to give close attention to various stimuli such as written material and information given verbally to co-workers.
- **Working Environment:** The work is varied. There are deadline pressures, while at the same time there is a demand for thoroughness and accuracy.