### 1. POSITION IDENTIFICATION

<table>
<thead>
<tr>
<th>Department Name:</th>
<th>Centre for Online &amp; Distance Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position Number(s):</td>
<td>00122908 (TEMPORARY)</td>
</tr>
<tr>
<td>Current Position Classification:</td>
<td>Programmer Analyst, gr. 10</td>
</tr>
<tr>
<td>Department Position Title:</td>
<td>LMS &amp; Open Source Programming Specialist</td>
</tr>
<tr>
<td>Evaluating Supervisor's Title:</td>
<td>Systems and Web Developer</td>
</tr>
<tr>
<td>Effective Date:</td>
<td>December 14, 2017</td>
</tr>
<tr>
<td>Date Completed:</td>
<td>December 14, 2017</td>
</tr>
<tr>
<td>Part 1 is being completed by:</td>
<td>□ Employee □ Evaluating Supervisor</td>
</tr>
</tbody>
</table>

### 2. POSITION SUMMARY

A summary of the major functions of the position in three or four sentences.

Reporting to the Systems and Web Developer and working collaboratively with the course programming staff, the LMS & Open Source Programming Specialist participates in the various tasks relating to the learning management system with particular attention to the user interface, the system administration and related programming. Responsible for the design, planning, analysis, implementation, enhancement, maintenance, and support of various software applications with regards to open source programming. Responsible for technical aspects of software development including analysis, user interface and code design, implementation, performance and security. Develops and maintains applications in languages such as but not limited to Drupal, Perl, PHP, and JavaScript.

### 3. MAJOR FUNCTIONS

List the duties and responsibilities of the position in order of frequency (i.e., (D) Daily; (W) Weekly; (M) Monthly; (S) Semester)

(D) Designs, iterates, and refines the user interface and user experience for the enterprise learning management system and related tools.

(D) Solves complex interaction design challenges utilizing various open source software programming and integrating these with the enterprise learning management system.

(D) Develops wireframes, visual comps, functional prototypes and process flows for various online course projects.
(D) Communicates with program directors and the core programming group in order to deliver elegant, detailed technical design solutions to CODE.

(D) Works collaboratively with program directors and core programming staff to design and maintain an open source infrastructure.

(D) Develops and maintains solid relationships and communication with central IT Services, CODE IT Support, and course development teams to improve system stability and availability.

(D) Participates in an on-call staff service rotation to support operational issues.

(D) Engages in front-end technical consultation regarding the enterprise software for learning management systems.

(D) Engages in back-end development using open source platforms and software.

(D) Ensures that all work undertaken conforms to the quality assurance principles within the unit. The incumbent is responsible for ensuring that these principles are applied to the position and related tasks and that all work is completed and verified

(W) Monitors the infrastructure relating to the hosting of courses on the learning management system and proactively scales as necessary.

(S) Utilizes enterprise configuration and frameworks to deploy and manage online course programming within the learning management system.

(S) Utilizes feedback from users (faculty, supervisors, TMs, CODE staff and students) to design solutions that address user needs and support learning outcomes.

(S) Maintains a current knowledge of the learning management system with particular attention to the user interface, the system administration and related programming. Performs related research. Writes technical documentation and develops and delivers training sessions for individuals or groups of staff members. Maintains and updates training materials by keeping them current and organized.

4. MINOR FUNCTIONS

List duties and responsibilities that occur annually and periodically throughout the year.

Liaises and collaborates with other units on campus, such as TLC, ITS, Library, and in working groups or committees to share information on institutional supported learning management technologies.

Attends and participates in in-house and off campus educational technology workshops, seminars and conferences.

Performs other duties and responsibilities consistent with the job description and classification on request.
5. LEVEL OF INDEPENDENCE
Check one box that best describes the level of independence that can be exercised within the position by a fully trained employee.

☐ a) Work is provided with specific instructions describing how and when it should be completed.

☐ b) Work is provided with general instructions. The employee makes choices about how the work will be completed within deadlines.

☒ c) Work is self-directed by the employee. The employee determines what work needs to be completed and when it should be completed to meet deadlines.

☒ d) Work is assigned on a project-by-project basis in the form of broad objectives. The employee evaluates what work needs to be completed within general time frames. Provide examples of project work:

6. TRAINING EXERCISED
If the position provides training, check each description that applies.

☐ a) Not required to provide training to other individuals.

☒ b) Explains how work is performed in his/her own position to individuals in other positions performing the same or similar work (includes training replacement employees).

☒ c) Provides one-on-one specialized training to other individuals. Considered a specialist in a particular area or field of study. Positions at this level may be designated as the resident department expert.

☐ d) Provides one-on-one training to individuals in other positions. Must have a good understanding of the work of the other positions. Positions at this level may be designated as group leaders or work leaders.

☒ e) Conducts training seminars for groups. Training seminars are normally scheduled and follow a prescribed format. May also develop or assist in the development of training seminars.

7. DIRECTION EXERCISED
Check each description that applies.

☒ a) Not required to provide direction to other individuals.

☐ b) Assigns and/or checks work of other individuals.

☐ c) Schedules, assigns, and checks work of other individuals.

☐ d) In addition to C, establishes work priorities for a unit.

☐ e) In addition to C and D, guides project teams.
### 8. INTERNAL AND EXTERNAL CONTACTS

List internal and external contacts (i.e., specific positions within own department, other departments, students, faculty, on/off campus vendors, etc.), the duration of each contact (i.e. less than 1 hour at a time, 1-2 hours at a time, more than 2 hours at a time), and the frequency of each contact (i.e. occasional, frequent, or continuous).

<table>
<thead>
<tr>
<th>Type of Contact</th>
<th>Duration</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director/Management</td>
<td>&lt; 1 hour</td>
<td>Frequent</td>
</tr>
<tr>
<td>Course Authors</td>
<td>&lt; 1 hour</td>
<td>Frequent</td>
</tr>
<tr>
<td>Core Programming Staff</td>
<td>&lt; 1 hour</td>
<td>Frequent</td>
</tr>
<tr>
<td>Technical staff in other departments</td>
<td>&lt; 1 hour</td>
<td>Occasional</td>
</tr>
<tr>
<td>Off campus vendors, technicians and service providers</td>
<td>&lt; 1 hour</td>
<td>Occasional</td>
</tr>
</tbody>
</table>

### 9. IMPACT OF ERRORS

**Common Errors:** Provide a few examples of the most common errors which normally occur in the performance of the work.

- Course site links don’t work – frustrated users, no access to resource
- eLIVE sessions missing a participant – miss meeting or class, complaints to Manager/Director
- eLIVE session in wrong time zone -- miss meeting or class
- Incorrect procedure in training documentation – users can’t do something correctly

**Uncommon Errors:** Provide a few examples of most uncommon errors which infrequently occur in the performance of the work.

- Delete LMS course – postpones online class sessions
- Incorrectly scheduled eLIVE or training event
- Web files not updated – old out-of-date information
- Course site doesn’t function properly – can lose internal and external clients

### 10. EFFORT

Describe concentrated periods of auditory (hearing/listening); visual (seeing); perceptual (understanding/comprehending); and physical dexterity (finger/hand movements, eye/hand coordination, lifting, carrying, pushing, pulling, reaching etc.). For each example of effort, indicate the concentrated duration (less than 1 hour at a time, 1-2 hours at a time, more than 2 hours at a time) and frequency (occasional, frequent, continuous).

<table>
<thead>
<tr>
<th>Type of Effort</th>
<th>Duration</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer work</td>
<td>1 – 2 hours</td>
<td>Frequent</td>
</tr>
<tr>
<td>Reviewing instructional support materials</td>
<td>1 – 2 hours</td>
<td>Frequent</td>
</tr>
<tr>
<td>Conducting Presentations</td>
<td>1 – 2 hours</td>
<td>Occasional</td>
</tr>
<tr>
<td>Lifting, Carrying, and pushing supplies &amp; equipment</td>
<td>&lt; 1 hour</td>
<td>Occasional</td>
</tr>
<tr>
<td>Standing, walking, crouching and kneeling</td>
<td>&lt; 1 hour</td>
<td>Occasional</td>
</tr>
</tbody>
</table>
11. WORKING CONDITIONS

a) Describe the place(s) where work is performed such as office environment, laboratory, outside work site, etc. Also identify the number of hours (of the total hours worked per week) spent in the place(s).

<table>
<thead>
<tr>
<th>Location</th>
<th>Hours spent as a total of hours worked per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>CODE offices</td>
<td>30</td>
</tr>
<tr>
<td>Off-site meetings, presentations, seminars</td>
<td>5</td>
</tr>
</tbody>
</table>

b) Describe any uncomfortable and/or distracting conditions in the workplace(s) which an incumbent is exposed to on a regular basis and the frequency of the exposure. (e.g. interruptions, distracting noise, unpleasant odours, dust, drafts, inks, dyes, cleaning agents, toner for printers, temperature extremes, heavy dust conditions, wetness, fumes, vibrations, etc.)

<table>
<thead>
<tr>
<th>Uncomfortable Conditions</th>
<th>Frequency of Exposure (Occasional, Frequent, or Continuous)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working at video display terminal</td>
<td>Frequent</td>
</tr>
<tr>
<td>Interruptions</td>
<td>Frequent</td>
</tr>
<tr>
<td>Noise from other team members/colleagues</td>
<td>Occasional</td>
</tr>
</tbody>
</table>

c) Describe any potential health or safety hazards etc. and the frequency of exposure of each hazard. (e.g. dealing with complaints and/or verbal/physical abuse; noise levels that interfere with normal speech/hearing; toxic gases or materials; dangerous chemicals, combustibles, radioactive material; repetitive arm, finger, wrist movements or other activities that may result in a physical injury; high speed, pressurized equipment; high voltage; heights above five feet; bio-hazardous wastes, body fluids, etc.)

<table>
<thead>
<tr>
<th>Potential Health or Safety Hazards</th>
<th>Frequency of Exposure (Occasional, Frequent, or Continuous)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal abuse</td>
<td>Occasional</td>
</tr>
</tbody>
</table>
## 12. CONTINUING EDUCATION
Check each description that applies.

- [ ] a) Does not require any continuing education.
- [x] b) Requires learning new university/department related procedures and/or methods.
- [x] c) Requires learning new procedures and/or methods acquired through reading non-university/department publications.
- [x] d) In addition to B and C, requires registration in formal seminars, training sessions, workshops, conferences, etc.
- [ ] e) In addition to B, C, and D, requires registration in post-secondary courses (one semester/equivalent).

## 13. QUALIFICATIONS
Minimum required to satisfactorily perform the work.

**Formal education qualifications:** identify the highest level of formal schooling required.

Bachelor’s degree in Computing Science, educational technology or a related field

In addition to formal education, identify the certification or program of study required.

In addition to the above qualifications, the number of years of minimum experience are:

3 _____ Years

Check one:

- [x] An equivalent combination of formal education, certificate/program of study and experience is acceptable.
- [ ] An equivalent combination of education, certificate/program of study and experience is not acceptable because: (please explain)

**Occupational Skills:** Identify skills specifically required to perform the work of the position.

- Ability to use script writing and coding languages (e.g. Perl, PHP, MySQL, HTML5, CSS, C++, JavaScript, ActionScript Python, Ruby, etc.), and open-source web application framework (e.g., Drupal and CakePHP etc.) at an advanced level.
- Excellent knowledge of Windows, Macintosh, Unix, and Linux operating systems and configuration management systems and concepts.
- Demonstrated knowledge of the latest open source web technologies and their capabilities.
- Excellent testing and evaluation skills.
- Thorough knowledge of World Wide Web applications, including the use of Internet browser software (e.g., Firefox or Explorer).
- Excellent knowledge of microcomputer software technology.
- Demonstrated knowledge and experience of how new media and multimedia can be used to support teaching and learning.
- Excellent creative and design skills and ability to optimize design principles for web delivery.
- Ability to manage multiple projects in an open source programming environment.
- Ability to formulate and conduct training sessions.
- Demonstrated knowledge of running open source applications on enterprise servers.
- Demonstrated knowledge of custom software development and long term maintenance.
Skilled in the use and application of cloud platforms.
Ability to exercise mature judgment and initiative.
Ability to monitor networked learning management systems and tools.
Ability to work effectively as a member of a team.
Ability to work independently and meet deadlines.
Ability to quickly learn new software applications and procedures.
Excellent oral, written, presentation, and communication skills.
Excellent analytical reasoning and problem-solving skills.
Good research skills.

**Occupational Requirement(s):** Identify non-skill requirements to perform the work such as ability to work shifts and/or be on-call; ability to travel periodically outside the lower mainland; have a valid driver's license; ability to lift, move or carry equipment or materials over 10 kg; etc.

Ability to lift, move and/or carry materials and equipment up to 20 kg.
Ability to work on-call and additional hours on occasion as required including evenings and weekends.
### 14. APPROVAL AND REVIEW

**Evaluating Supervisor Approval:** Information provided in the job description accurately reflects the requirements of the position.

<table>
<thead>
<tr>
<th>Name of Evaluating Supervisor</th>
<th>Signature of Evaluating Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
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</tbody>
</table>

**Employee Review:** I have read and understand the requirements of the position.

<table>
<thead>
<tr>
<th>Name of Employee</th>
<th>Signature of Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>