

University of Windsor
LMS - Assessment Guide

	Feature Need: E = essential I = important N = Nice-to-have	
1. Content Management Features		
1.1	Provides Browser-Based Content Editor	E
1.2	Internal text editor available to instructors and students includes an effective equation editor.	E
1.3	Internal rich media/text editor allows seamless copying and pasting from Word and other common word processing formats, and ability to display pasted text as marked up. What else can your text editor do? a. ease of copying a table or inserting graphics; b. resizable CMS i.e., drag corners to make larger or smaller c. allows addition of comments, similar to google docs	E
1.4	Internal editor provides ability to view and edit HTML	I
1.5	Internal editor allows attachment and display of images and other files	E
1.6	Internal editor has inbuilt spell checking function	I
1.7	Internal editor is consistent in functionality across all tools	I
1.8	Dedicated tool for displaying syllabus/course outline	I
1.9	Can import, display and edit html pages	E
1.10	Can import and use SCORM compliant learning objects	I
1.11	Course content (files, internal and external links) is stored in an intuitive and flexible folder structure	E
1.12	Files within folders can be moved from folder to folder within a course site, and between course sites owned by the user. Ability to drag and drop organizing of resources is preferable.	E
1.13	Content folders can be moved within a course site, and between course sites owned by the user	E
1.14	Course modules/Units are displayed in an intuitive menu structure	E
1.15	Ability to create linear and non-linear lessons or modules within a course	E
1.16	Ability to reorder course content once set [e.g. after the design, the instructor can resequence the material, remove sections etc]	E
1.17	Ability to customise course site navigation menu	E
1.18	Master versions of courses stored in the LMS can be copied to a course section/group area for use by faculty and students.	E
1.19	Courses copied from a master/previous version can be customized by Instructors.	E
1.20	Course content/modules/units can be assigned to some users and not to others	E
1.21	Complete course sites (including all student work) can be archived and retrieved and re-imported (without student work) by the instructor.	E
1.22	Instructors can easily archive their own sites (e.g. Download and keep a complete copy of the site).	I
1.23	Full course content can be viewed (but not modified) by past students in the course	I
1.24	Content can be made available or unavailable by following pre-determined rules. Release/unrelease criteria include: date, time, completion of assessment to required level, completion of activities. Rules can be varied by individual or group.	E
1.25	Ability to link learning activities to learning outcomes and display these links automatically. Ability to link to other Learning Outcomes Systems.	E
1.26	Ability to map learning activities to learning outcomes and display these maps automatically. Ability to link to other Learning Outcomes Systems.	I
1.27	Ability to easily create relative internal links between all items in a course that are maintained when courses are copied	E
1.28	Ability to search for content within a course or non-course site	E
1.29	Ability to create content, view, edit, and assess student work offline and sync with server later	I
1.30	Content author can specify the copyright/license terms of the materials; readers must actively agree to any terms	E
1.31	Content author can review the copyright/license status of all materials in the site.	E
1.32	Content author can edit copyrights en masse; hide/remove items based on status.	E

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1.33	Copyright/license logic/rules must be customizable to Canadian copyright law context (constantly changing!).	E
1.34	Ability to make selected or all parts of a site publically accessible and publically "joinable.	E
1.35	LMS provides a drag and drop features	N
1.36	Ability to export parts, or all, of a course site (content, assignments, discussion, etc.), "best" export would be in a standardized format importable to other systems	
	0 = not available 1 = poor 2 = average 3 = good u/k = unknown	
2. Communication/Collaboration/Productivity Tools		
Group management		
2.0	Instructor can create, modify and monitor groups within a course	E
2.1	Students can be assigned to groups in various ways using rules e.g. might include randomly, alphabetically, manually, self-enrolment, fixed number, form groups based on major, or not allow to have more than 2 people from the same major.	E
2.2	Non-course sites can allow self-enrolment	N
2.3	Groups can have their own toolset (e.g. Discussion forums, chat, file sharing, assessment etc)	E
2.4	Support for group assessment e.g. Assessment task can be assigned to a group	E
2.5	Individuals in group assignments can receive either individual or group grade	E
2.6	Course sections can be accommodated within the same site as groups. We can use this for courses that use one site for multiple sections.	E
2.7	Ability to create a group discussion topic and assign it to multiple or all groups at once	E
??	Ability to assign a TA/GA to a group	E
e-Mail		
2.8	The LMS includes an internal e-mail system which allows the course Instructor and enrolled students to send and receive e-mails from one another.	E
2.9	Ability to log email events without violating privacy of the student. The idea is to be able to log the date and time when the student had sent an email to the instructor and refer to the log for any associated inquiries.	E
2.10	Instructors can send e-mail to all students in a course, to a specific group, to selected students, or to one individual in a course.	E
2.11	Students can send e-mail to instructors, all students in a course, to a specific group, to selected students, or to one individual in a course. If this feature exists, provide the ability for student to opt out receiving email from other students and for the instructor to be able to turn on/off this feature in the class.	E
2.12	Ability to send emails automatically when new items are added to the site	I
2.13	When announcements are added to the site, email can be sent to users including the announcement. Users should be able to opt out of low priority announcements.	E
2.14	When new items are added to the site (e.g. Resources), email can be sent to students and other participants notifying them of the new resource. Users can opt out of receiving these emails.	
2.15	The e-mail editor includes a spell check tool	I
2.16	Instructors and students are able to create distribution lists	N
2.17	Documents can be attached to e-mails	E
2.18	Ability to use the WYSIWIG or HTML editor in the internal e-mail tool	E
2.19	Ability to forward internal email messages to other email systems	E
??	Ability to designate email status as Important	I
Threaded Discussion		
2.20	The LMS includes an integrated threaded discussion tool.	E
2.21	Participants posting to a forum can be identified by name, date and time, can be anonymous, and these settings can be changed from forum to forum.	E
2.22	The discussion interface can display posts sorted by student, subject, date and time.	I
2.23	Instructors can create any number of discussion forums for a course, without loss of performance in the system.	E

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2.24	Instructors can create discussion forums with access restricted to various levels, e.g. Whole class, group members, individuals	E
2.25	Editing and removing forum posts is possible and is based on adjustable permissions (time, individual, group etc).	E
2.26	Students are able to edit or delete their own posts (possibly within a limited period of time after posting) and instructors are able to disable postings based on permissions or timeframe.	E
2.27	Ability to receive notification of new posts on a subscription basis	I
2.28	Easy to interpret visual indication of new posts as long as there is a text alternative	E
2.29	Intuitive display of threads (for example, expanding threads, headings, colours)	E
2.30	Ability to grade discussions	E
2.31	Ability to attach/link discussions to assessment items and gradebook	E
2.32	Ability to link discussion forums to learning outcomes	I
2.33	Ability to export discussions to an aggregated text document	E
2.34	Discussion forums can be carried over to new sites when copying from a master, but content is removed from the forums	E
2.35	Images, video, audio and other files can be attached to forum posts	E
2.36	Ability to search for and aggregate a student's forum posts	E
2.37	Ability to attach/link discussion forums to a module/learning activity	I
2.38	Anonymous postings possible.	E
2.39	Ability to restrict access to a discussion forum to a particular group or groups	E
2.40	Linked to threaded discussion	N
File Exchange		
2.41	The LMS provides a shared space (similar to a CMS) into which Instructors and students can upload course documents.	E
2.42	Instructors can create a file exchange area for use by student groups.	I
2.43	The system has version control for files. Files checked out (downloaded) are locked for editing by others. The system will notify the person currently editing a file that someone else is requesting it.	I
2.44	Virus screening is performed on all file transfers.	E
2.45	File exchange area can be restricted/attached to a group by the instructor.	E
2.46	Adaptive release of files by instructor	E
2.47	Files can be accessed for each course the instructor is attached to and copied into any course, or attached to the course from the central repository	I
Synchronous Text Chat		
2.49	The LMS provides an integrated synchronous text chat tool.	E
2.50	The synchronous text chat tool has a moderator feature which allows a designated person to facilitate discussions by managing the sequence of student postings.	I
2.51	Chat sessions can be saved to a text file (by students and instructors).	E
2.52	A synchronous chat tool can be assigned to student groups for their exclusive use.	I
2.53	Chat can be continuous or on a session basis	I
2.54	A synchronous chat tool with an anonymous option for registered users.	N
Blog/Wiki tools		
2.55	LMS has integrated blog tool (or can integrate with external blog tools)	E
2.56	LMS has integrated Wiki tool (or can integrate with external wiki tools)	E
2.57	Ability to use the WYSIWIG or HTML editor within the Blog and Wiki tools.	E
2.58	Blogs and wikis can be graded	E
2.59	Multiple editors in the Wiki are notified to avoid over saving	E
ePortfolio tool		
2.60	Ability to access leading ePortfolio systems through single sign-on integration	E
2.61	LMS has inbuilt ePortfolio solution	I
2.62	Ability to provide access to e-portfolios to students at any time, including after graduation (lifetime), at no cost to the student	I

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2.63	Instructors should have option (with permission) to share a student portfolio or components of such, with an external reviewer(s)	E
2.64	Log of viewers on portfolio, available to the student	E
2.65	Ability for student to make publicly available discrete parts of the portfolio	E
2.66	Ability to determine/set storage limits for ePortfolios	E
2.67	Ability for student to import content into eportfolio, from within the LMS and from external sources; including all discussions, assignments (and feedback), wiki contributions, etc.	E
2.68	Integration of ePortfolio with grading tool/grade centre	E
2.69	Students should have option to share their student portfolio or components of such, with an external reviewer(s)	E
Community networking		
2.69	Ability to integrate with social media tools	I
2.70	Ability to use latest social media/push messaging tool to communicate with students.	I
2.71	Ability for instructors and students to see who is logged into site	E
2.72	Inbuilt IM/Messaging centre tool?	N
Assignment Submission Tool		
2.72	Instructors can add assignments as needed.	E
2.73	Assignments submitted by students are displayed to Instructors in a table which can be sorted by assignment name, due date, student name, student number, time and date of submission.	E
2.74	Virus screening is performed on all file transfers.	E
2.75	Student can see own submission after it has been deposited not necessarily submitted.	E
2.76	Student can edit or resubmit up to due date if instructor allows	E
2.77	Student can save assignment as draft	E
2.78	Student can see or confirm receipt of submitted assignment.	E
2.79	Instructor can reopen assignment/assessment tasks to individual student	E
2.80	Instructor can reopen assignment/assessment tasks to all students	E
2.81	Native integration with plagiarism detection software e.g., Turnitin	E
2.82	Assignments can be attached to the gradebook	E
2.83	Assignments can be graded in online/paperless mode (i.e. Can see gradebook and assignment/rubric at the same time)	E
2.84	Assignments can have grading rubrics attached to them	E
2.85	Multiple assignment formats are possible	E
2.86	Assignments/Assessment tasks can be assigned to learning outcomes that are tracked in an analytics module	E
2.87	Assignments can be graded anonymously	I
2.88	Assignments can be peer reviewed/graded	I
2.89	Assignments can be reviewed by external reviewers	I
2.90	Item analysis native and included	I
2.91	Feedback can be provided in multiple formats, e.g. Text files, inline text, audio, video	E
2.92	Assignments can include inline text response	E
2.93	Assignments can be submitted by file upload	E
2.94	Multiple files can be uploaded for one assignment (and limits can be set)	E
2.95	File responses can be in multiple formats e.g. Office docs, images, video, audio, URL, etc.	E
2.96	Multiple files can be attached to an assignment description/task by the instructor	E
2.97	Instructor can easily see which students have submitted assignments, when they were submitted, and whether they were submitted on time.	E
2.98	Assessed assignments can be included in an ePortfolio by students	I
2.99	Assignment Submission Tool has WYSIWIG editor for assignment description, including ability to attach office, PDF, image, audio and video files	E

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2.100	Rubrics can be shared across course sections and course sites, as well as, option to integrate to gradebook.	E
2.101	Ability to selectively release assignments/quizzes based on student ID	E
2.102	Ability to selectively release assignments based on gradebook criteria	E
2.103	Ability to selectively release assignments based on multiple criteria	E
2.104	Ability to set different assessment time frames for individual students (e.g., students with disabilities who need more time)	E
Assessment: Quizzes/Tests/Surveys		
2.105	Provides an intuitive, usable, flexible, native quiz/exam authoring tool that instructors can use to create their own assessment tasks	E
2.106	Quizzes can be configured to automatically release course content when a prescribed score has been achieved (adaptive release capability).	E
2.107	Ability to import some standard formats for quizzes i.e., publishers have test banks on instructor Resource disks; might be nice to be able to import from test banks.	E
2.108	Test results, along with date and time, are recorded and provided to instructors in a student activity report.	E
2.109	Ability to set boundary times around tests/quizzes	E
2.110	Quiz tool allows for creation of a question pool.	E
2.111	Question pools can be shared across course sites and/or question pools	E
2.112	Quiz display is flexible, e.g. One question at a time, all together etc.	E
2.113	Quizzes can be configured to present questions in random order.	E
2.114	Number of attempts can be configured	E
2.115	If allowed by instructor, students can save their work and return later	E
2.116	Ability to block access to internet sites during a quiz.	I
2.117	If manually ordered, quiz order can be easily re-ordered	E
2.118	Quizzing tool can also be used for surveys (can allow for anonymous responses)	I
2.119	Quizzes can be shared across course sites/survey banks	E
2.120	Configurable feedback can be provided at multiple levels e.g. At the question level, as final overall feedback (which can be adjusted based on grade in the quiz)	E
2.121	Quizzes automatically save when an answer is selected.	E
2.122	Quizzes can be exported and imported	E
2.123	Ability to assign partial credit and/or manually mark a quiz	E
2.124	Quizzes can be deployed to/accessed from within lesson/module and attached to that module (i.e. Students don't have to go to multiple locations to complete assessment related to the module)	N
2.125	Essay/short answer responses can be automatically graded	N
2.126	Essay/short answer responses can provide automatic feedback	N
2.127	Quizzes can be made available to students for a specified date and time period.	E
2.128	Question types include: multiple choice, fill-in-the-blank, fill in the multiple blanks, essay, short answer, matching, drag-and-drop, multimedia (video, images, Java/Flash applets etc), adaptive release, numerical, formula based/calculated, true/false, hot spot, file response, either/or questions, jumbled sentence, multiple answer, opinion scale/Likert scale	E
2.129	Quizzes can have multiple question types in each quiz.	E
2.130	Quizzes can be graded or ungraded	E
2.131	Rubrics can be added to quizzes	I
2.132	Option to show correct answers/provide feedback/provide model answer	E
2.133	Can provide access code or filtering of IP addresses (online proctoring)	E
2.134	Quizzes can be previewed before release	E
2.135	Ability for students to provide self-assessment comments	N
2.136	Item analysis and performance tracking are native and included	E
2.137	All elements of the assessment tool including interface and question types are accessible under AODA requirements	E

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2.138	Ability to plug in advanced/specific assessment types such as Molecule Design, or tools that use protocols such as Opaque	E
2.139	The LMS provides API's for extending assessment capabilities via SCORM	I
Grades/grade centre		
2.140	Grade centre connected to and informs analytics package	I
2.141	Grades can be manually or automatically released to individuals, groups, the whole class	E
2.142	Permissions-based access to the grade centre (e.g. Different permissions levels provide different levels of access and ability to alter the grade centre)	E
2.143	Grading rubrics can be attached to assessment tasks and accessed from the grade centre	E
2.144	Reports from the grade centre can be downloaded	E
2.145	Final grade can be calculated by the grade centre and made available to students	E
2.146	Grade centre can handle multiple grading formats, scales, weightings	E
2.147	Assessment items not created as formal assessment tasks can be added manually to the gradebook as a column and can be included or excluded from grade calculations	E
2.148	Instructor can choose which items contribute to final grade (e.g. Some items may be for formative feedback only but are still accessible through grade centre)	E
2.149	Grade centre allows instructor to easily see which students have not submitted an assessment task, which have been submitted late, which have been graded/returned, etc	E
2.150	Students can see their own grade for assignments, for each gradebook item, the mean grade for the class, and their progress in the course (all these can be turned on and off by the instructor). Additional clarification: Students can see the mean for a particular assessment, and how they compared to the mean, as well as the cumulative effect	I
2.151	Assessment items can be associated with learning outcomes	E
2.152	Marking/grading can be done offline and grades uploaded easily	E
2.153	Ability to provide a learning outcomes report at the individual, group, course and program levels	I
2.154	Sort and search functions for reordering the grade centre	E
2.155	Ability to easily see grade and feedback provided for any item within the grade centre	E
2.156	The gradebook provides an API that can be used to export grades to a student information system.	E
2.157	The gradebook can export student grades in various formats including comma delimited and XML.	E
2.158	Server date time stamp is placed on assessment submissions.	E
2.159	Provide an audit feature for date/time/person who made changes to a grade entered.	E
Learning outcomes tracking		
2.159	LMS is capable of recording and tracking existence of learning outcomes at course and program level	E
2.160	Learning outcomes can be easily added to a course and attached to learning activities and assessment tasks	E
2.161	LMS can track achievement of learning outcomes at individual, group, course, program and University levels	E
2.162	LMS is capable of displaying learning outcomes as a map at a range of levels	I
2.163	Learning outcomes map contains LOs, Assessment tasks, learning activities, achievement	I
2.164	Learning outcomes at the course or activity level can be mapped against higher level LOs e.g. Program, GAs etc	I
Calendar		
2.165	The LMS provides students with a consolidated calendar that displays assignments and test due dates that have been set in all courses.	I

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2.166	Consolidated calendar shows all events for all courses in which the student is enrolled	E
2.167	Adding items to the calendar is intuitive and easy to achieve (e.g. Option to add assignments/quizzes to calendar is available in the assignment tool; option to add module/learning activity titles to the calendar within the builder for these tools)	E
2.168	The LMS calendar permits students to add personal items to the calendar.	E
2.169	Students are able to print calendar events.	E
2.170	Ability to sync Calendar to other personal calendars e.g. Google Calendar etc.	N
2.171	Automatic reminders for upcoming events appear when student logs in	N
2.172	Ability to include university holidays/university important dates automatically.	E
2.173	Ability to add deadlines to Calendar from all other tools e.g., from Forums.	E
0 = not available 1 = poor 2 = average 3 = good u/k = unknown		
3. User Interface & Accessibility		
3.1	The homepage is customisable by the user (e.g. capable of displaying user selected news feeds, moving tabs around, selecting which items to display, selecting themes/colours, applying browser settings for users with disabilities etc., specifically, users may select/customize a personalized stylesheet)	I
3.2	The homepage is capable of displaying institutional announcements that are broadcast to all LMS users as well as targeting announcements/messages to individuals and groups of students.	E
3.3	The log in screen and student home page can be modified to incorporate institutional branding and content layout.	E
3.4	The user interface for courses offered by Faculties can be branded to incorporate the colours and logo of individual faculties.	I
3.5	The user interface provides students with an intuitive means for navigating within courses and from course to course.	E
3.6	The LMS is compliant with Web Content Accessibility Guidelines 2.0. See http://www.w3.org/TR/WAIWEBCONTENT/ . (UID)	E
3.7	The LMS is compliant with the Accessibility for Ontarians with Disabilities Act http://www.gov.on.ca/citizenship/accessibility/english/act2001.htm (UID)	E
3.8	Students can configure the layout, tools display, presentation of text and graphics, etc. and save those settings for future use.	I
3.9	Content authors can use the built in checker to review the accessibility of their content against international accessibility standards, such as, a web accessibility checker like WAVE, http://wave.webaim.org/	I
3.10	Supports courses starting and ending at different times e.g. Terms/semesters are flexible and may or may not be flexible dates determined by the institution. (for MOOCS)	E
3.11	Interface is clean, efficient and contemporary in design (similar to other familiar websites and services)	I
3.12	Navigation requires minimal steps to achieve frequent tasks (e.g. Most features should be accessible within 2-3 clicks)	E
3.13	LMS UI has been formally tested for usability and results of this are available	I
3.14	Interface is responsive/fast loading	E
3.15	Provide interface for sysadmins for trouble-shooting e.g., allow use of a current user profile to recreate events/cases.	
3.17	Supports all desktop browser versions supported by ITS now and in the future	E
3.19	Ability for instructors to 'view as student'	E
3.20	Supports all desktop OS currently supported by ITS (including desktop and mobile OS)	E
3.21	When completing tasks, users are returned to same place on the page upon save, rather than the top of the page	E
4. Reporting/Analytics		
4.1	The LMS provides extensive capabilities for tracking the progress of students through a course and program. Tracking reports will include frequency, dates and times that all course components have been accessed by individual students.	E

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4.2	The LMS provides extensive capabilities for students to track their own progress through a course. Tracking reports will include frequency, dates and times that all course components have been accessed by individual students.	E
4.3	Ability to set automatic and manual notifications/reports on potential students at risk	E
4.4	Ability to provide manual and customisable reports on student success and progress, as well as other LMS related functions	E
4.5	Ability to report at individual, course/section, program level	I
4.6	Reports provide visual (i.e. Dashboard) and text/numerical responses	I
4.7	Reports can be exported to common formats, e.g. Excel, Access, CSV, XML, pdf etc.	E
4.8	Reports can investigate instructor, student, department and faculty success/behaviours	I
5. Other/Intangibles		
5.1	Course sites can include multiple SIS sections and span multiple terms.	E
5.2	Cost of exit 1=lowest cost	E
5.3	Overall Reliability	E
5.4	System is highly stable, tested and scalable	E
5.5	If Open Source, size of development community; If commercial, development track record	E
5.6	If Open Source, model of development and any additional costs related to this (such as subscription fees)	E
5.7	Provide the philosophy of the vendor e.g., open source, etc.	I
5.8	Fit with University of Windsor Strategic Plan and other strategic and operational plans (e.g. ITS, CTL, Open Learning etc)	E
5.9	Opportunity for extended evaluation of product e.g., including having an local instance to test on]	I
5.10	Reputation of product (reports from current users; client references)	E
5.11	Perceived ability for expansion, extension, and development of the LMS as a critical institutional system	E
6. Usability/Features (Technical)		
6.1	Compliant withIMS catridge packages from text publishers	E
6.2	Flexibility beyond course delivery/support (research, training, recruiting, associations)	E
6.3	Integration with ARES, Library Catalogue, Google Scholar, reference management software etc.	E
6.4	Copyright management system (compared to our current Sakai system)	E
6.5	"Undo", soft deletions, rolling back of deleted files, assignments, etc. -Can be initiated by the user, or by sysadmin	E
6.6	Ability to returning permissions and settings to "default"	E
6.7	Files associated with the system (e.g. Assignments, uploaded resources etc) are stored in a directory structure rather than as part of the database)	E
6.8	Sites can be archived easily and efficiently by both the user and system admins	E
6.9	Archiving system is customisable and automated to support housekeeping policies e.g. Removing content from primary system, ability to set location of archive etc.	I
6.10	Archiving system uses standard format (describe the format your system uses) that is preferably interoperable between versions and comparative systems	E
7. Course templates/requesting sites		
7.1	Ability to create course templates	I
7.2	Ability to assign ownership of course templates to a selected group of users	I
7.3	Ability to assign course templates as default for particular groups (e.g. Business DE template, Nursing template etc) based on course code	I
7.4	Ability for user to select course templates when requesting course site	I
7.5	Ability for instructor or administrator to select and apply course templates after site has been created	I
7.6	Course sites can be automatically created when requested	I
7.7	Native course request system	E

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8. Support/Training/(post-production)		
8.1	Value of Help Desk support (from vendor)	E
8.2	Access to technical support (from vendor)	E
8.3	Range of support types available including: Text documentation, online documentation, short videos, training packages, live text chat, live phone support, onsite support	E
8.4	Availability of training for administrators, developers, trainers of trainers, clients	E
8.5	Size of user group/community of users (3 = extensive, 0 = very limited)	E
8.6	Extensiveness of online documentation (3 = extensive, 0 = very limited)	I
8.7	Extent of customisation of documentation required for the Windsor environment (3 = none, 0 = extensive)	I
8.8	Estimated support needs based on difference from current LMS and usability (3 = no difference or less, 0 = extensive support required)	I
8.9	Will this LMS require ongoing in-house or external customisation to meet requirements set out in this document (e.g. Development of assessment modules, development of integrations with other tools etc)	E
8.10	Will this LMS require changes to existing personnel deployment?	I
9. Migration from Legacy System (CLEW/Sakai)		
9.1	Is there an existing process for migrating from Sakai to the LMS?	E
9.2	Is the migration process well documented?	I
9.3	Can the process be managed automatically (1= not automated, 3 = completed automated)	I
9.4	Estimated migration time required to migrate all existing sites? (Days = 3; months = 1)	I
9.5	Is migration or migration support provided by the vendor?	I
9.6	Availability of a test system, for testing migrations prior to contract, and on an ongoing basis for new releases; autonomy of test system (do vendors need access to our servers)	E
10. Technical Environment		
10.1	Interoperability with operating system (Unix; RH Linux; Windows); VM	E
10.2	Interoperability with database (Oracle; MySQL)	E
10.3	Hardware requirements (if self-hosted); incl. file storage as well as servers, etc.	E
10.4	Performance metrics; load testing; logging; built into system	E
10.5	Describe the process for rolling back / restoring in terms of: granularity, time to turnaround, size of window (how far back can we go)	E
10.6	Interoperable with Java based platform (for development)	E
10.7	Well documented API	E
10.8	Conforms with existing IT strategic direction [open source; platforms; philosophy; all encompassing]	E
10.9	EZProxy integration (Web service that determines whether some URLs, e.g. journal articles, should be reverse proxied through library)	E
11. Security/Identity Management		
11.1	Link to EDS/LDAP (authentication)	E
11.2	Ability to support authentication using ShiChrosoleth	I
11.3	Ability to support authentication using Kerberos	I
11.4	Application security (determining roles and permissions)	E
11.5	3rd party application security (can we control level of access of a third-party system to the data in the LMS; permissions/roles based)	E
11.6	Cross-site scripting control/filtering	E
11.7	Virus scanner integration	E
11.8	Enrolment in courses is updated from SIS automatically	E
11.9	Encryption level/protocol? (HTTP/SSL/TLS is a must; WebDAV; ftp; sftp;)	E
11.10	Storage of user passwords (encrypted?); other personal user information stored in system)	E

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Feature Need: E = essential I = important N = Nice-to-have		
11.11	Ability to create 'Friend-account' (e.g. Flexibility to use userids with various formats including those with "@" in them)	E
11.12	Ability to create guest accounts (users who are not enterprise account holders who have limited access to a range of services)	E
12. Ramp up/Roll out		
12.1	Vendor support for initial setup and installation	E
12.2	Vendor support for initial training (train the trainer)	E
12.3	Vendor support for successful deployment (promotion)	I
13. Integration with other learning technologies		
13.1	Native integration with synchronous collaboration tools (specifically Blackboard Collaborate 11/12 currently)	E
13.2	Integration with clickers or online equivalent (to clickers e.g. responseware, lecturetools etc) to gradebook	I
13.3	Integration with ePortfolio system (where non-native) to include gradebook	I
13.4	Integration with Wordpress or similar	I
13.5	Does the system have the ability export from its gradebook to a secure webservice in a format that can be imported into our eGrade (not specifically) system?	E
13.6	Integration with Scantron (or similar) output	E
??	Integration with Plagiarism detection software like Turnitin	E
14. Hosting solutions - look more closely at this with clarification on the Charter (PROPOSED TO MOVE TO 15)		
14.1	Hosted or self-hosting available	E
14.2	Self-hosted: are there additional server requirements over current infrastructure?	I
14.3	Self-hosted: are there additional software requirements over current infrastructure (e.g. Database, Java, other)	I
14.4	Hosted: is the company subject to Canadian laws?	I
14.5	Hosted: what is the physical location of data storage?	I
14.6	Hosted: what is the guaranteed uptime?	I
14.7	Hosted: Security protocols?	I
14.8	Hosted: Subsidiary company or third party?	I
14.9	Hosted: Ownership of IP agreement - all IP remains property of Windsor	I
14.10	Hosted: expected turnaround time to restore a course from backup	E
14.11	Hosted: frequency of backups	E
14.12	Hosted: comprehensive disaster recovery management/plan	E
14.13	Managed vs unmanaged hosted solutions	E
14.14	Hosted: 24X7 uptime	E
Mobile access		
15.1	Desktop version is scalable and runs on mobile devices (tablets, smartphones)	E
15.2	Native mobile apps available for Android, iOS, Windows Mobile, Blackberry, and tablets	I
15.3	Native Mobile App access to core tools	E
15.4	Cost of Native Mobile App (3) - free (1) - paid	E
0 = not available 1 = poor 2 = average 3 = good u/k = unknown		

Comments

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These all need to be E -- given the quality assurance and external accreditations ...
Comments
Calendar functions are consistent -- example, set an assignment due date and it ought to pop up in the calendar, and so on.

Comments

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