

REQUEST FOR PROPOSALS
RFP

Issue Date: 10/03/2010
Title: Learning Management System
Issuing Agency:

RFP# 11-03
Commodity Code: 92400

Commonwealth of Virginia
University of Mary Washington
Centre Court Building
1671 Jefferson Davis Highway, Suite 104
Attn.: Purchasing Office
Fredericksburg, Virginia 22401

Where Work Will Be Performed: Fredericksburg, VA

Initial Period of Contract: The contract term will be for 3 years with option for two (2) one (1) year renewals.

Sealed Proposals for furnishing the goods/services described herein will be received until 3:00 pm, November 4, 2010. Proposals must reach the above address and department by the deadline stated in order to be considered.

* OPTIONAL PRE-PROPOSAL CONFERENCE: A pre-proposal conference will be held at 10:00 am, October 11, 2010 at the above location. (Reference: Paragraph IX).

All inquiries for information should be directed to K.C. McCullough or via e-mail: kmccullo@umw.edu referencing this solicitation by number and title.

IF PROPOSALS ARE MAILED, SEND DIRECTLY TO ISSUING AGENCY SHOWN ABOVE. IF PROPOSALS ARE HAND DELIVERED, THEN DELIVER TO ADDRESS ABOVE AND A PURCHASING DEPARTMENT STAFF.

In Compliance With This Request For Proposal And To All The Conditions Imposed Therein And Hereby Incorporated By Reference, The Undersigned Offers And Agrees To Furnish The Goods/Services In Accordance With The Attached Signed Proposal Or As Mutually Agreed Upon By Subsequent Negotiation. **THIS FORM MUST BE COMPLETED AND RETURNED WITH PROPOSAL.**

STATE CORPORATION COMMISSION ID#: _____ (*See General Terms & Conditions, Article BB & Special Terms & Conditions #19)

Virginia Contractor License No. : _____ EVA Vendor ID or DUNS number _____
Class: _____ Specialty Codes: _____

NAME AND ADDRESS OF OFFERING FIRM:

DATE: _____

BY: _____

(Signature In Ink)
PRINTED NAME: _____

TITLE: _____
E-mail: _____

(PLEASE PRINT)
Zip Code: _____
TEL: () ____ - ____ FAX: () ____ - ____

DMBE Cert.# _____ Exp. Date: ____ / ____ / ____

Check all that apply: Small Business: ____ Minority- Owned: ____ Women-Owned: ____

Note: This public body does not discriminate against faith-based organizations in accordance with the Code of Virginia, § 2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

I. Purpose

The purpose of this Request for Proposal (RFP) is to solicit sealed proposals to establish a contract or contracts through competitive negotiations for a learning management system (LMS) or an integrated suite of products which meet the mandatory functions of an LMS as listed below. In addition to the basic LMS functionality, the successful proposal must provide for the associated services and support necessary for implementing the LMS. The University of Mary Washington (UMW), an agency of the Commonwealth of Virginia, invites vendors of both proprietary systems and open source systems to respond to this solicitation. UMW invites proposals for systems to be hosted by the vendor or third party hosting concern. Information about UMW may be found at www.umw.edu.

II. Contract Period

The contract term will be for 3 years with option for two (2) one (1) year renewals.

III. Background

The University's residential campus in Fredericksburg, Virginia houses a traditional undergraduate program in Colleges of Arts & Sciences, Business, and Education. The university also operates a second campus located in nearby Stafford County. There are approximately 4,000 undergraduate students enrolled at the Fredericksburg campus. The Stafford campus has more than 1,000 students enrolled in degree completion and graduate programs and other credit-bearing courses. The university also offers an extensive program of non-credit, continuing education coursework. A third campus is planned for Dahlgren, Virginia. The Dahlgren campus, when completed in 2012, will accommodate on-site classes as well as classes taught from remote locations by UMW and also by other Virginia colleges and universities. Any LMS acquired via this RFP should be able to support UMW programs at all three campuses. Programs offered by other universities at the Dahlgren campus will not be supported by the LMS acquired via this RFP.

The UMW network is comprised of Cisco router/switching and VoIP equipment. The backbone operates at 1Gbit/s. The network is connected to the Internet with a 200Mbit/s circuit. The two campuses are connected via 100Mbit/s circuit. The server and desktop environment is a predominately Microsoft infrastructure running Exchange, ILM, and Sharepoint. Enterprise ERP is supported by SunGard enterprise support services including batch (snapshot) integration between Banner Student and Blackboard. UMW is currently using Banner Student version 7.6 and will be upgrading to Banner Student 8.4 soon.

UMW is currently using a single commercial learning management system to support the following environments:

- Minor online enhancements to traditional on-campus face-to-face classes (web-enhanced learning).
- Major online enhancements to traditional on-campus face-to-face classes (blended learning).

- Totally online courses and degree programs
- As of September 1, 2010, UMW is using Blackboard ver. 8.0.409.0 as the school-supported course management system . Additionally, a substantial number of faculty members use Wordpress, Drupal, Google Docs, and other solutions to supplement or as an alternative to Blackboard.
- Blackboard is currently implemented via a hosted service.

IV. Statement of Needs

A Learning Management System is needed to support face-to-face, blended, and fully online teaching and learning in an efficient and cost effective manner.

- The goal is to negotiate a multi-year contract.
- UMW should have the ability to renew initially in increments to reach an August 1, 2011 contract date, and be able to renew in twelve month increments thereafter.
- The contractor must provide documentation of all work performed for any work agreement.
- If a problem is discovered where the software does not perform according to the documentation or representation of the contractor's staff, the contractor shall fix the problem, at its own expense, including any required work-around solutions that may be necessary to ensure a successful implementation.
- Acceptance testing will be based on a plan developed jointly by the institution and the contractor and will be performed by the institution for a minimum period of thirty (30) days.
- Testing will commence upon completion of installation.
- The contractor shall participate in the acceptance test, in accordance with the jointly developed plan, until the acceptance of the software is complete to the institution's satisfaction.
- A standard purchase under this contract should include one (1) license that encompasses production use, development and testing.

V. Proposal Preparation and Submission

A. General Requirements

RFP Response: In order to be considered for selection, Offerors must submit a complete response to this RFP. One (1) original and eight (8) copies and one electronic copy of each proposal must be submitted to the issuing State agency. Electronic copy can either be on a disk or flash drive. No other distribution of the proposal shall be made by the Offeror.

B. Proposal Preparation: Proposals shall be signed by an authorized representative of the Offeror. All information requested must be submitted. Failure to submit all information requested may result in the purchasing agency requiring prompt submission of missing information and/or giving a lowered evaluation of the proposal. Proposals which are substantially incomplete or lack key information may be rejected by the university at its discretion. Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of content. Each copy of the

proposal should be bound in a single volume where practical. All documentation submitted with the proposal should be bound in that single volume.

- C. Oral Presentation: Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to the State agency. This will provide an opportunity for the Offeror to clarify or elaborate on the proposal but will in no way change the original proposal. The issuing State agency will schedule the time and location of these presentations. Oral presentations are an option of the purchasing agency and may not be conducted. Therefore, proposals should be complete.

Mandatory Requirements

The learning management needs of UMW span a wide variety of uses from simple document delivery in web-assisted courses to a comprehensive use by fully online classes. The following items represent the mandatory functions and features that must be provided by the successful vendor that must be met by any successful vendor.

1. An integrated calendaring system allows users to monitor course milestones and due dates.
 2. Users have access to an integrated system for threaded discussions within a course.
 3. Basic integrated email allows communication between users.
 4. LMS has a system for creating and delivering tests and automated scoring of objective tests.
 5. Content can be imported from SCORM-compliant packages.
 6. The LMS is capable of importing test banks from user created text files, third party exam generation tools, and publisher test banks.
 7. Assessments can be conditionally released based on instructor-definable release parameters such as time, date, and prior performance on the same or previous test.
 8. The integrated text editor is WYSIWYG.
 9. Assessment questions can be drawn from a pool or question database.
 10. Assessments can be timed with a system to prevent or mark late submissions.
 11. The LMS provides a tool to allow instructors to create assignments and to allow students to submit completed assignments including submission of user-created files.
 12. The LMS provides an access level for system administrators, instructors, and students.
 13. The LMS allows browser-based remote system administration.
 14. The LMS system administrator can send notifications to all users.
 15. The LMS includes delivered options for integrating all pertinent Banner student/faculty/course/enrollment data.
 16. The proposal provides for an external hosting arrangement.
 17. Users are able to access the system from Windows and Macintosh computers.
- C. Specific Requirements; Open Response Section
- The following questions are designed to allow the vendor to fully explain their offering

in an open-ended format so as to best describe how their product is capable of meeting the needs of UMW. The questions below do not represent mandatory expectations but should provide evidence by which the review committee can make a recommendation to UMW administration. Please be as brief and direct as possible in responding to the following questions.

1. Vendor Background
 - a. Provide your company's ownership, history, number of years in business, size, an indication of its financial health, and strategic partners.
 - b. Identify the parent corporation and any subsidiaries.
 - c. Describe your major products and services, including the different product versions that may be appropriate for institutions with different enrollments and varying levels of integration with administrative systems.
 - d. What distinguishes your company and its products and services from your competitors?
 - e. Provide a current list of your key customers, and all customers that comprise more than 5% of the company's revenue.
 - f. Describe the details of the LMS implementation of one of your clients similar in size and Carnegie classification (MA I) to the University of Mary Washington. Provide the client name, address and the name and phone number of the point of contact University of Mary Washington has your permission to contact about a reference.
 - g. Describe the largest institutional (as opposed to vendor-in-house) implementation of your LMS including the number of active classes and students supported by this implementation and the system architecture (if known). Provide the client name, address and the name and phone number of the point of contact University of Mary Washington has your permission to contact about a reference.
 - h. Provide three (3) additional recent education institutional references for whom you have provided the type of goods and services described herein. Include the date(s) the goods and services were furnished, the client name, address and the name and phone number of the individual University of Mary Washington has your permission to contact.
 - i. Provide references of customers having similar contracts.
 - j. Describe procedures, such as source code escrow, to protect an institution's use of the software if the vendor enters bankruptcy proceedings or otherwise cannot support buyers.
 - k. What percentage of clients are self-hosted, hosted by vendor, and hosted by third-party hosting companies other than the vendor?
2. System Architecture
 - a. Describe your system architecture and how it's designed for scalability.
 - b. Describe the underlying languages used for system development.
 - c. What backend databases are supported?
 - d. Which backend databases are recommended?
 - e. Describe the documentation available for the schema.

- f. What operating systems are supported?
 - g. Describe your recommended hardware and software configuration(s) scaling support for loads ranging from student enrollments of 5000 to 20,000 and up.
 - h. For each major function, describe your system's simultaneous user load capability.
 - i. Describe the ability to customize vs. configure your LMS.
 - j. Define what acceptable performance is, how it is measured, and how the system software and hardware can be scaled to maintain acceptable performance.
 - k. Provide a detailed description of how load is balanced.
 - l. Estimate how many local man-hours are required by local IT staff during the implementation and testing period.
 - m. Describe the ability to access the backend databases (or cached copies) via API.
 - n. Provide annual evidence of SAS70 compliance.
 - o. Provide a statement of assurance regarding security and privacy of UMW's faculty, student, course content, course enrollment, and student grade data as well as UMW ownership of these data.
3. System Security and Development Roadmap
- a. Describe your beta testing methodology, how it has evolved, and its future direction.
 - b. Describe your quality assurance procedures.
 - c. Describe your system's application security measures, its audit trail capability, and how it can perform data authentication.
 - d. Describe your system's support for federated identity management including details of authentication and authorization.
 - e. Describe your compliance with Hosted Services Special Terms and Conditions as described in appendix X.
4. System Integration/ERP/SIS/Library
- a. Describe the system integration capabilities of your system with third-party systems, including but not limited to authentication systems, administrative systems, student-information systems, library systems, identity management systems, portals, content repositories, and institutional assessment tools..
 - b. Describe how the LMS can provide authentication and/or portal services by itself and also with third-party systems.
 - c. Describe the capability, unique features, and constraints involved to turn off built-in LMS tools and replace them with third-party tools, e.g., assessment engine.
 - d. Identify the third-party systems that have been integrated with your LMS.
 - e. Give details of data import and export capabilities.

- f. Describe the process needed to achieve integration with the Banner SIS and how it is accomplished (batch, real-time, etc.).
 - g. What formal system integration relationships exist with SunGard.
 - h. Describe a major customer's experiences with integration with SunGard-Banner, third-party authentication, and external tools like assessment engines.
 - i. Describe each standard LMS system report available.
 - j. Describe how custom LMS system reports can be generated, including the process (and any restrictions) on how back-end databases can be queried for specific customer-defined dynamic reporting needs.
 - k. Describe the documentation provided for the back-end databases, including schemas used.
 - l. Describe means by which custom components, tools or plug-ins can be developed.
 - m. Describe means by which data stored in the application may be accessed from other systems – e.g. direct database access, web services, etc.
 - n. Describe mechanism for faculty to retrieve their course content from the LMS in a meaningful end-user format.
 - o. Describe mechanism for students to retrieve their submitted content from the LMS in a meaningful end-user format.
5. Course Content Creation, Presentation, and Management
- a. Describe how your system supports building of course content.
 - b. What and where is information maintained, and how is it structured?
 - c. Describe faculty for uploading content in a folder-level organization, via WebDAV or other file exchange.
 - d. Describe how the LMS recognizes and processes Banner Student changes in enrollments (student course adds, course drops, course withdrawals).
 - e. Describe how your system handles the desire to combine sections or merge cross listed courses both prior to and after the course enrollments have been added to the courses.
 - f. Describe your content management capabilities. UMW is especially interested in how we can leverage our existing MS SharePoint file storage services.
 - g. Describe how your system handles assignment submissions, including how assignments are created, how students submit assignments, how assignments are stored, how assignments are graded, how the instructor can edit/comment on the assignment, and how assignments are returned to students.
 - h. What authoring tools unique to your system are available?
 - i. Describe examples of third party authoring tools can be used to create fully-integrated content?
 - j. Discuss compatibility with courseware interoperability standards.

- k. Describe what assurances exist that course content can always migrate forward to newer version of product, either directly or through vendor provided tools.
 - l. Describe conversion and migration tools or processes for converting existing course content from Blackboard version 8 into vendor's system.
- 6. Assessment/Gradebook
 - a. Describe your systems' capability for creating, administering and tracking tests, evaluations and surveys.
 - b. How are questions assembled into tests, exams, quizzes and surveys including how question and answer choices can be randomized?
 - c. What anti-cheating measures are incorporated into the LMS testing tool?
 - d. Describe how students can enter special characters such as math, music, and science symbols in open response question types.
 - e. What grade data formats can be exported and imported?
 - f. List any known third party quiz construction tools that are interoperable with the LMS.
 - g. Describe the multiple assessment types available.
 - h. How are feedback and scores provided to students?
 - i. What standard grade reports can be generated for the student and for the instructor and for the system administrator?
 - j. How is the QTI standard supported?
- 7. Communication/Email/Discussion/Chat
 - a. Describe the various communication features within a course from student-to-student, and student-to-instructor.
 - b. Describe the communication features available between users in different courses.
 - c. Does the LMS allow connection to outside communication tools like Twitter, Google Talk? If so, what tools and how are the connections made?
 - d. Does the LMS support text messaging from instructor to student and between students. Please describe if supported.
 - e. Describe email systems and their connectivity options to other email systems.
 - f. How does the LMS support RSS feeds both bringing information into the course and feeding information out of the course.
- 8. Integration with 3rd Party Tools
 - a. List any third party vendors with which the vendor has a formal partnership agreement and provides add-on functionality to the LMS. Please specify if any of these add-ons are included in the base price or if they are available at extra cost.
- 9. Standards Compliance and Accessibility
 - a. Compared to competitive products, describe how your system is more compatible with Section 508 of the Federal Rehabilitation Act, SCORM,

- IMS, AICC and similar standards. In that regard, what unique features does your system provide?
10. Implementation and Training
 - a. Describe your company's implementation methodology.
 - b. What implementation and migration resources are available?
 - c. Describe your approach to project management.
 - d. How are change requests managed?
 - e. Describe professional services available.
 - f. What technical and functional training is provided with your product or service?
 - g. How much and what type of training is recommended for a system administrator and for faculty to use your product? Local/remote? F2F/Online? Self-guided/instructor-led?
 - h. Describe any documentation provided, including on-line resources.
 - i. What ongoing faculty and student training resources are available to all users?
 11. System Releases and Upgrades
 - a. What is your current release?
 - b. About how many releases are there each year and what is the timing?
 - c. How long are new releases supported?
 - d. How are bug fixes released? Timing, hot-patches or downtime required?
 - e. How are customers notified?
 - f. In a hosted environment, are all customers required to upgrade at approximately the same time?
 - g. How do customers access upgrades?
 - h. Describe the process for transitioning course content to newer versions.
 - i. Describe how customers can make recommendations for product changes.
 - j. Describe the past processes for upgrading your software from one version to another, converting course content from one version to another, and the effort anticipated to be borne by your customers in these conversions.
 - k. Are your upgrade paths required? Are there required timelines associated with upgrades?
 - l. What support/training is provided for the end user when a new feature is added in an upgrade?
 12. Support
 - a. Provide details on your company's support plan(s) for both administration and troubleshooting of the LMS as well as support for users of the LMS, including instructors and students.
 - b. Describe your company's approach to responsiveness to problems: initial maximum response time, and the procedure for escalating the problem to reach a solution.
 13. Professional Services
 - a. Describe and give examples of the professional services available from the company.

- b. Describe what measures are taken to develop price estimates, and what steps are taken to insure actual work does not exceed estimates.
- 14. Hosting
 - a. Describe your hosting capabilities include details on security, redundancy, uptime percentage, backup, and recovery.
 - b. Describe and provide samples of service level agreements (SLA) you offer.
 - c. Provide the ASP average uptime per month.
 - d. Describe the extent of scheduled maintenance windows that could disrupt service.
 - e. How much notice is given for unscheduled maintenance?
 - f. Detail vendor's ability to mitigate client-initiated problems and a description of actions and time frame to recover from each of the following scenarios. Indicate if this is typically covered via SLA or an extra-ordinary cost charged to the client.
 - i. Instructor requests recovery of accidentally deleted course three (3) days after the deletion.
 - ii. Instructor requests recovery of accidentally deleted unit of content three (3) days after deletion.
 - iii. Instructor requests recovery of accidentally deleted test (deployed via vendor's LMS test tool) three (3) days after deletion.
- 15. Price
 - a. Provide all pricing that will apply to your offer over the period of the contract.
 - b. Describe licensing pricing models. Include how license cost is calculated and all variables that affect total cost (number of users, disk space, bandwidth, ...)
 - c. Describe all associated products that are available but not included in the base cost.
 - d. Describe hosting pricing models. Include how hosting cost is calculated and all variables that affect total cost (number of users, disk space, bandwidth).
 - e. Describe any licensing limitations based on types of usage such as non-credit courses, departmental use, student club use, community outreach use, etc.
 - f. Describe pricing model for a hosted test environment.
 - g. Describe pricing model for a hosted development environment.
 - h. Describe pricing model for all vendor recommended professional services (such as a standard number of recommended hours for data migration services, training, and other recommended services).
- 16. Warranty
 - a. Describe the terms and conditions of any warranty on the software and professional services available.
 - b. Describe how such warranty is implemented to provide problem resolution services.

17. Ease of Use

- a. Describe any known usability studies and findings published by third parties.
- b. Describe means by which documents are uploaded.
- c. Describe how LMS employs intuitive, user-friendly means of setting up discussion boards, grade books, and tests.
- d. What is the typical time for initial course set-up, including uploading of pre-existing syllabi, course information, and assignments?
- e. Does LMS feature drag and drop or a series of drop menus and clicks to upload material.
- f. Instructors with a wide spectrum of technical skills and expectations create course content. It is important that the LMS can provide or smoothly integrate with tools that allow for flexibility and meet the different needs of instructors. Describe in detail how the content can be created, assessed, and modified. Address the following specific issues:
 - i. Creating content with/without the knowledge of HTML.
 - ii. Importing and cross linking of course materials and use of LMS tools without knowledge of HTML, including linking to materials and examinations in other courses or other sections of the same course.
 - iii. Formatting, editing, and reusing content easily, including adding hyperlinks and organizing or embedding images, presentations, sound, animation or movies.
 - iv. Method of uploading a single document into the course.
 - v. Method to easily create links to external web resources.
 - vi. Ability to release content selectively by date/time, student status, groups, test scores, and other criteria.
 - vii. Customizing the look and feel of course pages.
 - viii. Input of music, math, science and other special symbols.
 - ix. Support for foreign languages.
 - x. Spell-checking capability.
 - xi. Use of interactive elements such as forms and flash animation.
 - xii. Integrating off-line content such as CD and DVDs.
 - xiii. Copying, moving, and re-ordering content (at the module and document level) within a course and across courses.
 - xiv. Integrating different LMS functions (e.g., content, assignments, quizzes, discussion forums, and links into a single unit or module)
 - xv. Ability to easily organize or chunk course content and/or materials into a module or unit.
 - xvi. Options for students to reformat pages/sections to optimize printing.
 - xvii. Method of providing a course index or glossary of terms related to content.
 - xviii. Method for providing tips, tricks, hints to students.
 - xix. Method for providing access to and support for third party plagiarism detection validation tools for both students and instructors.

- xx. Ability to utilize and integrate e-packs or course cartridges from publishers and third party content providers.
 - xi. List the publishers that have pre-configured course content available for this LMS.
 - xxii. Provide the approximate number of publisher e-packs or cartridges available for this LMS
 - g. The LMS should allow the course designer/instructor role the ability to easily move a variety of files, course modules, and other content into and out of a course. Describe in detail the file and content management features of the LMS. In particular explain or describe
 - i. Basic File Management features – copy move, rename.
 - ii. How directories and files are organized, managed, and accessed.
 - iii. The flexibility available with the LMS's file naming conventions including file naming conventions.
 - iv. Smart recognition of common file types from both PC and Mac.
 - v. Easy import/export of various text, word processing, graphic, and presentation formats (.txt, .doc, .jpg, PowerPoint, Flash, PDF, etc.).
 - vi. Import/export of reusable learning objects.
 - vii. How student files are viewed by instructors across a course
18. Faculty Incentive to Use
- a. Describe the features of the system that would attract faculty who do not currently make use of an LMS, to use your system. This would include users who have not found using an LMS compelling, as well as users who prefer the flexibility of web2.0 tools.
 - b. Describe the features of the system that would encourage faculty who teach "face-to-face" courses with no online component, to make use of your LMS.
 - c. Describe the features of the system that would convince faculty that the time invested in learning to use the LMS will be worth the benefits gained by using the system in their classes.
 - d. Describe how faculty wishing to use only a small subset of LMS features will be able to do so without learning the entire system.

D. Specific Requirements: Limited Response

The following questions are designed to elicit answers to very specific issues of interest to UMW. No one of these issues should be considered a mandatory requirement. Please restrict the value the response column to one of the characters, Y, S, C, F, or N. For any value other than Y, clarification may be entered in the "Comment" column.

Possible Responses:

Y = Yes, included in base cost
S = Yes, with stipulations not involving additional costs (explain in comments)
C = Yes, for additional cost not included in base cost (explain in comments)
F = To be provided in future released (provide expected release date)
N = Not available

Number	Communication Features (Section 1)	Response (Y,S,C,F,N)	Comment
1.1	Users are able to create community groups not otherwise associated with a particular course.		
1.2	Integrated instant messaging (chat) system allows users to communicate synchronously.		
1.3	Users are able to record events that occur within the LMS and make them available as resources inside and outside course.		
1.4	Users have access to an integrated blogging		

	system at individual user level and at course level.		
1.5	Users have access to an integrated system for threaded discussions external to course.		
1.6	Instructor has ability to monitor and filter public, course-related threaded discussions.		
1.7	Basic integrated email allows communication between users external to course but within LMS.		
1.8	Advanced integrated email includes features in basic email plus ability to send and receive, store, manage and archive messages from internal and external addresses		
1.9	System allows access to email before, during, and after course enrollment; that is, access to email function is not dependent on course enrollment but rather an active account within the system.		
1.10	Integrated LMS email system can inter-operate with campus email system via Exchange, IMAP, and POP.		
1.11	Users are able to send messages from the LMS to mobile devices via SMS text messaging.		
Number	Group Work Features (Section 2)	Response (Y,S,C,F,N)	Comment

2.1	Users are able to collaborate interactively in small groups to manage and perform assigned tasks.
2.2	Integrated decision support software facilitates whole class and small group decision making.
2.3	Blogging support is available for small groups.
2.4	Users have access to integrated wiki system.
2.5	System is inter-operable with Microsoft SharePoint team workspaces.
2.6	System is inter-operable with multi-user virtual environments
2.7	System is inter-operable with Twitter
2.8	System is inter-operable with Facebook
2.9	System is inter-operable with third party social networking sites other than Twitter and Facebook.
2.10	System facilitates collaborative group file exchange.
2.11	System facilitates student community-building tools.
2.12	Instructors are able to filter communications by user.

Number	Learner Feedback Features (Section 3)	Response (Y,S,C,F,N)	Comment
2.13	Instructors are able to accept group submitted assignments and give group feedback and grades that automatically propagate to the individuals in the group.		
3.1	Integrated and dedicated course evaluation system allows students to anonymously evaluate courses for which they are enrolled.		
3.2	Agreement feedback (applause, thumbs up/down, or other) mechanisms are available during synchronous presentations.		
3.3	System facilitates feedback after presentations.		
3.4	Hand-raising or other attention-getting mechanisms are available during synchronous presentations.		
3.5	Audience polling with result indicator are available during synchronous presentations		
3.6	Pace indicators are available during synchronous presentations		
3.7	Users are able to record synchronous presentations.		
Number	Note Taking Features (Section 4)	Response (Y,S,C,F,N)	Comment

Number	Offline Features (Section 5)	Response (Y,S,C,F,N)	Comment
Number	Organizational Features (Section 6)	Response (Y,S,C,F,N)	Comment
4.1	Users are able to create private/personal notes within the system.		
4.2	Users are able to publish private/personal notes.		
4.3	Instructors are able to monitor and evaluate private/personal notes.		
4.4	System administrators are able to monitor private/personal notes.		
5.1	Users are able to work offline and subsequently synchronize work product with LMS.		
6.1	Users are able to bookmark or otherwise mark place or progress within course content		
6.2	Instructor-created and student-created checklists permit users to monitor task performance.		
6.3	Users are able to monitor study plan or progress to course completion		
6.4	Users are able to perform keyword search of all materials for which the user is authorized to view.		

Number	Self-Help Features (Section 7)	Response (Y,S,C,F,N)	Comment
6.5	Users may create study guides within the system.		
7.1	System allows specific courses to be available via self-registration		
7.2	System allows users to self-test microphone and speaker from within the LMS.		
7.3	System is inter-operable with university course catalog.		
7.4	Instructors are able to create self-assessments for users.		
7.5	System has an integrated help function for using the LMS.		
7.6	User self-orientation or guided tutorial for LMS is available.		
Number	User-Generated Content Features (Section 8)	Response (Y,S,C,F,N)	Comment
8.1	System allows users to add user-generated content.		
8.2	Content can be generated using the browser.		
8.3	A built-in WYSIWYG editor is available for any user text input.		

Number	User-Workspace Features (Section 9)	Response (Y,S,C,F,N)	Comment
8.4	Users are able to insert hyperlinks for user generated content.		
8.5	Integrated and dedicated system for student portfolios exists within the system.		
8.6	Integrated suite of design templates for user generated content exists within the system.		
9.1	LMS-related browser toolbars are available and configurable. Z		
9.2	Users are able to configure and customize LMS menu options.		
9.3	Users are able to configure and customize screen layout of LMS assets.		
9.4	Users are able to save interface customizations.		
9.5	System interface allows Web 2.0-like drag and drop layout based on user preferences.		
9.6	The LMS supports copying user specific archival courses.		
10.1	Users are able to capture embedded audio and video.		

Number	Whiteboard Features (Section 11)	Response (Y,S,C,F,N)	Comment
10.2	Users can access multiple simultaneous audio streams.		
10.3	System has integrated mechanism for streaming video.		
10.4	System has integrated mechanism for streaming audio		
10.5	System has integrated mechanism for streaming telephone conferencing.		
10.6	System has integrated mechanism for VOIP support.		
10.7	System has integrated mechanism for synchronous web conferencing.		

	voice, and webcam.	
Number	Student Evaluation Features (Section 12)	Response (Y,S,C,F,N)
Number	Course Management Features (Section 13)	Comment
12.1	The LMS has an integrated system of grading tools which allow instructors to record a grade and move directly from one student submission to the next student submission without returning to an intermediate screen such as the gradebook or roster.	
12.2	The LMS has an integrated system for creating assessment rubrics which can be applied during the grading process.	
12.3	Instructors can implement alternate prescriptive content for students with identified subject matter weaknesses.	
12.4	System allows tracking of user actions within the system and allows instructors to monitor student time-on-task for content, discussions, and assessment activities.	
12.5	Evaluation data can be exported to external systems.	
13.1	LMS has integrated calendaring system.	
13.2	LMS has entry screen for instructors to enter	

Number	Presentation Delivery Features (Section 14)	Response (Y,S,C,F,N)	Comment
13.3	LMS has integrated system for learner evaluation of courses.		
13.4	LMS supports multiple time zones.		
13.5	The LMS supports logical segmentation of access and branding for multi-site organizations (multiple campuses).		
Number	Polling Features (Section 15)	Response (Y,S,C,F,N)	Comment
15.1	LMS supports audience polling or testing during presentations.		

Number	Instructor Feedback Features (Section 16)	Response (Y,S,C,F,N)	Comment
15.2	LMS supports reporting results of polling in both tabular and graphical formats.		
16.1	The LMS supports an early warning method which alerts the instructor and affected student of lack of attendance, a lack of performance or failed performance on a graded activity, and a cumulative average below a threshold set by the instructor.		
16.2	Learners can attach rating to content.		
Number	Instructor Support Features (Section 17)	Response (Y,S,C,F,N)	Comment
17.1	LMS contains an integrated system of context-sensitive help for all basic LMS functions.		
17.2	LMS contains a rubric creation tool.		
17.3	LMS contains a survey creation tool.		
17.4	LMS contains a system for community building and communication between and among instructors.		
17.5	LMS can track email delivery and read status and report this status back to the email sender for messages sent from within the LMS.		
17.6	LMS contains a system to support listserv-type		

Number	Interoperability with Custom Courseware	Response (Y,S,C,F,N)	Comment
17.7	The LMS contains an online gradebook with the ability for the instructor to customize the view by filtering by student ID, student last name, and by score for any numeric grade book column.		mailing lists.
17.8	The LMS contains an online gradebook with the ability to apply a weight to specific grades, display a running total, display a weighted average, and apply instructor created formulas including dropping the lowest score.		The LMS contains an online gradebook with the ability to apply a weight to specific grades, display a running total, display a weighted average, and apply instructor created formulas including dropping the lowest score.
17.9	Instructor can post announcements within the course and track which users have accessed the announcement page.		Instructor can post announcements within the course and track which users have accessed the announcement page.
17.10	Instructor can create frequently asked questions (FAQ) file.		Instructor can create frequently asked questions (FAQ) file.
17.11	Instructor can track student attendance including time per page of content.		Instructor can track student attendance including time per page of content.
17.12	LMS grade book provides a process to import mid-term and final grades from the LMS to Banner Student.		LMS grade book provides a process to import mid-term and final grades from the LMS to Banner Student.
17.13	LMS has an integrated notification system to alert instructors of new discussion entries, quizzes to be graded, internal emails, assignment submissions, and dropbox entries.		LMS has an integrated notification system to alert instructors of new discussion entries, quizzes to be graded, internal emails, assignment submissions, and dropbox entries.

	(Section 18)
18.1	LMS supports Adobe Acrobat PDF files.
18.2	LMS is interoperable with Panopto.
18.3	LMS supports content creation in Dreamweaver with import directly into the LMS via integrated FTP or WebDAV rather than local save followed by file upload or copy/paste.
18.4	LMS supports Flash content served from within the LMS system.
18.5	LMS supports Java content served from within the LMS system.
18.6	LMS supports PowerPoint content served from within the LMS system.
18.7	LMS is interoperable with third party content creation tools including SoftChalk.
18.8	The LMS is interoperable with SMART Technologies Symposium and interactive whiteboard and Senteo Clickers and Notebook files.
18.9	The LMS is interoperable with Promethean Planet interactive whiteboard and flip chart files.
18.10	The LMS is interoperable with Microsoft OneNote and Evernote notes.
18.11	LMS supports Microsoft Word and Excel

Number	Output Features (Section 19)	Response (Y,S,C,F,N)	Comment
19.1	The LMS can be configured to deliver full functionality (content, communication, assessment) for a user accessing via a web browser.		
19.2	The LMS can be configured to deliver full functionality (content, communication, assessment) for a user accessing via a mobile device including laptops, tablets, smartphones, ipod touches, and ipads.		
19.3	The LMS allows printing of single content pages, user selected collections of pages, single discussion postings, user selected collections of discussion postings, single email messages, and user selected collections of email messages.		
19.4	Courses can be exported in XML format is a reusable form.		
19.5	Courses can be exported in PDF format.		
19.6	Courses can be exported in a ZIP formatted archive.		
Number	Content Features (Section 20)	Response (Y,S,C,F,N)	Comment

20.1	The LMS has the ability to create and manage templates for institution, department, and course level branding and content presentation purposes.
20.2	The LMS is able to import and export SCORM compliant learning objects.
20.3	The LMS uses an integrated, full-featured, web-based formatted text editor for direct creation of content, email, discussions, paragraph test answers and other places where text is entered into the system.
20.4	The LMS is able to auto-create a course menu/map.
20.5	The LMS supports bookmarking.
20.6	The LMS can launch third party applications.
20.7	The LMS provides course designers a choice of navigation buttons and design tools.
20.8	The LMS provides a course level glossary tool for creating course-related entries.
20.9	The LMS can import content from PowerPoint.
20.10	The LMS can import content from Word with the ability for the user to strip the imported document of text and paragraph styles so as to implement the style information used in the

Number	Rich Media Features (Section 21)	Response (Y,S,C,F,N)	Comment
21.1	The LMS provides a tool to create animations.		
21.2	The LMS provides a tool to record and edit audio.		

Number	Interactive Features (Section 22)	Response (Y,S,C,F,N)	Comment
21.3	The LMS provides a tool to record and edit video.		
21.4	The LMS provides a tool to edit images.		
Number	Assessment & Evaluation Features (Section 23)	Response (Y,S,C,F,N)	Comment
22.1	The LMS supports branching based on learner responses.		
22.2	The LMS supports computer screen simulations.		
22.3	The LMS supports interactivity via hot spots in images.		
22.4	The LMS supports non-graded pre-tests to build course curriculum.		
22.5	The LMS supports role-play simulations.		

Number	Test Format Features (Section 24)	Response (Y,S,C,F,N)	Comment
23.5	The LMS provides a system for reporting learner performance per student for instructor use in monitoring progress toward course goals.		
23.6	The LMS stores learner performance data for retrieval via print or export to external systems.		
23.7	The LMS provides a survey creation tool.		
23.8	The LMS supports the IMS Tests and Question Interoperability specification (QTI).		
23.9	The LMS supports standards and competency correlation tools (allow an instructor to align course materials with standards/competencies and track which users are meeting those standards).		

24.6	The LMS provides a matching questions type.		
24.7	The LMS provides a multiple choice questions type.		
24.8	The LMS provides a multiple response questions type (more than one answer choice correct).		
24.9	The LMS provides a numerical answer questions type.		
24.10	The LMS provides a calculated question type; that is, a question in which variables are used as placeholders for randomly generated values. The question presented to the learner contains values and the random selection process is transparent to the learner.		
24.11	Answer choices can be randomized.		
24.12	Question order can be randomized.		
24.13	The LMS provides a ranking questions type.		
24.14	The LMS provides a short-answer questions type.		
24.15	Individual questions can be timed.		
24.16	The LMS provides a true/false question type.		
24.17	The LMS supports sharing of assessments with other instructors, departments, organizations.		

Number	Language Features (Section 25)	Response (Y,S,C,F,N)	Comment
24.18	Arabic: The LMS supports the ability for awarding extra credit or manual scoring of individual questions and whole tests.		
24.19	The LMS supports the ability to proctor tests and assignments via alternative authentication of proctors.		
25.1	Arabic: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Arabic including any language-specific character sets.		
25.2	Chinese: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Chinese including any language-specific character sets.		
25.3	English: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in English including any language-specific character sets.		
25.4	French: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in French including any language-specific		

	character sets.
25.5	German: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in German including any language-specific character sets.
25.6	Italian: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Italian including any language-specific character sets.
25.7	Japanese: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Japanese including any language-specific character sets.
25.8	Russian: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Russian including any language-specific character sets.
25.9	Spanish: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Spanish including any language-specific character sets.

Number	Learner Feedback Features (Section 26)	Response (Y,S,C,F,N)	Comment
26.1	The LMS provides instructors an interface for online essay evaluation including in-line comments and separate summary comments.		
26.2	The LMS allows instructors to provide hints on objective questions in self-tests and graded tests.		
26.3	The LMS allows instructors to implement immediate feedback with correct answers.		
26.4	The LMS allows instructors to implement immediate feedback without correct answers.		
26.5	The LMS allows instructors to authorize multiple attempts on an assessment.		
26.6	The LMS allows instructors to provide a performance summary for assessments.		
26.7	The LMS allows instructors pre-select feedback for correct and for incorrect quiz question responses.		
Number	Levels of Access Features (Section 27)	Response (Y,S,C,F,N)	Comment
27.1	The LMS provides an access level for student		
27.2	The LMS provides an access level for teaching		

Number	Reporting Features (Section 28)	Response (Y,S,C,F,N)	Comment
27.3	The LMS provides an access level for guest.		
27.4	The LMS provides multiple levels of customized instructor and administrative permissions		
27.5	The LMS allows the creation of new user types and the customization of permissions for that new type.		
Number	Administrative Features (Section 29)	Response (Y,S,C,F,N)	Comment
28.1	The LMS provides a system for authorized, select administrative users to query the live database or recent copy of the database and all log files.		
28.2	Custom reports can be created on all data.		
28.3	The vendor provides a set of commonly requested report templates.		
28.4	Report data can be exported in common file formats.		
Number	Administrative Features (Section 29)	Response (Y,S,C,F,N)	Comment
29.1	The LMS requires separate administrative client software.		
29.2	The LMS allows multiple concurrent sessions for users.		

Number	Client Software Features (Section 30)	Response (Y,S,C,F,N)	Comment
29.3	The LMS supports multiple time zones.		
29.4	The LMS provides a system of scheduling users for synchronous events.		
29.5	The LMS supports user profiles.		
30.1	All functions of the LMS are available to users running Apple Macintosh OS X (10.4.x and prior).		
30.2	All functions of the LMS are available to users running Apple Macintosh OS X (10.5 and up to current as of the time of the RFP).		
30.3	All functions of the LMS are available to users running BNS/Linux (such as Debian, SUSE, or Red Hat).		
30.4	All functions of the LMS are available to users running a supported operating system in a Java Virtual Machine (JVM).		
30.5	All functions of the LMS are available to users running Unix.		
30.6	All functions of the LMS are available to users running Microsoft Windows 2000.		
30.7	All functions of the LMS are available to users running Microsoft Windows XP.		

Number	Web Browser Features (Section 31)	Response (Y,S,C,F,N)	Comment
30.8	All functions of the LMS are available to users running Microsoft Windows Vista.		
30.9	All functions of the LMS are available to users running Microsoft Windows 7.		
31.1	All functions of the LMS are available to those using: Chrome (version 5.0 and above).		
31.2	All functions of the LMS are available to those using: Konqueror (version 4.4.5 and above)		
31.3	All functions of the LMS are available to those using: Microsoft Internet Explorer (version 6.0 and above)		
31.4	All functions of the LMS are available to those using: Mozilla/Firefox (version 3.6 and above)		
31.5	All functions of the LMS are available to those using: Opera (version 10 and above)		
31.6	All functions of the LMS are available to those using: Safari (version 5.0 and above)		
Number	Web Services Features (Section 32)	Response (Y,S,C,F,N)	Comment
32.1	The LMS supports key web service standards (SOAP, UDDI, WSDL, etc).		

Number	LDAP Features (Section 33)	Response (Y,S,C,F,N)	Comment
32.2	The LMS can aggregate data from multiple web services.		
32.3	The LMS renders external web services into standard HTML, PDF, spreadsheet, or XML.		
32.4	The LMS can capture data visualization via external Web services.		
32.5	Third party XML authoring products can integrate natively with the LMS.		
32.6	Third party taxonomy management tools can integrate natively with the LMS.		
Number	Integration with Other Systems (Section 34)	Response (Y,S,C,F,N)	Comment
33.1	Authenticates users or authors from third party LDAP directories.		
33.2	The LMS supports Windows Active Directory.		
33.3	The LMS supports federated identity management via Shibboleth and SAML.		
34.1	The LMS integrates with SharePoint without the need for custom coding by in-house staff or professional services engagements.		
34.2	The LMS integrates with third party		

Number	Help Desk Features (Section 35)	Response (Y,S,C,F,N)	Comment
34.3	The LMS can integrates with Banner Student in batch and (near) real time population of courses and grade exchange without the need for custom coding by in-house staff or professional services engagements.		
34.4	The LMS integrates with library systems such as that used at UMW without the need for custom coding by in-house staff or professional services engagements.		
34.5	The vendor provides API (Application Program Interfaces) access to facilitate creation of custom applications.		

	methods demonstrated using the LMS.
35.4	The LMS vendor offers a Help Desk support solution that includes reporting tools based on usage level, question type, resolution statistics, required resolution time, and unresolved inquiry tracking.
35.5	The LMS vendor offers a Help Desk support solution that includes a system to track end user self-service usage and effectiveness.
35.6	The LMS vendor offers a Help Desk support solution that measures average response times for all service requests.
35.7	The LMS vendor offers a Help Desk support solution that includes an end user accessible knowledge base.
35.8	The LMS vendor offers a Help Desk support solution that can monitor effectiveness of knowledge base information/FAQs
35.9	The LMS vendor offers a Help Desk support solution that allows end users to track the progress of a trouble ticket.
35.10	The LMS vendor offers a Help Desk support solution that is operated directly rather than by a contracted third party.
35.11	The LMS vendor offers a Help Desk support

	solution that tracks product enhancements/refinement suggestions.	
Number	Miscellaneous Features (Section 36)	Response (Y,S,C,F,N)
36.1	The LMS facilitates combining (merging) sections before and after student enrollments have been added to the sections.	
36.2	The LMS allows the instructor to open parts of a course to guest users; both users with accounts created via Banner integration and also temporary ad hoc users not existing in Banner.	
36.3	The LMS allows the instructor to set parts of the course as open access available via an RSS feed.	
36.4	The LMS can scale to handle expected enrollments (up to 10,000) through 2014.	
36.5	The LMS meets accessibility standards such as W3C, WCAG 2, IMS ACCMD, and W3C ATAG.	
36.6	Access log files are available to the local system administrator for forensic, data mining, and reporting purposes.	
36.7	The LMS is able to import/export individual courses with and without embedded student data.	

36.8	The LMS is interoperable with third party tools that are IMS LTI compliant.		
36.9	The LMS vendor provides conversion services for migrating existing UMW courses, content, and assessments from Blackboard version 8.		
36.10	The LMS vendor maintains a disaster recovery plan for vendor hosted solutions that is capable of bringing all courses, users, and user data back into an active state in no longer than 3 days after a catastrophic event (complete system crash or natural disaster).		
36.11	The LMS vendor maintains a backup plan that includes individual course restore points.		
36.12	The LMS has a significant and active end user community.		
36.13	The LMS prompts users to download and install codecs as needed.		
36.14	The vendor has an established road map for HTML 5 implementation and compliance.		

VIII. Selection Criteria and Award

A. Selection Criteria

No.	Criteria	Points
1.	Vendor's product(s) and services encompass a comprehensive, innovative, and extensive set of functional features which support the creative teaching and learning existing in all delivery modalities at UMW and the vendor's proposal evidences a vision for future innovation and improvement in its products and services.	35
2.	Vendor's meaningful guarantees of initial training, documentation, and continued responsiveness to any issues that arise in providing these services, including actions that give the University assurance that vendor understands the nature of the LMS within the University, are mission critical and immediate attention and rapid resolution are required for any interruption of service.	10
3.	Vendor's experience, technical and business qualifications and prior success providing services as described in this RFP.	10
4.	Vendor's approach to project in terms of installation, implementation, and integration with existing technical infrastructure, and the degree to which that approach demonstrates sincere commitment to the interests of the institution.	10
5.	Price	15
6.	SWAM Participation	20
	Maximum Points Possible	100

B. Finalist Presentations

Finalist presentations will be scheduled during a two-week window beginning January 17, 2011 at a date and time mutually agreed upon. Each presentation will consist of a two hour presentation targeted toward end users (instructors and students) and a one hour technical presentation. The end-user presentation is subject to video recording for students or faculty unable to attend in person. As part of the Finalist presentation, a test (sandbox) instance of the proposer's product should be made available with 30 sample accounts (10 student, 10 instructor, and 10 admin) for the duration of the two week presentation window.

IX. Optional Pre-proposal Conference

An optional pre-proposal conference will be held 10:00 am, October 11, 2010 at:

University of Mary Washington
Centre Court Building
1671 Jefferson Davis Highway, Suite 104
Purchasing Office
Fredericksburg, Virginia 22401

The purpose of this conference is to allow potential Offerors an opportunity to present questions and obtain clarification relative to any facet of this solicitation. While attendance at this conference will not be a prerequisite to submitting a proposal, offerors who intend to submit a proposal are encouraged to attend.

Bring a copy of this solicitation with you. Any changes resulting from this conference will be issued in a written addendum to this solicitation and posted on eVA and may be posted on <http://lms.umwblogs.org>. as well.

All questions must be in writing and answers from this conference will be posted in eVA as an addendum and may be posted on the website: <http://lms.umwblogs.org>.

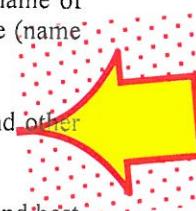
Additional questions may be emailed to KC McCullough, kmccullo@umw.edu. These questions and subsequent answers will also be posted on the website. Question will be accepted through 5:00pm, October 18, 2010.

X. Attachments

- A: Special Terms and Conditions
- B: General Terms and Conditions
- C: Hosting Special Terms and Conditions
- D: Small Business Sub-Contracting Plan

ATTACHMENT A

**SPECIAL TERMS AND CONDITIONS
GOODS AND NONPROFESSIONAL SERVICES**

1. **ADVERTISING** In the event a contract is awarded for supplies, equipment, or services resulting from this bid/proposal, no indication of such sales or services to the University of Mary Washington will be used in product literature or advertising. The contractor shall not state in any of its advertising or product literature that (name of agency/institution) has purchased or uses any of its products or services, and the contractor shall not include (name of agency/institution) in any client list in advertising and promotional materials..
2. **ADDITIONAL USERS:** This procurement is being conducted on behalf of state agencies, institutions and other public bodies who may be added or deleted at anytime during the period of the contract.
3. **AWARD OF CONTRACT:** Selection shall be made of two or more offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with the offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each offeror so selected, the agency shall select the offeror which, in its opinion, has made the best proposal, and shall award the contract to that offeror. The Commonwealth may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reasons why a particular proposal was not deemed to be the most advantageous (*Code of Virginia*, § 2.2-4359D). Should the Commonwealth determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that offeror. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation and the contractor's proposal as negotiated.
4. **BEST AND FINAL OFFER (BAFO):** At the conclusion of negotiations, the offeror(s) may be asked to submit in writing, a Best And Final Offer (BAFO). After the BAFO is submitted, no further negotiations shall be conducted with the offeror(s). The offeror's proposal will be rescored to combine and include the information contained in the BAFO. The decision to award will be based on the final evaluation including the BAFO.
5. **CANCELLATION OF CONTRACT:** The purchasing agency reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the contractor. In the event the initial contract period is for more than 12 months, the resulting contract may be terminated by either party, without penalty, after the initial 12 months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.
6. **EXTRA CHARGES NOT ALLOWED:** The bid price shall be for complete installation ready for the Commonwealth's use, and shall include all applicable freight and installation charges; extra charges will not be allowed.
7. **IDENTIFICATION OF BID/PROPOSAL ENVELOPE:** If a special envelope is not furnished, or if return in the special envelope is not possible, the signed bid/proposal should be returned in a separate envelope or package, sealed and identified as follows:

From: _____
Name of Bidder/Offeror _____ Due Date _____ Time _____

Street or Box Number _____ IFB No./RFP No. _____

City, State, Zip Code _____ IFB/RFP Title _____

Name of Contract/Purchase Officer or Buyer _____

The envelope should be addressed as directed on Page 1 of the solicitation.

If a bid/proposal not contained in the special envelope is mailed, the bidder or offeror takes the risk that the envelope, even if marked as described above, may be inadvertently opened and the information compromised which may cause the bid or proposal to be disqualified. Bids/proposals may be hand delivered to the designated location in the office issuing the solicitation. No other correspondence or other bids/proposals should be placed in the envelope.

8. **SMALL BUSINESS SUBCONTRACTING AND EVIDENCE OF COMPLIANCE:**

It is the goal of the Commonwealth that 40% of its purchases be made from small businesses. This includes discretionary spending in prime contracts and subcontracts. All potential bidders/offerors are required to submit a Small Business Subcontracting Plan. Unless the bidder/offeror is registered as a DMBE-certified small business and where it is practicable for any portion of the awarded contract to be subcontracted to other suppliers, the contractor is encouraged to offer such subcontracting opportunities to DMBE-certified small businesses. This shall not exclude DMBE-certified women-owned and minority-owned businesses when they have received DMBE small business certification. No bidder/offeror or subcontractor shall be considered a Small Business, a Women-Owned Business or a Minority-Owned Business unless certified as such by the Department of Minority Business Enterprise (DMBE) by the due date for receipt of bids or proposals. If small business subcontractors are used, the prime contractor agrees to report the use of small business subcontractors by providing the purchasing office at a minimum the following information: name of small business with the DMBE certification number, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product/service provided.

- a. Each prime contractor who wins an award in which provision of a small business subcontracting plan is a condition of the award, shall deliver to the contracting agency or institution on a quarterly basis, evidence of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the small business subcontracting plan. When such business has been subcontracted to these firms and upon completion of the contract, the contractor agrees to furnish the purchasing office at a minimum the following information: name of firm with the DMBE certification number, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product or service provided. Payment(s) may be withheld until compliance with the plan is received and confirmed by the agency or institution. The agency or institution reserves the right to pursue other appropriate remedies to include, but not be limited to, termination for default.
- b. Each prime contractor who wins an award valued over \$200,000 shall deliver to the contracting agency or institution on a quarterly basis, information on use of subcontractors that are not DMBE-certified small businesses. When such business has been subcontracted to these firms and upon completion of the contract, the contractor agrees to furnish the purchasing office at a minimum the following information: name of firm, phone number, total dollar amount subcontracted, and type of product or service provided.

9. **OPTIONAL PREPROPOSAL CONFERENCE:** An optional preproposal conference will be at 10am 10/11/2010 at the 1671 Jefferson Davis Hwy, Fredericksburg VA 22401 (Centre Court building). The purpose of this conference is to allow potential bidders/offerors an opportunity to present questions and obtain clarification relative to any facet of this solicitation.

- a. Due to the importance of all bidders/offerors having a clear understanding of the specifications/scope of work and requirements of this solicitation,
- b.
- c. Bring a copy of the solicitation with you. Any changes resulting from this conference will be issued in a written addendum to the solicitation.

10. **PRIME CONTRACTOR RESPONSIBILITIES:** The contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that he may utilize, using his best skill and attention. Subcontractors who perform work under this contract shall be responsible to the prime contractor. The contractor agrees that he is as fully responsible for the acts and omissions of his subcontractors and of persons employed by them as he is for the acts and omissions of his own employees.

11. **RENEWAL OF CONTRACT:** This contract may be renewed by the Commonwealth for 5 successive one year periods under the terms and conditions of the original. Price increases may be negotiated only at the time of renewal. Written notice of the Commonwealth's intention to renew shall be given approximately 90 days prior to the expiration date of each contract period.

If during any subsequent renewal periods, the Commonwealth elects to exercise the option to renew the contract, the contract price(s) for the subsequent renewal period shall not exceed the contract price(s) of the previous renewal period increased/decreased by more than the percentage increase/decrease of the Service category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

12. **SUBCONTRACTS:** No portion of the work shall be subcontracted without prior written consent of the purchasing agency. In the event that the contractor desires to subcontract some part of the work specified herein, the contractor shall furnish the purchasing agency the names, qualifications and experience of their proposed subcontractors. The contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.
13. **USE OF RECYCLED MATERIALS:** Notwithstanding the prohibition against used, damaged or obsolete items, vendors are encouraged to use secondary or recycled materials in the manufacture of products to the maximum extent practicable without jeopardizing the performance or intended end use of the product unless such use is precluded due to health and welfare or safety requirements or product specifications contained herein.
14. **WARRANTY:** All materials and equipment shall be fully guaranteed against defects in material and workmanship for the term of the contract. Should any defect be noted by the owner, the Purchasing Office will notify the contractor of such defect or non-conformance. Notification will state either (1) that the contractor shall replace or correct, or (2) the owner does not require replacement or correction, but an equitable adjustment to the contract price will be negotiated. If the contractor is required to correct or replace, it shall be at no cost to the Commonwealth and shall be subject to all provisions of this clause to the same extent as materials initially delivered. If the contractor fails or refuses to replace or correct the deficiency, the office issuing the purchase order may have the materials corrected or replaced with similar items and charge the contractor the costs occasioned thereby or obtain an equitable adjustment in the contract price.
15. **WORK SITE DAMAGES:** Any damage to existing utilities, equipment or finished surfaces resulting from the performance of this contract shall be repaired to the Commonwealth's satisfaction at the contractor's expense.
16. **eVA Business-To-Government Contracts and Orders:** The solicitation/contract will result in several purchase order(s) with the eVA transaction fee specified below assessed for each order.

- a. For orders issued prior to August 16, 2006, the Vendor Transaction Fee is 1%, capped at a maximum of \$500 per order.
- b. For orders issued August 16, 2006 and after, the Vendor Transaction Fee is:
 - i. DMBE-certified Small Businesses: 1%, Capped at \$500 per order.
 - ii. Businesses that are not DMBE-certified Small Businesses: 1%, Capped at \$1,500 per order.

The eVA transaction fee will be assessed approximately 30 days after each purchase order is issued. Any adjustments (increases/decreases) will be handled through eVA change orders.

Internet electronic procurement solution, website portal www.eva.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

Vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution and agree to comply with the following:

If this solicitation is for a term contract, failure to provide an electronic catalog (price list) or index page catalog for items awarded will be just cause for the Commonwealth to reject your bid/offer or terminate this contract for default. The format of this electronic catalog shall conform to the eVA Catalog Interchange Format (CIF) Specification that

can be accessed and downloaded from www.eVA.virginia.gov. Contractors should email Catalog or Index Page information to eVA-catalog-manager@dgs.virginia.gov.

17. **CONFIDENTIALITY OF PERSONALLY IDENTIFIABLE INFORMATION:** The contractor assures that information and data obtained as to personal facts and circumstances related to patients or clients will be collected and held confidential, during and following the term of this agreement, and will not be divulged without the individual's and the agency's written consent and only in accordance with federal law or the Code of Virginia. Contractors who utilize, access, or store personally identifiable information as part of the performance of a contract are required to safeguard this information and immediately notify the agency of any breach or suspected breach in the security of such information. Contractors shall allow the agency to both participate in the investigation of incidents and exercise control over decisions regarding external reporting. Contractors and their employees working on this project may be required to sign a confidentiality statement.
18. **OWNERSHIP OF INTELLECTUAL PROPERTY:** All copyright and patent rights to all papers, reports, forms, materials, creations, or inventions created or developed in the performance of this contract shall become the sole property of the Commonwealth. On request, the contractor shall promptly provide an acknowledgment or assignment in a tangible form satisfactory to the Commonwealth to evidence the Commonwealth's sole ownership of specifically identified intellectual property created or developed in the performance of the contract.
19. **STATE CORPORATION COMMISSION IDENTIFICATION NUMBER:** Pursuant to Code of Virginia, §2.2-4311.2 subsection B, a bidder or offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is required to include in its bid or proposal the identification number issued to it by the State Corporation Commission (SCC). Any bidder or offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law is required to include in its bid or proposal a statement describing why the bidder or offeror is not required to be so authorized.

ATTACHMENT B
GENERAL TERMS AND CONDITIONS

A. VENDORS MANUAL: This solicitation is subject to the provisions of the Commonwealth of Virginia *Vendors Manual* and any changes or revisions thereto, which are hereby incorporated into this contract in their entirety. The procedure for filing contractual claims is in section 7.19 of the *Vendors Manual*. A copy of the manual is normally available for review at the purchasing office and is accessible on the Internet at www.eva.virginia.gov under "Vendors Manual" on the vendors tab.

B. APPLICABLE LAWS AND COURTS: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The agency and the contractor are encouraged to resolve any issues in controversy arising from the award of the contract or any contractual dispute using Alternative Dispute Resolution (ADR) procedures (*Code of Virginia*, § 2.2-4366). ADR procedures are described in Chapter 9 of the *Vendors Manual*. The contractor shall comply with all applicable federal, state and local laws, rules and regulations.

C. ANTI-DISCRIMINATION: By submitting their (bids/proposals), (bidders/offerors) certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and § 2.2-4311 of the *Virginia Public Procurement Act (VPPA)*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia*, § 2.2-4343.1E). In every contract over \$10,000 the provisions in 1. and 2. below apply:

1. During the performance of this contract, the contractor agrees as follows:
 - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
 - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
2. The contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

D. ETHICS IN PUBLIC CONTRACTING: By submitting their (bids/proposals), (bidders/offerors) certify that their (bids/proposals) are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other (bidder/offeror), supplier, manufacturer or subcontractor in connection with their (bid/proposal), and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

E. IMMIGRATION REFORM AND CONTROL ACT OF 1986: By entering into a written contract with the Commonwealth of Virginia, the Contractor certifies that the Contractor does not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

F. DEBARMENT STATUS: By submitting their (bids/proposals), (bidders/offerors) certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

G. ANTITRUST: By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.

H. MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS FOR IFBs AND RFPs

1. (For Invitation For Bids): Failure to submit a bid on the official state form provided for that purpose shall be a cause for rejection of the bid. Modification of or additions to any portion of the Invitation for Bids may be cause for rejection of the bid; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a bid as nonresponsive. As a precondition to its acceptance, the Commonwealth may, in its sole discretion, request that the bidder withdraw or modify nonresponsive portions of a bid which do not affect quality, quantity, price, or delivery. No modification of or addition to the provisions of the contract shall be effective unless reduced to writing and signed by the parties.

2. (For Request For Proposals): Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.

I. CLARIFICATION OF TERMS: If any prospective (bidder/offeror) has questions about the specifications or other solicitation documents, the prospective (bidder/offeror) should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.

J. PAYMENT:

1. To Prime Contractor:

a. Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the state contract number and/or purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).

b. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

c. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price, regardless of which public agency is being billed.

d. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.

e. **Unreasonable Charges.** Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those

charges which are not in dispute (*Code of Virginia*, § 2.2-4363).

2. To Subcontractors:

a. A contractor awarded a contract under this solicitation is hereby obligated:

(1) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or

(2) To notify the agency and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.

b. The contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Commonwealth.

3. Each prime contractor who wins an award in which provision of a SWAM procurement plan is a condition to the award, shall deliver to the contracting agency or institution, on or before request for final payment, evidence and certification of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the SWAM procurement plan. Final payment under the contract in question may be withheld until such certification is delivered and, if necessary, confirmed by the agency or institution, or other appropriate penalties may be assessed in lieu of withholding such payment.

4. The Commonwealth of Virginia encourages contractors and subcontractors to accept electronic and credit card payments.

K. PRECEDENCE OF TERMS: The following General Terms and Conditions *VENDORS MANUAL*, APPLICABLE LAWS AND COURTS, ANTI-DISCRIMINATION, ETHICS IN PUBLIC CONTRACTING, IMMIGRATION REFORM AND CONTROL ACT OF 1986, DEBARMENT STATUS, ANTITRUST, MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS, CLARIFICATION OF TERMS, PAYMENT shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

L. QUALIFICATIONS OF (BIDDERS/OFFERORS): The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the (bidder/offeror) to perform the services/furnish the goods and the (bidder/offeror) shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect (bidder's/offeror's) physical facilities prior to award to satisfy questions regarding the (bidder's/offeror's) capabilities. The Commonwealth further reserves the right to reject any (bid/proposal) if the evidence submitted by, or investigations of, such (bidder/offeror) fails to satisfy the Commonwealth that such (bidder/offeror) is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.

M. TESTING AND INSPECTION: The Commonwealth reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.

N. ASSIGNMENT OF CONTRACT: A contract shall not be assignable by the contractor in whole or in part without the written consent of the Commonwealth.

O. CHANGES TO THE CONTRACT: Changes can be made to the contract in any of the following ways:

1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.

2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice

to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt. The contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:

- a. By mutual agreement between the parties in writing; or
- b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the contractor's records and/or to determine the correct number of units independently; or
- c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia *Vendors Manual*. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.

P. DEFAULT: In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Commonwealth, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Commonwealth may have.

Q. TAXES: Sales to the Commonwealth of Virginia are normally exempt from State sales tax. State sales and use tax certificates of exemption, Form ST-12, will be issued upon request. Deliveries against this contract shall usually be free of Federal excise and transportation taxes. The Commonwealth's excise tax exemption registration number is 54-73-0076K.

R. USE OF BRAND NAMES: Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict (bidders/offerors) to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the public body, in its sole discretion, determines to be the equivalent of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The (bidder/offeror) is responsible to clearly and specifically identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the Commonwealth to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid nonresponsive. Unless the (bidder/offeror) clearly indicates in its (bid/proposal) that the product offered is an equivalent product, such (bid/proposal) will be considered to offer the brand name product referenced in the solicitation.

S. TRANSPORTATION AND PACKAGING: By submitting their (bids/proposals), all (bidders/offerors) certify and warrant that the price offered for FOB destination includes only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein,

standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.

T. INSURANCE: By signing and submitting a bid or proposal under this solicitation, the bidder or offeror certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The bidder or offeror further certifies that the contractor and any subcontractors will maintain these insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

MINIMUM INSURANCE COVERAGES AND LIMITS REQUIRED FOR MOST CONTRACTS:

1. Workers' Compensation - Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirements under the *Code of Virginia* during the course of the contract shall be in noncompliance with the contract.

2. Employer's Liability - \$100,000.

3. Commercial General Liability - \$1,000,000 per occurrence. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.

When the requirement is for parking facilities and garages for motor vehicle maintenance contracts, the forgoing sentence should be changed to read: These coverage should include Garage Owner's Liability. Contracts with movers or truck transporters should also require motor carrier's liability. When in the judgment of a procurement officer, these limits and coverage are not warranted for the goods and services being procured, the Division of Risk Management should be contacted.

4. Automobile Liability - \$1,000,000 per occurrence. (Only used if motor vehicle is to be used in the contract.)

NOTE: In addition, various Professional Liability/Errors and Omissions coverages are required when soliciting those services as follows:

Profession/Service	Limits
Accounting	\$1,000,000 per occurrence, \$3,000,000 aggregate
Architecture	\$2,000,000 per occurrence, \$6,000,000 aggregate
Asbestos Design, Inspection or Abatement Contractors	\$1,000,000 per occurrence, \$3,000,000 aggregate
Health Care Practitioner (to include Dentists, Licensed Dental Hygienists, Optometrists, Registered or Licensed Practical Nurses, Pharmacists, Physicians, Podiatrists, Chiropractors, Physical Therapists, Physical Therapist Assistants, Clinical Psychologists, Clinical Social Workers, Professional Counselors, Hospitals, or Health Maintenance Organizations.)	\$1,925,000 per occurrence, \$3,000,000 aggregate (Limits increase each July 1 through fiscal year 2008, as follows: July 1, 2008 - \$2,000,000. This complies with §8.01-581.15 of the <i>Code of Virginia</i> .
Insurance/Risk Management	\$1,000,000 per occurrence, \$3,000,000 aggregate
Landscape/Architecture	\$1,000,000 per occurrence, \$1,000,000 aggregate
Legal	\$1,000,000 per occurrence, \$5,000,000 aggregate
Professional Engineer	\$2,000,000 per occurrence, \$6,000,000 aggregate
Surveying	\$1,000,000 per occurrence, \$1,000,000 aggregate

U. ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract over \$50,000, as a result of this solicitation, the purchasing agency will publicly post such notice on the DGS/DPS eVA web site (www.eva.virginia.gov) for a minimum of 10 days.

V. DRUG-FREE WORKPLACE: During the performance of this contract, the contractor agrees to (i) provide a drugfree workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor. For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

W. NONDISCRIMINATION OF CONTRACTORS: A bidder, offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faithbased organizational status, any other basis prohibited by state law relating to discrimination in employment or because the bidder or offeror employs ex-offenders unless the state agency, department or institution has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

X. eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION: The eVA Internet electronic procurement solution, website portal www.eVA.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The eVA portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet eprocurement solution either through the eVA Basic Vendor Registration Service or eVA Premium Vendor Registration Service. All bidders or offerors must register in eVA; failure to register will result in the bid/proposal being rejected.

a. eVA Basic Vendor Registration Service: \$25 Annual Registration Fee plus the appropriate order Transaction Fee specified below. eVA Basic Vendor Registration Service includes electronic order receipt, vendor catalog posting, on-line registration, electronic bidding, and the ability to research historical procurement data available in the eVA purchase transaction data warehouse.

b. eVA Premium Vendor Registration Service: \$25 Annual Registration Fee plus the appropriate order Transaction Fee specified below. eVA Premium Vendor Registration Service includes all benefits of the eVA Basic Vendor Registration Service plus automatic email or fax notification of solicitations and amendments.

c. For orders issued prior to August 16, 2006, the Vendor Transaction Fee is 1%, capped at a maximum of \$500 per order.

d. For orders issued August 16, 2006 and after, the Vendor Transaction Fee is:

(i) DMBE-certified Small Businesses: 1%, capped at \$500 per order.

(ii) Businesses that are not DMBE-certified Small Businesses: 1%, capped at \$1,500 per order.

The eVA transaction fee will be invoiced approximately 30 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

Y. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the agency shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

Z. SET-ASIDES. This solicitation is set-aside for DMBE-certified small business participation only when designated “SET-ASIDE FOR SMALL BUSINESSES” in the solicitation. DMBE-certified small businesses are those businesses that hold current small business certification from the Virginia Department of Minority Business Enterprise. This shall not exclude DMBE-certified women-owned and minority-owned businesses when they have received the DMBE small business certification. For purposes of award, bidders/offerors shall be deemed small businesses if and only if they are certified as such by DMBE on the due date for receipt of bids/proposals.

AA. BID PRICE CURRENCY: Unless stated otherwise in the solicitation, bidders/offerors shall state bid/offer prices in US dollars.

BB. AUTHORIZATION TO CONDUCT BUSINESS IN THE COMMONWEALTH: A contractor organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the *Code of Virginia* or as otherwise required by law. Any business entity described above that enters into a contract with a public body pursuant to the *Virginia Public Procurement Act* shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract. A public body may void any contract with a business entity if the business entity fails to remain in compliance with the provisions of this section.

1. DEFINITIONS

A. Application

The software programs (collectively called the "Learning Management System") in object code and other related data, including intellectual data, proprietary information and Documentation contained and applicable to the Licensed Services hosted and supported by Supplier under this Contract, including any Updates, enhancements, and replacements to the Application.

B. Application Users

Application Users shall include, as specified in the applicable order, UMW, employees of UMW, independent contractors engaged by UMW, or entities contracting with UMW for services, as well as customers, suppliers, members of the general public, and other entities with whom UMW may find it necessary or desirable to process or communicate electronically in pursuit of its business.

C. Computer Virus

Any malicious code, program, or other internal component (e.g., computer virus, computer worm, computer time bomb, or similar component), which could damage, destroy, alter or disrupt any computer program, firmware, or hardware or which could, in any manner, reveal, damage, destroy, alter or disrupt any data or other information accessed through or processed by such software in any manner.

D. Contract/RFP Con

"Contract" and "RFP" may be used interchangeably in this document as the RFP is a component of the awarded Contract.

E. Documentation

The supplier's user manuals, training materials, guides, product descriptions, technical manuals, product specifications, supporting materials and Updates describing the Application, Licensed Services and Supplier Product provided to UMW, in printed and/or electronic form.

2. DESCRIPTION OF LICENSED SERVICES

During the term of any order issued pursuant to this Contract, Supplier hereby agrees to host the Learning Management System Application on servers owned, operated, housed, and maintained by Supplier and shall make the Application available to UMW's designated Application Users through the Internet.

Supplier has acquired any and all license rights in the Application necessary and appropriate for Supplier to provide the Licensed Services for UMW. Supplier hereby grants UMW and its Application Users a non-exclusive, transferable, license to access and use by any method the Application during the term pursuant to this Contract.

3. SUPPLIER RESPONSIBILITIES

A. Standard Application Responsibilities

Unless otherwise indicated, Supplier shall acquire and maintain, at no charge to UMW, the hardware and software required to host the Application(s). The hardware and software on which the Application(s) is hosted will be maintained in good operating condition, consistent with or exceeding generally accepted industry practices and procedures. In addition:

- i). Supplier shall maintain sufficient hardware capacity to satisfy the technical requirements and the bandwidth and required storage capacity in agreement with UMW.
- ii). Supplier shall be responsible for all telecommunication connections from the server hosting the Application to the Internet.
- iii). Supplier may collect user-specific data only as necessary to provide the Licensed Services ordered by UMW. No information regarding UMW or any Application User shall be disclosed, provided, rented or sold to any third party for any reason unless required by law or regulation or by an order of a court of competent jurisdiction. This obligation shall extend beyond the term of the Contract.

-
- iv). The Application will be made available to UMW and designated Application Users, twenty-four (24) hours a day, seven (7) days a week ("Uptime") less Excusable Downtime. For the purposes of this Contract, "Excusable Downtime" is defined as that period of time when the Licensed Services are not available to UMW or its Application Users due to scheduled network, hardware or service maintenance and/or upgrades. Except in cases of emergency, UMW shall be provided a two (2) business day advance notification of such maintenance and/or upgrade. In cases of emergency, Supplier will use its best efforts to notify UMW of a planned Downtime as soon as practicable.
 - v). Excusable Downtime shall not include (i) an electronic hardware failure, (ii) a failure in the Supplier's Application, (iii) an electric utility failure at Supplier's facility where the Application is hosted, or (iv) a network failure up to, but not including, the interconnection point of Supplier's network to the public switched telephone network.
 - vi). Supplier guarantees the Application will be available for use at least ninety-nine percent (99%) of the total time during each month, excluding Excusable Downtime.
 - vii). If non-Excusable Downtime exceeds the parameters listed above, Supplier will credit to UMW the total recurring fees that would otherwise be owed under this Contract during the month of such failure. Such credit will be issued in the month immediately following the failure.
 - viii). Supplier shall be required to back up Content on a daily basis and shall retain the backed-up Content on a separate and dedicated secure server. Only Content supplied by or to UMW may reside on such server. UMW reserves the right to request a copy of such back-up Content at any time and in a format acceptable to UMW.

4. CONTENT SECURITY

Supplier shall provide a secure environment for Content and any hardware and software, including servers, network and data components, to be provided by Supplier as part of its performance under this Contract in accordance with best industry practices in order to prevent unauthorized access to and use or modification of, and to otherwise protect, the Application and Content. Supplier shall, at a minimum, implement the following procedures designed to protect the security of Content:

- i). User identification and access controls designed to limit access to Content to Application Users;
- ii). External connections to the World Wide Web which will have appropriate security controls including industry standard intrusion detection and countermeasures that will detect and terminate any unauthorized activity prior to entering the firewall maintained by Supplier;
- iii). Industry standard firewalls regulating all data entering Supplier's internal data network from any external source which will enforce secure connections between internal and external systems and will permit only specific types of data to pass through;
- iv). Industry standard encryption techniques which will be used when Content is transmitted by Supplier on behalf of UMW;
- v). Physical security measures, including securing all Content on a secure server, in locked data cabinets within a secure facility. Access to facilities housing the Application and Content restricted to only allow access to personnel and agents of Supplier who have a need to know in connection with operation and support of the Application;
- vi). Supplier's maintaining and following a disaster recovery plan designed to maintain Application User access to the Application and Licensed Services, and to prevent the unintended destruction of Content; and which plan, unless otherwise specified herein, shall provide for daily back-up of Content and archival of such Content at a secure facility. The disaster recovery plan shall provide for and be followed by Supplier such that in no event shall the Application, Licensed Services, Supplier Product and/or Content be unavailable to UMW for a period in excess of twenty-four (24) hours;
- vii). Regular training for Supplier personnel regarding the security and data recovery programs referenced in this Section;
- viii). Regular testing of the systems and procedures outlined in this Section; and
- ix). Audit controls that record and monitor Application and Licensed Services activity continuously.

Failure by Supplier to use best industry practices in fulfilling these security obligations shall eliminate any limitation of Supplier's liability to UMW or third parties, including the limitation on lost profits and consequential damages.

5. TRANSITION ASSISTANCE (AT CONTRACT END)

Upon execution of an order pursuant to this Contract, Supplier and UMW will develop a transition plan ("Transition Plan") detailing each Party's respective tasks in connection with the orderly transition and migration of (i) all Content stored by Supplier pursuant to such order to UMW's archive and/or to a system or application maintained by UMW or a third party application service provider and, if applicable and agreed in writing by UMW and Supplier, (ii) the Application and Licensed Services to UMW or a third party service provider, such transition and migration to occur upon termination or expiration of the Contract or the applicable order.

At a minimum, the Transition Plan shall provide that upon expiration or termination of this Contract or the applicable order for any reason, Supplier will return all Content in its possession to the UMW in a format accessible without the use of Supplier's Application and, at UMW's option, continue to provide Licensed Services for up to six (6) months after the date of expiration or termination in order to facilitate UMW's transition to a new service provider and Supplier shall provide such reasonable assistance as may be requested by UMW to effectuate such transition.

In any event, regardless of whether a Transition Plan has been developed or implemented, Supplier shall, within thirty (30) days of expiration, completion, or termination of this Contract or any order issued hereunder, provide to UMW a complete set of all Content provided to Supplier by UMW and/or its Application Users and stored by the Application on behalf of UMW. Supplier's failure to do so shall constitute a material breach of this Contract and, in addition to the remedies set forth in this Contract, UMW may exercise all available rights and remedies under law and equity.

The obligations set forth in this section and in any Transition Plan developed pursuant to an order issued pursuant to this Contract may extend beyond expiration or termination of the Contract for a period not to exceed six (6) months. In the event of a termination for breach and/or default of Supplier, Supplier shall perform such obligations at no charge or fee to UMW; otherwise, Supplier shall perform such obligations at the hourly rate or a charge agreed upon by Supplier and UMW.

6. ACCEPTANCE OF LICENSED SERVICES

A. Acceptance

The Application shall be deemed accepted when UMW reasonably determines that UMW and its Application Users can successfully access and use all functionalities of the Application which Supplier is required to provide to UMW and its Application Users. UMW agrees to complete Acceptance testing within such period as set forth in the applicable order. After such period, unless UMW notifies Supplier to the contrary, the Application shall be deemed accepted. Supplier agrees to provide to UMW such assistance and advice as UMW may reasonably require, at no additional cost, during such Acceptance testing, other than pre-approved travel expenses incurred which will be reimbursable UMW at the then current per diem amounts set forth by the Virginia Department of Accounts and published at: http://www.doa.virginia.gov/Admin_Services/CAPP/CAPP_Topics/20335_Meals_Lodging_102008.pdf or a successor URL(s). UMW shall provide to Supplier written notice of Acceptance upon completion of successful Acceptance testing. Should UMW fail to provide Supplier written notice of successful or unsuccessful Acceptance testing within five (5) days following the Acceptance testing period, the Service shall be deemed Accepted.

B. Cure Period

If during the Acceptance test period, UMW is unable to access the licensed functionalities of the Application, Supplier shall provide UMW with such access, and UMW's Application Users with their required access, within seven (7) days of written notice of inability to access, or as otherwise agreed between UMW and Supplier in the applicable order. Should Supplier fail to provide access to the licensed functionalities of the Application, UMW may, in its sole discretion: (i) reject the Application in its entirety and recover amounts previously paid hereunder; (ii) issue a "partial Acceptance" of the Application access with an equitable adjustment in the price to account for such deficiency; or (iii) conditionally accept the applicable Application access while reserving its right to revoke Acceptance if timely correction is not forthcoming.

If UMW and its Application Users are unable to access the licensed functionalities of the Application after a second set of acceptance tests, Supplier shall be deemed in default of the order. In the event of such default, UMW may, at its sole discretion, terminate its order, in whole or in part, for the Licensed Services to be provided by Supplier.

7. RECORDS AND AUDIT

Supplier shall maintain accurate records and other evidence pertaining to the costs and expenses for all Licensed Services performed/delivered under any order issued pursuant to this Contract in support of its charges invoiced to UMW. The records will be to the extent and in such detail as will properly reflect all direct and indirect costs associated with such order. In addition, Supplier shall maintain accurate records of the Licensed Services, including but not limited to, the "Uptime" and "Downtime" as set forth in the Supplier Responsibilities Section. UMW shall have

the right, at any reasonable time during regular business hours after giving reasonable advance notice, to inspect and audit the records applicable to its order(s). Supplier shall preserve such records for five (5) years after termination/completion of the Licensed Services agreed to under this Contract or any order issued hereunder.

The Supplier will make available to UMW, on an annual basis, the SAS 70 Type II security audit report on the contracted services to UMW.

8. APPLICATION AND LICENSED SERVICES SUPPORT

At any time during the term of any order issued pursuant to this Contract, Supplier shall provide the following Application Services (including unlimited telephonic support and all necessary travel and labor) without additional charge to UMW in order to ensure UMW and its Application Users are able to access and use the Application in accordance with the Requirements.

A. Coverage

Twenty-four (24) hours per day, seven (7) days a week, Supplier provide to UMW all reasonably necessary telephone or written consultation requested by UMW in connection with use, problems and operation of the Application.

B. Service Levels

Within one (1) hour after a request from UMW, Supplier will respond to such request for support of Licensed Services regarding the Application and Licensed Services, including Application, Supplier Product and Documentation in accordance with the procedures identified below. In each case, UMW may describe the problem by telephone, facsimile or electronic mail or via a web site provided by Supplier. Supplier shall use its best efforts/commercially reasonable efforts to meet Response Time and Resolution Time and other obligations under this Contract.

Severity (Sample Problem)	Response Time	Resolution Time (Fix/work-around within)	Internal Escalation Procedure
1 (Application down)		six (6) hours	
2 (certain processing interrupted or malfunctioning but Application is able to process)		twenty-four (24) hours	
3 (minor intermittent malfunctioning, Application able to process data)		three (3) days	

C. Application Evolution

Should Supplier merge or splinter the Application previously provided to UMW, such action on the part of Supplier shall not in any way result in UMW being charged additional license or support fees in order to access the Application, to enable its Application Users to access the Application, or to receive enhancements, releases, upgrades or support for the Application.

9. SERVICE LEVELS AND REMEDIES

Supplier's failure to make the Licensed Services Available to UMW and its Application Users at least 99% of the time in any given month during the term of UMW's order, excluding scheduled maintenance, shall be deemed a service level default ("Service Level Default") and UMW may obtain the non-exclusive remedies set forth below. For purposes of this Contract, "Available" means that UMW and its Application Users are able to access all features and functions of the Application and Licensed Services required by UMW, including but not limited to the Application and Supplier Product.

Service Level (Monthly)	Service Level Credit (Prorated Fees – Monthly)
Above 99%	0
98.99 – 97%	10%
96.99 – 95%	25%

94.99 – 93%	50%
Below 93%	100% and, UMW's sole discretion, termination of UMW's order

In the event UMW is eligible for a 100% Service Level Credit under this Section during any given month of the term of UMW's order, UMW may terminate such order without penalty upon written notice to Supplier and, in addition to the remedies available under this Section, receive any additional remedies set forth in the Contract.

Credits shall be applied against the next invoice. In the event a Service Level Default occurs after UMW has given notice of termination pursuant to the Term and Termination section of this Contract or due to non-appropriation of funds, or UMW has made final payment to Supplier for the Application and Licensed Services and no further invoices shall issue as a result, Supplier shall refund to UMW the amount of the appropriate Service Level Credit due for the period of default.

A. Reporting

Once each calendar month during the term of an order issued pursuant to this Contract, Supplier shall provide UMW with a written report that shall contain information with respect to the performance of the Application and Licensed Services Representatives of Supplier and UMW shall meet as often as may be reasonably requested by either Party, but no less often than once each calendar year, to review Supplier's performance of Licensed Services and the performance of the Application and to discuss technical plans, financial matters, system performance, service levels and for any other matters related to this Contract that may be reasonably requested by either Supplier or UMW. UMW may independently audit the report at its expense no more than two (2) times annually.

B. Failure to Meet Service Level Commitments

In the event that such Application fails to meet the Service Levels specified herein, Supplier will: (i) repair the Application, at Supplier's expense, so that it conforms to this Contract and such specifications; or (iii) refund to UMW all fees paid for the Application and the Licensed Services after the failure of the Application to meet the Service Levels. In the event Supplier fails to comply with these remedies, UMW may exercise all available rights and remedies under law and equity.

10. GENERAL WARRANTY

Supplier warrants and represents to UMW the Licensed Services and the Application as follows:

A. Ownership

Supplier has the right to provide the Licensed Services, including access by UMW and its Application Users to the Application, without violating or infringing any law, rule, regulation, copyright, patent, trade secret or other proprietary right of any third party.

B. Licensed Services, Application, and Documentation

Supplier warrants the following with respect to the Licensed Services and the Application:

- i). The Application is pursuant to a particular Request for Proposal ("RFP"), and therefore such Application shall be fit for the particular purposes specified by UMW in the RFP and in the Contract, and Supplier is possessed of superior knowledge with respect to the Application and is aware that UMW and its Application Users are relying on Supplier's skill and judgment in providing the Licensed Services, including the Application;
- ii). Supplier represents and warrants (i) that it shall perform the Licensed Services in conformity to the specifications set forth in this RFP and the Contract in a professional and workmanlike manner and (ii) that the Licensed Services shall not infringe any third party proprietary rights including (without limitation) any trademark, trade name, trade secret, copyright, moral rights, patents or similar intellectual property rights.
- iii). Supplier warrants that the Application and Licensed Services will conform in all material respects to the Requirements set forth in this Contract and any order issued hereunder, and the applicable specifications and Documentation, not including any post-Acceptance modifications or alterations to the Documentation which represent a material diminishment of the functionality of the Application, Licensed Services or Supplier Product; and that such Application and Licensed Services are compatible with and will operate successfully when used on the equipment in accordance with the Documentation and all of the terms and conditions hereof.
- iv). The Application provided hereunder is at the current release level unless UMW specifies another version in its order;

-
- v). No corrections, work arounds or future Application releases provided by Supplier shall degrade the Application, cause any other warranty to be breached, or UMW to acquire additional hardware equipment or software;
 - vi). Supplier warrants that all post-Acceptance Updates, changes, alterations or modifications to the Application, Licensed Services and Documentation by Supplier will be compatible with, and will not materially diminish the features or functionality of the Application, Licensed Services and/or Supplier Product when used on the equipment in accordance with the Documentation and all of the terms and conditions hereof.

C. Malicious Code

Supplier has used its best efforts through quality assurance procedures to ensure that there are no Computer Viruses or undocumented features in the Application accessed by UMW or its Application Users; and the Application does not contain any embedded device or code (e.g., time bomb) that is intended to obstruct or prevent any use of or access to the Application by UMW or its Application Users. Supplier agrees that UMW may pursue all remedies provided under law in the event of a breach or threatened breach of this Section, including injunctive or other equitable relief.

D. Access to Product and Passwords

Supplier warrants that the Application and Licensed Services do not contain disabling code (defined as computer code designed to interfere with the normal operation of the Licensed Services or hardware or software of UMW or its Application Users) or any program routine, device or other undisclosed feature, including but not limited to, viruses, worms, trojan horses, or other malicious code which is specifically designed to permit unauthorized access, delete, disable, deactivate, interfere with or otherwise harm the Application, Licensed Services or the hardware or software of UMW or its Application Users. In addition, Supplier warrants that UMW and its Application Users will be provided commercially reasonable uninterrupted access to the Application and that Supplier will not cancel or otherwise terminate access to the Application by disabling passwords, keys or tokens that enable continuous use of the Application by UMW and its Application Users during the term of this Contract or any order issued hereunder. Supplier further warrants that the Application and Licensed Services are compatible with and will operate successfully on the equipment.

E. Open Source

Supplier will notify UMW if the Application contains any Open Source code and identify the specific Open Source License that applies to any embedded code dependent on Open Source code, provided by Supplier under this Contract.

F. Suppliers Viability

Supplier warrants that it has the financial capacity to perform and continue to perform its obligations under this Contract; that Supplier has no constructive or actual knowledge of a potential legal proceeding being brought against Supplier that could materially adversely affect performance of this Contract and that entering into this Contract is not prohibited by any contract, or order by any court of competent jurisdiction.

G. Supplier's Past Experience

Supplier warrants that Supplier has provided the Licensed Services to a non-related third party customer of Supplier without significant problems due to the Licensed Services, the Application, or Supplier.

H. Contract Administration

Supplier agrees that at all times during the term of this Contract an account executive, at Supplier's senior management level, shall be assigned and available to UMW. Supplier reserves the right to change such account executive upon reasonable advance written notice to UMW.

ATTACHMENT D

Small Business Subcontracting Plan

Definitions:

Small Business: "Small business" means an independently owned and operated business which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. Note: This shall not exclude DMBE-certified women- and minority-owned businesses when they have received DMBE small business certification.

Women-Owned Business: Women-owned business means a business concern that is at least 51% owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, or in the case of a corporation, partnership or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, and both the management and daily business operations are controlled by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law.

Minority-Owned Business: Minority-owned business means a business concern that is at least 51% owned by one or more minority individuals or in the case of a corporation, partnership or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

All small businesses must be certified by the Commonwealth of Virginia, Department of Minority Business Enterprise (DMBE) by the due date of the solicitation to participate in the SWAM program. Certification applications are available through DMBE online at www.dmbe.virginia.gov (Customer Service).

Offeror Name: _____

Preparer Name: _____ Date: _____

Instructions

- A. If you are certified by the Department of Minority Business Enterprise (DMBE) as a small business, complete only Section A of this form. This shall not exclude DMBE-certified women-owned and minority-owned businesses when they have received DMBE small business certification.
- B. If you are not a DMBE-certified small business, complete Section B of this form. For the offeror to receive credit for the small business subcontracting plan evaluation criteria, the offeror shall identify the portions of the contract that will be subcontracted to DMBE-certified small business in this section. Points will be assigned based on each offeror's proposed subcontracting expenditures with DMBE certified small businesses for the initial contract period as indicated in Section B in relation to the offeror's total price.

Section A

If your firm is certified by the Department of Minority Business Enterprise (DMBE), are you certified as a (check only one below):

- Small Business
 Small and Women-owned Business
 Small and Minority-owned Business

Certification number: _____ Certification Date: _____

Section B (Small Business Subcontracting Plan)

Populate the table below to show your firm's plans for utilization of DMBE-certified small businesses in the performance of this contract. This shall not exclude DMBE-certified women-owned and minority-owned businesses when they have received the DMBE small business certification. Include plans to utilize small businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.

B. Plans for Utilization of DMBE-Certified Small Businesses for this Procurement

Small Business Name & Address	Status if Small Business is also: Women (W), Minority (M)	Contact Person, Telephone & Email	Type of Goods and/or Services	Planned Involvement During Initial Period of the Contract	Planned Contract Dollars During Initial Period of the Contract
Totals \$					

UNIVERSITY OF MARY WASHINGTON
RFP #11-03
LEARNING MANAGEMENT SYSTEM
ADDENDUM No. #1
10/19/2010

Per the original solicitation the following are the answers from questions that were generated by vendors attending the optional pre-proposal meeting held on 10/11/2010:

1. How many courses does UMW have and anticipate migrating?

It is expected that the contract will be awarded in early Spring 2011. The bulk of course migrations will happen in Spring 2011, with limited pilots running during Summer 2011, and all Fall 2011 courses offered in the new system. There will be approximately 1300 course sections Fall 2011. Historic LMS usage is at about 50%, so about 650 courses will have content. Many instructors will want to redesign their course by fully utilizing the new system, so not all 600 sections will be created via migration. Migration will also be needed for Spring courses at approximately the same volume as well as the summer courses at significantly lower volume.

2. Does UMW currently have a digital repository? If so, what?

UMW has not implemented a digital repository as such. We do make online space available for faculty use on a self-hosted media server reserved for iTunes U related media and also a self-hosted media server reserved for Panopto related media.

3. Does UMW currently have an E-Portfolio? If so, what?

UMW does not have an institutionally supported E-portfolio at present.

4. Does UMW currently use any particular synchronous tools?

UMW encourages faculty to exploit free tools such as Skype or DimDim for synchronous communications.

5. Does UMW currently use any particular plagiarism detection tools?

UMW uses SafeAssign available through Blackboard.

6. Who does UMW want trained? How many?

For admin training, UMW will need to have approximately 6 persons trained. For end-user training, UMW intends to use the train-the-trainer model with about 15-20 instructional designers and user services personnel trained directly. In addition, it is expected that the successful vendor will have significant documentation and tutorials for admins, faculty, and students available online.

7. What type of training does UMW want?

UMW would prefer on-site training for instructional designers and user service personnel. On-site training of admins is also preferable.

8. How many average years of experience does your administration have with online learning?

No experience <1 year 1-2years 2-4years more than 4years

At least some administrators have more than 4 years experience.

9. How many average years of experience does your staff (teachers) have with online learning?

No experience <1 year 1-2years 2-4years more than 4years

Of those with a high likelihood of using an LMS, the majority has more than 4 years experience in web-assisted and blended learning. Only a few instructors have significant experience teaching fully online classes.

10. What is the desired time line for implementation and/or migration?

The tentative timeline is published at <http://lms.umwnblogs.org>. Basically we want to invite the top vendors for live, on-site demonstrations during mid-January 2011, implement during Spring 2011, pilot during Summer 2011, and be in production for all courses Fall 2011.

11. What is the size of a typical course?

For the Fall 2009 semester:

Number of courses 0 - 0.9 MB --->	1077	83.0%
Number of courses 1 - 9 MB --->	80	6.2%
Number of courses 10 - 49 MB --->	80	6.2%
Number of courses 0 - 99 MB --->	28	2.2%
Number of courses 100 - 249 MB --->	22	1.7%
Number of courses 250 - 499 MB --->	6	0.5%
Number of courses 500 - 999 MB --->	5	0.4%
Number of courses 1 GB or larger --->	0	0.0%
Number of Distinct Courses --->	1298	100.0%

12. What type of multimedia/content is used in a typical course?

Faculty make extensive use of free web 2.0 audio and video sites such as YouTube, SlideShare, VoiceThread, and many others. The institution supports a media server for iTunes U content and another media server for Panopto content.

13. Where is multimedia stored? (i.e. within the LMS, in an external repository, etc.)

Currently, very little media is stored within the LMS.

14. What types of quizzes/questions are typically used?

Current quiz and question use varies from basic multiple choice objective tests to open-ended paragraphs. There is some use of random ordered questions pulled from a question pool.

15. Where does content typically originate? (i.e. in the LMS, external authoring tool, etc.)
Content is mostly instructor created with some use of textbook publisher content. Few publisher e-packs are currently used but this could expand.

16. What functionality do you think will get the most use? How easily do you feel your users will learn this functionality?

Current practice is using the LMS mostly for content distribution with some use of threaded discussions for communication. Instructors may take more advantage in a newer system with greater ease of use than the current system.

17. What are the primary institutional teaching and learning objectives for your learning system?

The LMS should provide an environment in which student learning outcomes are comparable to courses not using an LMS.

18. Do you need users to purchase courses through the LMS? If so, describe the purchase flow you envision.

The option to purchase course via the LMS is not currently planned.

19. Do you require certificates to be generated for your users? If so, please describe all of your needs around certification.

Certificates of completion are used extensively with non-credit courses. However, the creation and dissemination of certificates does not currently occur within the LMS and is handled by office staff.

20. Do you plan to deploy large media files? If so will you be streaming those file or uploading them to system?

Streaming media is an important part of online instruction although it will not be used in every course. The current practice is to support this outside the LMS.

21. Does UMW already have content recovery or archiving procedures and batch back-up tools in place?

Yes, UMW relies on the Blackboard hosting service for content recovery and archiving. In addition, it is the current practice to archive each and every course individually after the end of the semester and store locally.

22. What time constraints will your team have (testing/exams, start/end of semester/term, vacations, etc.)?

The UMW calendar is available online at http://www.umw.edu/calendar/academic_calendar2/default.php. Because the LMS implementation is mission-critical, availability of local personnel will be maximized to ensure full operation for the Fall 2011 semester.

23. How will your institution manage content development (internal, external, push content from curriculum team, instructors in charge of dev, etc.)?

Content will come primarily from existing courses and online assets. For instructors who wish to redesign their course by taking advantage of any new LMS feature set will be supported by instructional designers and support personnel from User Services, Division of Teaching and Learning with Technology, and Distance and Blended Learning.

24. In reference to 1.g on page 5, please clarify if “in house” means on premise at the institution or within the vendor’s data center.

“On premise at the institution” was the intent of this item.

25. In reference to 4.n and o, please clarify what kind of content UMW is referring to.

The course content in this item refers to the totality of the course (other than the system interface). That is, the material added by the instructor to create the course and all information and communications added to the course during the period of the semester. The question should be seen from the eyes of the instructor who has two possible uses for this content: one, to re-use within this or another LMS at a later date; and, two to re-use outside the venue of an LMS (handout, web page, portfolio, etc.).

26. In reference to 7.d, please confirm that “text messages” refers to SMS.

Yes, SMS messaging.

27. In reference to 14.f.ii, please define “unit” in this context.

Unit here means a subsection of content organized into a unit or week of instruction. The unit could be comprised of documents, links to assignments, links to quizzes, links to discussion threads. In Blackboard, a “Learning Unit” is a construct of this type.

28. In reference to 15.f and g, does UMW want two separate environments for development and testing?

While two separate environments are ideal, one environment is acceptable if there is a significant savings in total cost.

29. In reference to 9.2-9.4 in the functionality chart, please define a user. Would this be all users or a particular role?

User here means students and instructors.

30. In reference to 20.6, please define “launch.” Would this be the ability to link to a third-party application, or integrate through SSO, or something else?

Launch here means link to and/or cause the browser to open a local application.

31. In reference to 22.5, please describe what a role-play simulation would look like.

Example: In an education course for potential teachers Student A assumes the identity and avatar of a third grade classroom teacher and all other students assume identities and avatars for third graders. Student A (in the role of teacher) teaches a lesson on social studies. Some members of class have been pre-assigned to misbehave. The college instructor evaluates

Student A on his/her classroom management skills and uses the interactions as examples in lecture. This might occur in a chat room or virtual environment similar to Second Life.

32. In reference to 23.1, please explain the difference (if any) between a test/quiz and an assessment.

A test/quiz is one form of an assessment. Other forms might include an assignment in which students are required to submit a paper. Another could be a performance, debate, or speech in which the instructor provides graded feedback.

33. Is the LMS interface required to operate in all languages mentioned in section 25 pages 32-33? Is it acceptable for the LMS interface to be solely in English?

There is no mandatory requirement relative to languages. Section 25 seeks to discover which languages in addition to English can be implemented at the interface level.

34. Are all courses to be migrated into new system SCORM compliant?

All active courses are currently in Blackboard version 8 and can be exported as Blackboard "export" and "archive" zip course packages. Some older courses saved as Blackboard version 6 export or archive packages may need to be migrated. UMW cannot certify that these packages are SCORM compliant and refers vendors to Blackboard's website for more information.

35. Are databases used with the LMS required to be open source or from a specific vendor?

No.

36. What is the number of users expected to be simultaneously accessing applications?

We have a total of approximately 5,000 students - 4,000 undergrads and 1,000 grad students. Approximately faculty does not use the LMS but the potential is there. There are currently approximately 10,000 student user accounts and approximately 600 instructor user accounts in Blackboard. These accounts include users from past semesters that have not yet been purged from the system as well as faux users created for demonstration purposes. Fall and Spring 2009 semesters each had approximately 1300 course sections created in Blackboard. For the Spring 2009 semester approximately 45% of course sections had very little or no Blackboard activity; 49.4% of course sections had activity within their Blackboard courses on at least 50 of the days in the semester.

37. What levels of access (account-types) are required?

Currently we have student, faculty and administrative accounts. Not to say we wouldn't be interested in hearing about additional options.

38. What is the time line?

The tentative timeline is published at <http://lms.umwnblogs.org>. Basically we want to invite the top vendors for live, on-site demonstrations during mid-January 2011, implement during Spring 2011, pilot during Summer 2011, and be in production for all courses Fall 2011.

39. Should vendors provide a link to a demo in our proposal?

We expect the RFP to answer our questions. If a link is in the proposal it is there but we are not requesting it. Access to a sandbox environment is requested from the top vendors invited for demonstrations.

40. What types of content is expected to be migrated into the new LMS?

A study of types of files used by faculty in Blackboard from fall 2008 through fall 2009 found that there were 163 file types used. Of these the file types representing more than 1% use (by disk usage): 35.6% were ppt/pptx, 22.9% were pdf, 12.6% were doc/docx, 12.4% were zip, 3.3% were mp3, 1.6% were accdb, 1.6% were jpg, 1.6% were wmv.

50. How many courses would be moved over?

It is expected that the contract will be awarded in early Spring 2011. The bulk of course migrations will happen in Spring 2011, with limited pilots running during Summer 2011, and all Fall 2011 courses offered in the new system. There will be approximately 1300 course sections Fall 2011. Historic LMS usage is at about 50%, so about 650 courses will have content. Many instructors will want to redesign their course by fully utilizing the new system, so not all 600 sections will be created via migration. Migration will also be needed for Spring courses at approximately the same volume as well as the summer courses at significantly lower volume.

51. Is Blackboard currently hosting?

Yes

52. Number of systems do we want to integrate and do we have LDAP?

Yes, we have LDAP via Microsoft Active Directory services. UMW currently performs a one-way Banner Student to Blackboard integration of enrollment data twice daily. We do not currently integrate Blackboard grade book to Banner Student. We are currently using the Vanderbilt Blackboard building block to integrate with the UMW instance of iTunesU. We are currently using the Panopto Blackboard building block to integrate with our self-hosted Panopto server. We are currently using the Echo 360 Blackboard building block to integrate with a trial instance of Echo 360 (hosted at Echo 360). We are currently using the Starfish Blackboard building block to integrate with Starfish Retention Solution. Not to say we would not be interested in additional integrations as new systems are added at UMW.

53. Do we use Black Board for anything else?

Yes, we have some Blackboard use for clubs, training, departmental collaboration and several other activities.

54. Do we have a webinar program?

We currently use the free version of DimDim.

55. Are we partners with Turn-It -In?

We currently use Safe-Assign for plagiarism detection.

56. What types of reports are needed?

We currently generate basic usage reports including number of total users and number of active users by authorization type per day, page views per course per day, tool use per course per day, number of courses per day, disk usage by file type by date or date range, bandwidth usage by date or date range. We also have access to typical server log files. We are interested in increasing our ability to study usage metrics especially in regards to identity verification, student learning outcomes, and student success and retention.

END OF ADDENDUM #1

Contract #RFP 11-03
UNIVERSITY OF MARY WASHINGTON
Commonwealth of Virginia
Standard Contract

This contract ("contract" or "Contract") is entered into this 15th day of April 2011 ("Effective Date") by Instructure, Inc., hereinafter called the "contractor" or "Contractor" and the Commonwealth of Virginia, University of Mary Washington with a principal place of business at [], hereinafter called the "Purchasing Agency," "UMW," or the "Commonwealth."

WITNESSETH that the Contractor and the Purchasing Agency, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

SCOPE OF SERVICES: The Contractor shall provide the services described herein.

PERIOD OF CONTRACT: Effective Date through July 31, 2014 with an option to renew for five (5) additional one year periods. However, the renewals of the contract will run from August to August each year.

COMPENSATION AND METHOD OF PAYMENT: Will be in accordance with the contract documents.

CONTRACT DOCUMENTS: The contract documents shall consist of: this signed Contract; Attachment A (Special Terms and Conditions Goods and Nonprofessional Services) to UMW's solicitation dated October 3, 2010 (the "Solicitation"); Attachment B (General Terms and Conditions) to the Solicitation; Attachment D (Small Business Subcontracting Plan) to the Solicitation; and clarifications and modifications as described in Attachments 1 and 2 to this Contract, all of which contract documents are incorporated herein by reference. These contract documents, including without limitation this Contract, constitute the final, complete, and exclusive agreement between the parties regarding the subject hereof and supersedes all prior or contemporaneous agreements, understandings, and communication, whether written or oral. In the event of a conflict or inconsistency between the terms of this Contract (or Attachments 1 or 2 to this Contract) and the terms of any other contract document, the terms of this Contract will govern.

Any contractual claims shall be submitted in accordance with the contractual dispute procedures set forth in the Commonwealth of Virginia's Vendor Manual ("Vendors Manual").

In witness, whereof, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:

By: Mark W. Wilhite
Title: CFO
Date: April 18, 2011
FEI/FIN# 26-3505687

Email Addresses: markw@instructure.com

PURCHASING AGENCY:

By: KC YL
Title: Director of Purchasing & Stores
Date: April 20, 2011

Note: This public body does not discriminate against faith-based organizations in accordance with the *Code of Virginia 2.2-4343.1* or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any basis prohibited by state law relating to discrimination in employment.

ATTACHMENT 1

Through negotiations the following Exhibits 1, 2, and 3 have been agreed upon by both parties and shall become part of the contract documents:

EXHIBIT 1
TERMS AND CONDITIONS

1. Definitions. Capitalized terms shall have the meanings set forth in this section, or in the section where they are first used.

(a) “**Content**” means any and all information, data, results, ideas, plans, sketches, texts, files, links, images, photos, video, sound, inventions (whether or not patentable), notes, works of authorship, articles, feedback, or other materials.

(b) “**Documentation**” means all specifications, user manuals, and other technical materials relating to the Services.

(c) “**Intellectual Property Rights**” means any and all now known or hereafter existing (1) rights associated with works of authorship, including copyrights, mask work rights, and moral rights; (2) trademark or service mark rights; (3) trade secret rights; (4) patents, patent rights, and industrial property rights; (5) layout design rights, design rights, and other proprietary rights of every kind and nature other than trademarks, service marks, trade dress, and similar rights; and (6) all registrations, applications, renewals, extensions, or reissues of the foregoing, in each case in any jurisdiction throughout the world.

(d) “**Services**” means the Site and the services or functionality made available or enabled via the Site by Contractor, to facilitate the sharing of information and collaboration between students, teachers and administrators.

(e) “**Site**” means the website at <http://canvas.instructure.com/>.

(f) “**Users**” means the students, teachers, and administrators of UMW’s educational institution, that (1) are authorized by UMW to utilize the Services, and (2) are provided with access to the Services by virtue of a Login Credential.

2. Login Credentials

(a) **Login Credentials.** UMW may create an account username and password (“**Login Credential**”) for each User for which UMW has ordered a Full Time Equivalent User license (“**FTE User License**”) and paid the applicable License Fee (as set forth in Section 3(b)). Depending on whether the User is a student, teacher, or administrator, UMW may create a student, teacher, or administrator Login Credential (respectively) for the User, and such User will be able to access student Services, teacher Services, or administrator Services (respectively). Each Login Credential may only be used to access the Services during one (1) concurrent login session. UMW will ensure that (1) each Login Credential issued to a User will be used only by that User, (2) each User will notify Contractor (through UMW) promptly of any actual or suspected unauthorized use, and (3) each User will maintain the confidentiality of his/her Login Credentials. Each User must accept and comply with, and its right to use the Services is conditioned upon its acceptance and compliance with, Contractor’s Terms of Use.

(b) **Compliance of Users.** UMW represents and warrants that it has agreements and policies in place to enable UMW to enforce the provisions of this Contract (including Sections 2, 4, and 6) against each User that accesses or uses the Service. UMW will enforce the provision of this Contract against each User with at least the same degree of diligence that UMW uses to enforce its similar agreements, but in no event less than reasonable efforts. UMW will

immediately notify Contractor if UMW becomes aware of any material breach of the provisions of this Contract by a User. Contractor may suspend or terminate the account of any User, if the User breaches any provision of this Contract or Contractor's Terms of Use and does not cure the breach within thirty (30) days.

3. Subscription Term and Payment

(a) Unless terminated earlier in accordance with this Contract, the initial term of this Contract will begin on the Effective Date and end on July 31, 2011 (the "**Initial Term**"). The parties acknowledge that UMW will require extensive assistance from Contractor to implement the Services and that the parties will cooperate in good faith for the successful implementation of the Services. Commencing on August 1, 2011 the term of this Contract will continue for three (3) periods of one (1) year each (each, a "**Subscription Term**"). Notwithstanding the RFP, the term of this Contract may be renewed for up to five (5) additional Subscription Terms.

(b) UMW will pay fees for the Services ("**License Fees**") as follows:

Total License Fees for the first Subscription Term will be \$80,000—on a base of \$16.00 per FTE User License and an FTE User License count of 4,400. During the term of this Contract, Contractor will create additional Login Credentials at no additional cost for faculty accounts, faux accounts, test accounts, and other accounts as UMW reasonably feels necessary. Tier III—(Contractor Premium Support) service support is also included at no additional cost.

The License Fees for the first Subscription Term will be paid by UMW as follows: \$20,000 within 30 days following the Effective Date, the remaining \$60,000 will be due after July 1, 2011—but no later than July 31, 2011.

The License Fees for the second Subscription Term will be \$84,000. The second year's cost per FTE User License is \$16.80 and service level coverage will be identical to the first year service, i.e. Tier III (Contractor Premium Support) service support, at an additional cost of \$10,080. All such License Fees and support costs are payable on the first day of such Subscription Term. Adjustments to FTE User License counts are addressed below.

The License Fees for the third Subscription Term will be \$88,200. The third year's cost per FTE User License is \$17.64 and service level coverage will be identical to the first year service, i.e. Tier III (Contractor Premium Support) service support, at an additional cost of \$10,584. All such License Fees and support costs are payable on the first day of such Subscription Term. Adjustments to FTE User License counts are addressed below.

Notwithstanding anything to the contrary in Subsection (2) of Section O (Changes to the Contract) of Attachment B (General Terms and Conditions): the following terms will apply:

- Should the total FTE User License count for any upcoming Subscription Term increase by more than 150 over the prior Subscription Term, the cost for the upcoming Subscription Term will increase to include the new total FTE User License Count in an amount equal to the total increase in FTE User License Count multiplied by the per FTE User License cost for the upcoming Subscription Term.

- Likewise, should the total FTE User License count for any upcoming Subscription Term drop by more than 150 from the previous Subscription Term, UMW will receive a credit reflecting the difference in an amount equal to the total decrease in FTE User License count multiplied by the per FTE User License count for the upcoming Subscription Term.
- UMW must submit to Contractor its FTE User License count for each Subscription Term (other than the first Subscription Term) at least thirty (30) days prior to the beginning of that Subscription Term.
- During any Subscription Term, UMW may receive up to 150 additional FTE User Licenses at no additional cost. Each additional FTE User License over this limit of 150 will be charged at the then-current per FTE User License cost, prorated for the remaining portion of the then-current Subscription Term.
- Notwithstanding anything to the contrary in the RFP, the allotment of storage for the first Subscription Term will be 2.2TB (“Initial Allotment”) based on 500 MB per FTE. This allotment may be allocated at UMW’s discretion between departments. This allotment will not change based on the FTE User License count, but UMW will have the right to purchase additional storage space. The additional storage charges will be \$.50 per Subscription Term per 500 Mb allotment over the Initial Allotment. UMW reserves the right to initiate negotiations with Contractor on storage usage and rates at each contract renewal.

Cost for each renewal Subscription Term will be negotiated at least 60 days prior to the applicable Contract anniversary date. The cost will be based on the University’s FTE User License Count and the service support level required, or on a price structure deemed appropriate by UMW and Contractor.

(c) All payment obligations are non-cancelable and all amounts paid are nonrefundable. Contractor shall be entitled to withhold performance and discontinue service until all amounts due are paid in full. Contractor’s fees are exclusive of all taxes, levies or duties imposed by taxing authorities, and UMW shall be responsible for payment of all such taxes, levies, or duties, excluding only United States taxes based solely on Contractor’s income.

4. LICENSE GRANT AND RESTRICTIONS

(a) License to Service. Subject to the terms and conditions of this Contract, Contractor grants UMW a non-exclusive, non-transferable license to use the Services solely for UMW’s internal business purposes during the Subscription Term.

(b) Limitations. UMW will not, and will ensure that each User will not: (1) permit any party to access and/or use the Services, other than the Users; (2) rent, lease, loan, or sell access to the Services to any third party; (3) interfere with, disrupt, alter, translate, or modify the Services or any part thereof, or create an undue burden on the Services or the networks or services connected to the Services; (4) reverse engineer or access the Services in order to (i) build a competitive product or service, (ii) build a product using similar ideas, features, functions or graphics of the Services, or (iii) copy any ideas, features, functions or graphics of the Services; (5) without Contractor’s express written permission, introduce software or automated agents or scripts to the Services so as to produce multiple accounts, generate automated searches, requests and queries, or to strip or mine data from the Services; or (6) cover or obscure any page or part of the Services via HTML/CSS, scripting, or any other means, if any. Except as expressly set forth herein, no express or implied license or right of any kind is granted to UMW or any Users regarding the Services or any part thereof.

(c) License to Contractor Content. Contractor hereby grants UMW a license to view, download and print Content provided by Contractor (“**Contractor Content**”) and Content provided by other Users (“**Other User Content**”), subject to the following conditions: (1) UMW may access and use the Contractor Content and Other User Content solely for UMW’s internal business purposes, (2) UMW may not modify or alter the Contractor Content or Other User Content; (3) UMW may not distribute or sell, rent, lease, license or otherwise make the Contractor Content or Other User Content available to others; (4) UMW may not remove any copyright or other proprietary notices contained in the Contractor Content or Other User Content; and (5) UMW may not copy or distribute any photos, graphics, audio or video in the Contractor Content or Other User Content apart from their accompanying text. UMW will ensure that each User will not violate the foregoing conditions. Contractor reserves the right to revoke the authorization to view, download and print the Contractor Content and Other User Content at any time, and any such use shall be discontinued immediately upon notice from Contractor. The rights specified above are not applicable to the design, layout or look and feel of the Site. Such elements of the Site are protected by Intellectual Property Rights and may not be copied or imitated in whole or in part. No mark, graphic, sound or image from the Site may be copied or retransmitted unless expressly permitted by Contractor.

(d) License to API Information. From time to time, Contractor may provide UMW with Application Programming Interface information (“**API Information**”) in Contractor’s sole discretion. To the extent Contractor provides UMW API Information, Contractor grants UMW a non-exclusive, non-transferable license to use such Application Information subject to the following conditions: (1) UMW shall not use the API Information for any purpose other than to interface UMW’s application or service with Contractor’s Service and (2) UMW shall not use the API Information in a manner that, as determined by Contractor in Contractor’s sole discretion, exceeds reasonable request volume, constitutes excessive or abusive usage, or otherwise fails to comply or is inconsistent with any part of the API Information. UMW agrees that Contractor has no obligation to maintain the Application Programming Interface, Contractor reserves the right, at any time with or without notice, to modify, suspend, or discontinue the application programming interface, and Contractor reserves the right, at any time upon written notice to UMW, to terminate UMW’s license to the API Information.

5. IP OWNERSHIP.

(a) The Services, the Contractor Content, the Other User Content, the API Information, and any of Contractor’s proprietary technology, including software, hardware, products, processes, algorithms, user interfaces, know-how, technologies, designs and other tangible or intangible technical material or information made available to UMW or any Users by Contractor in providing the Services (the “**Contractor Technology**”), and all Intellectual Property Rights therein, are the exclusive property of Contractor or its suppliers. Except as expressly set forth herein, no express or implied license or right of any kind is granted to UMW or any Users regarding the Services, the Contractor Content, the Other User Content, the API Information, or the Contractor Technology, or any part thereof, including any right to obtain possession of any source code, data or other technical material relating to the Contractor Technology. All rights not expressly granted to UMW or any Users are reserved to Contractor.

(b) UMW hereby assigns to Contractor any suggestions, ideas, enhancement requests, feedback, recommendations or other information provided by UMW or (to the extent UMW has the right) any Users related to the Services, the Contractor Content, the Other User Content, the API Information, or the Contractor Technology (“**Feedback**”). Feedback includes without limitation any information provided through the feedback feature on the Service.

(c) As between Contractor and UMW, UMW Content and all Intellectual Property Rights therein, are the exclusive property of UMW.

6. UMW CONTENT AND CONDUCT

(a) **License.** UMW hereby grants, and represents and warrants that it has all rights necessary to grant, to Contractor a non-exclusive, worldwide, irrevocable, royalty-free and fully paid license (1) to use, reproduce, create derivative works, distribute, perform, and display any Content provided, imported or uploaded to, or otherwise used by or on behalf of UMW or any User with the Services (“**UMW Content**”), for purposes of providing the Services; and (2) to use UMW’s trademarks, service marks, and logos as required to provide the Services. All rights in and to UMW Content not expressly granted to Contractor in this Contract are reserved by UMW.

(b) **Content and Conduct.** Will be governed and enforced under UMW’s acceptable use policy. UMW agrees that Contractor may (but has no obligation to), with prior written permission from UMW, remove or modify specific UMW Content which it deems to violate UMW’s covenants, representations and warranties in this section.

7. **Support Services.** Contractor will use commercially reasonable efforts to provide the support services set forth in Exhibit 2, in accordance with the terms and conditions set forth therein (“**Support Services**”).

8. **Personal Data; Privacy.** To provide the Services, Contractor may require (a) Users to provide Personal Data (as defined in the Privacy Policy) about themselves and (b) Users to provide Personal Data about other Users. UMW represents and warrants that UMW and each User’s provision of such Personal Data to Contractor does not violate any provisions of the Family Education Rights and Privacy Act (“**FERPA**”). To the extent UMW is required to pass-down any obligations regarding Personal Data to Contractor in order to comply with FERPA, UMW will provide Contractor written notice thereof prior to the Effective Date. UMW agrees that Contractor’s obligation to protect any Personal Data obtained in the course of providing the Services will be as set forth in the Privacy Policy. The terms of the Privacy Policy, available at http://www.instructure.com/pages/privacy_policy, are hereby incorporated by reference into this Contract.

9. **Copyright Policy.** Contractor respects the intellectual property of others and asks that users of the Services do the same. In connection with the Services, Contractor has adopted and implemented a policy respecting copyright law that provides for the removal of any infringing materials and for the termination, in appropriate circumstances, of users of the Services who are repeat infringers of intellectual property rights, including copyrights. If UMW believes that one of UMW’s users is, through the use of our Services, unlawfully infringing the copyright(s) in a work, and wishes to have the allegedly infringing material removed, the following information in the form of a written notification (pursuant to 17 U.S.C. § 512(c)) must be provided to our designated Copyright Agent:

1. physical or electronic signature of UMW’s authorized representative;
2. identification of the copyrighted work(s) that UMW claims to have been infringed;
3. identification of the material on our services that UMW claims is infringing and that you request us to remove;
4. sufficient information to permit us to locate such material;
5. UMW’s address, telephone number, and e-mail address;

6. a statement that UMW has a good faith belief that use of the objectionable material is not authorized by the copyright owner, its agent, or under the law; and
7. a statement that the information in the notification is accurate, and under penalty of perjury, that UMW is either the owner of the copyright that has allegedly been infringed or that UMW is authorized to act on behalf of the copyright owner.

Please note that, pursuant to 17 U.S.C. § 512(f), any misrepresentation of material fact (falsities) in a written notification automatically subjects the complaining party to liability for any damages, costs and attorney's fees incurred by us in connection with the written notification and allegation of copyright infringement.

The designated Copyright Agent for Contractor is:

Instructure, Inc.
Devlin Daley
3051 West Maple Loop Drive, Ste 300
Lehi, Utah 84043
800-203-6755 (phone)
copyright@instructure.com

10. Confidential Information. Contractor may from time to time during the term of this Contract disclose to UMW certain confidential or proprietary information regarding Contractor's business and technology, including without limitation the API Information, ("Confidential Information"). UMW will not use any Confidential Information for any purpose other than for the purposes of this Contract, and will disclose the Confidential Information only to the employees or contractors of UMW who have a need to know such Confidential Information for the purposes of this Contract and who are under a duty of confidentiality no less restrictive than UMW's duty hereunder. UMW will protect Confidential Information from unauthorized use, access, or disclosure in the same manner as UMW protects its own confidential or proprietary information of a similar nature and with no less than reasonable care. UMW will return to Contractor or destroy all Confidential Information in UMW's possession or control promptly upon the written request of Contractor or the expiration or termination of this Contract, whichever comes first. At Contractor's request, UMW will certify in writing signed by an officer of UMW that it has fully complied with its obligations under this Section 10.

11. Warranty Disclaimer. THE SERVICES, THE CONTRACTOR CONTENT, THE OTHER USER CONTENT, THE API INFORMATION, AND THE CONTRACTOR TECHNOLOGY ARE PROVIDED "AS IS," AND CONTRACTOR MAKES NO (AND HEREBY DISCLAIMS ALL) WARRANTIES, REPRESENTATIONS, OR CONDITIONS, WHETHER WRITTEN, ORAL, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE, NONINFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THIS CONTRACT, THE USE, MISUSE, OR INABILITY TO USE THE SERVICES (IN WHOLE OR IN PART), THE CONTRACTOR CONTENT, THE OTHER USER CONTENT, THE API INFORMATION, THE CONTRACTOR TECHNOLOGY, OR ANY OTHER PRODUCTS OR SERVICES PROVIDED TO UMW BY CONTRACTOR. CONTRACTOR DOES NOT WARRANT THAT ALL ERRORS CAN BE CORRECTED, OR THAT OPERATION OF THE SERVICES SHALL BE UNINTERRUPTED OR ERROR-FREE. THE SERVICES MAY BE SUBJECT TO LIMITATIONS, DELAYS, AND OTHER PROBLEMS INHERENT IN THE USE OF THE INTERNET AND ELECTRONIC COMMUNICATIONS. CONTRACTOR IS NOT RESPONSIBLE FOR ANY DELAYS, DELIVERY FAILURES OR OTHER DAMAGES RESULTING FROM SUCH PROBLEMS.

12. Termination

(a) Termination by Contractor. Contractor may terminate this Contract, effective immediately upon written notice to UMW, if (1) UMW fails to pay any portion of the fees when due under this Contract within ten (10) days after receiving written notice from Contractor that payment is due, or (2) UMW breaches any provision of this Contract and does not cure the breach within thirty (30) days after UMW receives written notice thereof from Contractor. UMW may terminate this Contract, effective immediately upon written notice to Contractor, if Contractor breaches any other provision of this Contract and does not cure the breach within thirty (30) days after receiving written notice thereof from UMW.

(b) Effect of Termination. Upon any termination of this Contract, Contractor shall, within thirty (30) days of expiration, completion or termination, return all UMW content in its possession to UMW in a format accessible without the use of Contractor's Application, and at UMW's option, continue to provide Licensed Services for up to six (6) months after the date of expiration or termination. In the event of a termination for breach and/or default of Contractor, Contractor shall perform such obligations at no charge or fee to UMW; otherwise, Contractor shall perform such obligations at the hourly rate or a charge agreed upon by Contractor and UMW. Upon expiration or termination, UMW shall, and shall cause each User to, promptly discontinue use of the Services.

13. Third Party Links. The Site may contain links to other web sites operated by third parties. Such third party web sites are not under the control of Contractor. Contractor is not responsible for the content of any third party web site or any link contained in a third party web site. Contractor provides these links only as a convenience and does not review, approve, monitor, endorse, warrant, or make any representations with respect to third party web sites.

14. Miscellaneous

(a) Export. UMW agrees not to export, re-export, or transfer, directly or indirectly, any U.S. technical data acquired from Contractor, or any products utilizing such data, in violation of the United States export laws or regulations.

(b) Severability. If any provision of this Contract is, for any reason, held to be invalid or unenforceable, the other provisions of this Contract will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

(c) Waiver. Any waiver or failure to enforce any provision of this Contract on one occasion will not be deemed a waiver of any other provision or of such provision on any other occasion.

(d) No Assignment. UMW shall not assign, subcontract, delegate, or otherwise transfer this Contract, or its rights and obligations herein, without obtaining the prior written consent of Contractor, and any attempted assignment, subcontract, delegation, or transfer in violation of the foregoing will be null and void. This Contract shall be binding upon the parties and their respective successors and permitted assigns.

(e) Force Majeure. Any delay in the performance of any duties or obligations of either party (except the payment of money owed) will not be considered a breach of this Contract

if such delay is caused by a labor dispute, shortage of materials, fire, earthquake, flood, or any other event beyond the control of such party ("Force Majeure"), provided that such party uses reasonable efforts, under the circumstances, to notify the other party of the cause of such delay and to resume performance as soon as possible.

(f) **Independent Contractors.** UMW's relationship to Contractor is that of an independent contractor, and neither party is an agent or partner of the other. UMW will not have, and will not represent to any third party that it has, any authority to act on behalf of Contractor.

(g) **Notices.** All notices, consents and approvals under this Contract must be delivered in writing by courier, by electronic facsimile (fax), or by certified or registered mail, (postage prepaid and return receipt requested) to UMW's address set forth on the introduction to the Contract (if for UMW) or the address below (if for Contractor), and will be effective upon receipt or three (3) business days after being deposited in the mail as required above, whichever occurs sooner. Either party may change its address by giving notice of the new address to the other party. Contractor's address for notice is: 6415 South 3000 East, Suite 100, Salt Lake City, Utah 84121.

EXHIBIT 2
SOFTWARE SUPPORT

Capitalized terms not otherwise defined in this Exhibit 2 shall have the meanings set forth in Exhibit 1 (Term and Conditions). This Exhibit 2 describes Support Services to be provided by Contractor to UMW.

1. Support Requests. Contractor will use commercially reasonable efforts to provide support for Support Requests from the Primary System Administrator, teachers and students in accordance with the tables below, and based on the support package purchased by UMW. The support packages available are listed below as Basic, Advanced and Premium. The support package purchased by UMW is set forth on in Section 3(b) of Exhibit 1. “**Support Requests**” means support-related issues arising from the use of the Services, including technical questions concerning functions and features of the Services. Support Requests does not include support-related issues arising from or related to enrollment, login, academic courses, or customer policy, which shall be UMW’s sole responsibility.

Types of Support	Basic	Advanced	Premium
Support FAQ Access (Everyone)	24/7/365	24/7/365	24/7/365
Support wiki Access (Everyone)	24/7/365	24/7/365	24/7/365
Tier I support for student/teachers/staff	Provided by Institution LMS Administrator	Provided by Institution LMS Administrator	Provided by Institution LMS Administrator
Email support for Tier II issues escalated to Contractor Support by LMS Administrator	2 business day response time	24 hour response time	8 hour response time
Live Phone Support for Tier II & Tier III issues (for LMS Administrator)	Business Hours	Business Hours	24/7/365
Number LMS Administrator Authorized Contacts	1	2	3
Dedicated Support Manager	No	Yes	Yes

(a) Primary System Administrator. UMW will designate one of its employees as Contractor’s primary system administrator (“**Primary System Administrator**”). UMW may redesignate its Primary System Administrator upon written notice to Contractor.

(b) Support Contacts. Phone Support is available at 800.203.6755. Phone Support after hours is available at 800.203.6755. Email support is available support@instructure.com. Email Support Feedback Tool is available through logging on to the Service. The FAQ and wiki are available at support.instructure.com.

2. Service Level Agreement (“SLA”).

(a) Service Commitment. Contractor will use commercially reasonable efforts to make the Services available during the term of the Contract with an Annual Uptime Percentage (defined below) of at least 99.9% during the Service Year (defined below). In the event Contractor does not meet the Annual Uptime Percentage commitment, UMW will be eligible to receive a Service Credit (as described below).

(b) Definitions

(i) “Service Year” is the preceding 365 days from the date of an SLA claim.

(ii) “Annual Uptime Percentage” is calculated by subtracting from 100% the percentage of 5 minute periods during the Service Year in which the Services were in the state of Unavailability (defined below). If UMW has been using the Services for less than 365 days, UMW’s Service Year is still the preceding 365 days, but any days prior to UMW’s use of the Services will be deemed to have had 100% availability. Any Unavailability occurring prior to a successful Service Credit claim cannot be used for any future claim(s). Annual Uptime Percentage measurements exclude Unavailability resulting directly or indirectly from any Contractor SLA Exclusion (defined below).

(iii) “Unavailable” or “Unavailability” means that all of UMW’s Services have no external connectivity during a five minute period.

(iv) The “Eligible Credit Period” is a single month.

(v) A “Service Credit” is a dollar credit, calculated as set forth below, that Contractor will credit back to an eligible Contractor account in accordance with this Section 2.

(vi) “Scheduled Downtime” means the total amount of minutes during the applicable period, during which UMW is not able to access the Services, due to planned system maintenance performed by Contractor. Contractor will use commercially reasonable efforts to perform Scheduled Downtime between Friday 12:00 am – 2:00 am Mountain Standard Time and to provide UMW at least 24-hours prior notice thereof via email. For Scheduled Downtime occurring outside this period, Contractor will use commercially reasonable efforts to provide UMW at least 3-days prior notice thereof via email.

(c) Service Commitments and Service Credits

(i) If the Annual Uptime Percentage for UMW drops below 99.9% for the Service Year, UMW is eligible to receive a Service Credit equal to 10% of 1/12 of UMW’s annual License Fee for the Eligible Credit Period. To file a claim, UMW does not have to have wait 365 days from the day they started using the Services or 365 days from UMW’s last successful claim. UMW can file a claim any time UMW’s Annual Uptime Percentage over the trailing 365 days drops below 99.9%.

(ii) Contractor will apply any Service Credits only against future Contractor payments otherwise due from UMW, except as set forth below. Service Credits shall not entitle UMW to any refund or other payment from Contractor unless UMW is in UMW’s final year of the Agreement and is terminating the Agreement. Service Credits may not be transferred or applied to any other account. Unless otherwise provided in the Agreement, UMW’s sole and exclusive remedy for any unavailability or non-performance of the Services or other failure by Contractor to provide the Services is the receipt of a Service Credit (if eligible) in accordance with the terms of this Section 2 or termination of UMW’s use of the Services.

(d) **Credit Request and Payment Procedures.** To receive a Service Credit, UMW must submit a request by sending an e-mail message to [sla-request @ instructure.com](mailto:sla-request@instructure.com). To be eligible, the Service Credit request must (i) include UMW’s full institution name in the subject of the e-mail message; (ii) include, in the body of the e-mail, the dates and times of each incident of Unavailability that UMW claims to have experienced; (iii) include UMW’s request logs that

document the errors and corroborate UMW's claimed outage (any confidential or sensitive information in these logs should be removed or replaced with asterisks); and (iv) be received by Contractor within thirty (30) business days of the last reported incident in the SLA claim. If the Annual Uptime Percentage of such request is confirmed by Contractor and is less than 99.9% for the Service Year, then Contractor will issue the Service Credit to UMW within one billing cycle following the month in which the request occurred. UMW's failure to provide the request and other information as required above will disqualify UMW from receiving a Service Credit.

(e) Contractor SLA Exclusions. The Service Commitment does not apply to any unavailability, suspension or termination of Services, or any other Services performance issues: (i) that result from Scheduled Downtime; (ii) caused by factors outside of Contractor's reasonable control, including any Force Majeure event or Internet access or related problems beyond the demarcation point of the Services; (iii) that result from any actions or inactions of UMW or any third party; (iv) that result from UMW's equipment, software or other technology and/or third party equipment, software or other technology (other than third party equipment within Contractor's direct control); (v) that result from failures of individual instances not attributable to Unavailability; or (vi) arising from Contractor's suspension and termination of UMW's right to use the Services in accordance with the Agreement (collectively, the "**Contractor SLA Exclusions**"). If availability is impacted by factors other than those explicitly listed in this agreement, Contractor may issue a Service Credit considering such factors in Contractor's sole discretion.

3. Security. Contractor will use commercially reasonable efforts to provide logical and physical security designed to maintain the integrity of the logical and physical security of its equipment and UMW Content. The logical and physical security provided by Contractor will include, but not be limited to (a) a defined security administration practice and process including account and password administration; and (b) requiring that only authorized Contractor employees who have a need for physical access to provide the Services will have such access to the equipment and UMW Content. During the License Term, Contractor shall use commercially reasonable efforts to protect UMW Content behind a secure firewall system, to conduct daily data backups, and to store weekly full-system backups in a separate, fire-resistant facility.

4. Updates. Contractor will make available to UMW all updates to the Services that Contractor generally makes available to other customers of the Services. Updates will be made available automatically.

5. Integration and Migration Services. Contractor will use commercially reasonable efforts to provide any integration and migration services agreed to in a written statement of work signed by both parties and subject to Contractor's then-standard professional services terms and conditions.

6. Training. Contractor will use commercially reasonable efforts to provide the following training services:

(a) Primary System Administrator. Contractor will provide training to UMW as agreed between the parties.

(b) Teachers. Training for teachers would generally be provided by UMW, following Contractor's training of the Primary System Administrator. UMW may purchase additional training for teachers.

(c) **Students.** Training for students will be provided by UMW.

7. UMW Obligations and Support Services Exclusions

(a) **Cooperation.** UMW will fully cooperate and assist Contractor in the provision of Support Services, including allowing full and free access to relevant hardware, software and other information. UMW will use any tools provided by Contractor in order to track and resolve any issues. Without limiting the foregoing, UMW will try to recreate the issue that is the subject matter of the Support Requests or Unscheduled Downtime, inform Contractor as soon as possible of such issue, and provide Contractor all information relating to the issue, including a detailed description of the issue and any other information that Contractor may reasonably request in order to provide the Support Services to UMW.

(b) **System Requirements.** UMW and/or its Users must meet the following minimum system requirements (“**System Requirements**”) to use the Services: Internet Explorer 8+, Firefox 3.5+, Safari 4+, or Chrome.

(c) **Support Services Exclusions.** Contractor is not required to provide Support Services for Support Requests resulting from, and Unscheduled Downtime shall not include downtime resulting from: (i) UMW’s or any User’s breach of any provision of this Agreement, (ii) improper use of the Services that substantially deviates from any operating procedures established by Contractor in the Documentation, (iii) any alteration, adaptation, or modification to the Services not made by or under the supervision or direction of Contractor; (iv) UMW’s or any User’s negligence, hardware malfunction or other causes beyond the reasonable control of Contractor; (v) any accidental or intentional damage to the Services; (v) UMW’s or any User’s failure to meet the System Requirements; (vi) performance of UMW’s or any User’s systems or the Internet; or (vii) any Force Majeure (as defined in the Agreement).

EXHIBIT 3
CHANGES TO CONTRACT TERMS

Notwithstanding anything to the contrary, including without limitation Section K (Precedence of Terms) of Attachment B (General Terms and Conditions), the parties agree to the following modifications to the terms and conditions of the contract documents:

1. Section 5 (Cancellation of Contract) of Attachment A (Special Terms and Conditions Goods and Nonprofessional Services) to the Solicitation is hereby deleted in its entirety.
2. Section 11 (Renewal of Contract) of Attachment A (Special Terms and Conditions Goods and Nonprofessional Services) to the Solicitation is hereby deleted in its entirety.
3. Section 12 (Subcontracts) of Attachment A (Special Terms and Conditions Goods and Nonprofessional Services) is hereby deleted and replaced with the following:

The Commonwealth acknowledges that the Contractor uses third party service providers to provide portions of the Service. Contractor will have the right to use third party service providers to perform its obligations under this Agreement without prior written consent of the Commonwealth. The Contractor shall, however, remain fully liable and responsible for the work to be done by such providers and shall assure compliance with all requirements of the Contract.

4. Section 14 (Warranty) of Attachment A (Special Terms and Conditions Goods and Nonprofessional Services) is hereby deleted in its entirety.
5. Section 18 (Ownership of Intellectual Property) of Attachment A (Special Terms and Conditions Goods and Nonprofessional Services) is hereby deleted in its entirety.
6. Attachment C (Hosting Special Terms and Conditions) is hereby deleted in its entirety.

ATTACHMENT 2

University of Mary Washington

Interoperability Security Agreement (ISA) Memorandum of Understanding

Date: March 18, 2011

This Memorandum of Understanding comprises an Interoperability Security Agreement (ISA) between the System Owners of the Instructure Canvas _____ “owned” by the Instructure _____ and the data _____ “owned” by the University of Mary Washington. The interoperability between Instructure _____ and the University of Mary Washington provides the University’s course management/learning management system _____. The table below outlines the nature of the sensitive data shared between the systems:

Type of Data	Sensitivity Ratings			Data Flow To/from/both
	Confidentiality	Integrity	Availability	

The System Owners of the two IT systems agree to the following:

- Annually provide UMW, at their request, with documentation describing the current state of **Instructure's** security program and controls. Documentation could take the form of a SAS70 report or similar security audit documentation.
 - To inform UMW, in a timely and deliberate manner, of any security breaches that affect UMW data.

This ISA shall remain in force until Contract Termination unless jointly re-accomplished by the ISOs.

Contractor Contacts:

Mark Webb
Printed Name and Signature

4-18-11
Date

markw@instructure.com (801) 869-5000
Email Phone

REQUEST FOR PROPOSALS
RFP

Issue Date: 10/03/2010
Title: Learning Management System
Issuing Agency:

RFP# 11-03
Commodity Code: 92400

Commonwealth of Virginia
University of Mary Washington
Centre Court Building
1671 Jefferson Davis Highway, Suite 104
Attn.: Purchasing Office
Fredericksburg, Virginia 22401

Where Work Will Be Performed: Fredericksburg, VA

Initial Period of Contract: The contract term will be for 3 years with option for two (2) one (1) year renewals.

Sealed Proposals for furnishing the goods/services described herein will be received until 3:00 pm, November 4, 2010. Proposals must reach the above address and department by the deadline stated in order to be considered.

* OPTIONAL PRE-PROPOSAL CONFERENCE: A pre-proposal conference will be held at 10:00 am, October 11, 2010 at the above location. (Reference: Paragraph IX).

All inquiries for information should be directed to K.C. McCullough or via e-mail: kmccullo@umw.edu referencing this solicitation by number and title.

IF PROPOSALS ARE MAILED, SEND DIRECTLY TO ISSUING AGENCY SHOWN ABOVE. IF PROPOSALS ARE HAND DELIVERED, THEN DELIVER TO ADDRESS ABOVE AND A PURCHASING DEPARTMENT STAFF.

In Compliance With This Request For Proposal And To All The Conditions Imposed Therein And Hereby Incorporated By Reference, The Undersigned Offers And Agrees To Furnish The Goods/Services In Accordance With The Attached Signed Proposal Or As Mutually Agreed Upon By Subsequent Negotiation. THIS FORM MUST BE COMPLETED AND RETURNED WITH PROPOSAL.

STATE CORPORATION COMMISSION ID#: F185261-7 (*See General Terms & Conditions, Article BB & Special Terms & Conditions #19)

Virginia Contractor License No. :

Class: _____ Specialty Codes: _____

EVA Vendor ID or DUNS number 963590737

NAME AND ADDRESS OF OFFERING FIRM:

INSTRUCTURE
3051 W. MAPLE Loop DR
LETHI, VT 84043

(PLEASE PRINT)

Zip Code: 84043

TEL: 804-899-5415 FAX: () - _____

DMBE Cert.# APPLIED FOR Exp. Date: 1/1/

DATE: Nov 03, 10

BY: Mark Blosil

(Signature In Ink)

PRINTED NAME: MARK BLOSIL

TITLE: DIRECTOR, OF BD

E-mail: MARK@INSTRUCTURE.com

Check all that apply: Small Business: Minority- Owned: _____ Women-Owned: _____

Note: This public body does not discriminate against faith-based organizations in accordance with the Code of Virginia, § 2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.



UNIVERSITY OF
MARY WASHINGTON

REQUEST FOR PROPOSAL

RFP# 11-03

Submitted by:

INSTRUCTURE

November 4, 2010

INSTRUCTURE

Commonwealth of Virginia
University of Mary Washington
Centre Court Building
1671 Jefferson Davis Highway, Suite 104
Attention: Purchasing Office
Fredericksburg, Virginia 22401

November 4, 2010

To Whom It May Concern:

Instructure is pleased to provide to the University of Mary Washington (UMW) our response to UMW's Request for Proposal, RFP #11-03, Dated October 3, 2010.

Throughout this proposal we describe the many features and approaches that Instructure has developed to provide the most user-friendly, intuitive, modern, and advanced LMS on the market today—and we will remain so. We are confident that once you have viewed Instructure's LMS you will understand how our LMS can empower your faculty and students to facilitate better teaching and learning through more communication and collaboration.

Instructure has taken care to submit the requested information in the order outlined in the RFP, not only as a guide to provide the information most important to UMW, but to also provide continuity between the RFP and Instructure's response for easy reference. However, since many of the Mandatory Requirements itemized on Page 4 of the RFP are also addressed in the Specific Requirements: Open Response Section, Instructure has created a checklist confirming Canvas's inclusion of these mandatory items, with brief comments as necessary. Many of these mandatory items will be addressed in greater detail within the Specific Requirements section, along with sample screen shots for visual clarity.

Thank you in advance for your interest and consideration, and we look forward to the opportunity of presenting Canvas to the University of Mary Washington.

Sincerely,

Mark Blosjl
Director of Business Development

3051 West Maple Loop Drive
Suite 300
Lehi, UT 84043

Office: 801.436.8093
Cell: 801.889.5415

Email: mark@instructure.com

canvas

Masters of Jazz

[Change Home Page Layout](#) | [See Course Setup](#)

[Course Setup Checklist](#)

[New Announcement](#)

Welcome

[Instructor Biography](#)

[Office Hours](#) [Contact Information](#)

To Do

[Grade & Artist Assessment](#)

[Edit Syllabus Description](#)

September 2010

27	28	29	30	1	2	3	4
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30	1	2	
3	4	5	6	7	8	9	

Course assignments are not weighted. The final score will be based on the sum of the points for all assignments.

Recent Feedback

Nothing for the last 2 weeks

Powered by **INSTRUCTURE** | [Support](#) | [Privacy policy](#) | [Terms of use](#)

I. EXECUTIVE SUMMARY

History: Instructure began in 2008 with the purpose of designing and creating a product based on user need, rather than vendor defined requirements. Before a single line of code was written, the co-founding engineers (specialists in human-computer interaction and useable security systems and authentication) met with Instructional Designers, Administrators, Faculty, and Students at over 20 colleges and universities nationwide to identify, discuss, and understand their greatest and most underserved needs with the current generation of Learning and Course Management Systems.

Compiling over 300 pages of interview notes, the two most oft cited frustrations were usability and technological interference—that is, the technology did more to interfere with the delivery of course material, rather than enhance and compliment the education process. Through constant communication and collaboration Instructure developed a deep understanding of the need for innovation—and we have delivered. Introducing **Canvas**, the only native cloud based LMS on the market today.

But it doesn't end here. We are user champions and every user will always have a voice with Instructure.

With the focus on usability, Canvas was designed from the bottom up using modern programming and true Web 2.0 standards—not just drag and drop, but a truly user-centered design where the focus is on collaboration, interoperability, and the facilitation of interactive information sharing. The result: the only native cloud based LMS and a truly revolutionary LMS that has advanced the teaching and learning experience beyond anything currently available. Canvas is what an LMS should be.

The Canvas product pilot ended in 2009, and today we have numerous universities and instructors using Canvas, or are in various stages of subscription negotiations (including a large state consortium with over 105,000 FTE), or who are in formal evaluations to adopt Canvas as their sole solution.

Canvas is primarily used in the U.S. higher education market, with some K-12, and we support users across nearly 30 different countries worldwide. Our current market penetration is small, but our future is bright. Based on the phenomenal response we are getting in the market, we expect to capture a greater than 20% market share within four years.

Usability: At Instructure, we are completely focused on providing a user-intuitive LMS that is clean and easy to use in order to minimize the learning curve and training requirements. Our users are raving fans because our features are so robust, and the interface so intelligent, resulting in not only the more effective delivery of course content, but also in creating "*found life*" for more productive pursuits—like teaching and communicating with their students.

Canvas's user interface is well organized and has been referred to as both "sophisticated" and "elegant." Our data rich, but simple to use interface, allows students and instructors to see at a glance all of their academic activity, across all courses, from the main "dashboard." Moreover, turning in assignments, and seeing evaluations of their work, including text or media feedback from the instructor, is simple and intuitive.

INSTRUCTURE

- Features:** Naturally, Canvas provides the typical features required of any LMS—grade books, course development tools, messaging, assessment tools, reporting, calendaring—but Canvas's functionality and ease of use go far beyond that of current systems. Canvas employs a standard feature set that can often be costly add-ons—including ePortfolios, Rubrics, Learning Outcomes, and is has been granted Gold Level Certification from the National Federation for the Blind.
- Communication:** A powerful and flexible internal messaging system keeps user connected not only internally, but also through external sources that users can define for themselves, including Twitter, Facebook, SMS Text, and email. Users not only can define the mode of communication, but can also define the frequency of delivery. Users can stay connected to the course—receiving updates on assignments, calendar changes, or topics of interest, without having to be logged on to Canvas. For example, if the instructor makes an assignment due date change on the course calendar, the student would be notified immediately via the notification preferences set by the student—whether it be SMS text, email, Facebook, or Twitter.
- SaaS:** Canvas is Software as a Service, fully hosted and supported, to provide users with the most current features and functionality along with the ease of implementation and with virtually no maintenance, thereby reducing the total cost of ownership. Further, Canvas can fix any discovered bug's, make system improvements, and automatically scale in real-time to meet the capacity needs of UMW with limited interruption or additional cost. Canvas also employ's the Agile Software Development method to facilitate quick development cycles.
- Openness:** Canvas is an open architecture system, which means that institutions don't require approval or consent from their LMS provider to integrate learning management features and functionality into other products and services—all functionality and school data is available programmatically outside of the Canvas system. This open system approach allows schools to control their own destiny while enjoying the benefits of a fully hosted and supported enterprise system. Our open API will allow UMW to integrate with any 3rd party tools in the future.
- Integration:** Canvas integrates with a variety of identity protocols to enable single sign-on for users of the system. Instructure creates an identity adapter for each different authentication system allowing Canvas to "speak" to different systems specific to each client. These adapters are created, maintained and supported by Instructure. LDAP is among the current adapters as well as SAML, the same protocol that is used to integrate with Google Apps for Education (which also provides the basis for Shibboleth), and can integrate with the UMW Central Authentication System, or OpenId.
- Canvas seamlessly utilizes a variety of communication channels and vehicles for keeping all users actively engaged in the educational experience. These channels include e-mail, text (SMS), Facebook, and RSS. Since Canvas is built on an open architecture, other systems can be given direct access to data and LMS functionality. This makes it very straightforward to integrate Canvas with any portal since the data inside Canvas is openly available.
- Migration:** Canvas contains specialized migration tools for extracting course content, assignments, quizzes and other course materials out of UMW's existing LMS. The Canvas migration tool was created to be simple and usable so that teachers can quickly and easily migrate content into

INSTRUCTURE

their own courses, or have the university's IT department migrate all courses on behalf of the teachers, automatically through the Canvas open API.

Migration of content can occur at the time the course is created or anytime thereafter. Migration is typically performed when moving course material from one LMS system to another, but migration is also utilized to move content from one course to another within Canvas itself—most commonly from semester to semester. In addition to recreating the structure and content of the course, the migration assistant will intelligently re-schedule due dates and calendar events to the new date ranges of the new semester, including day substitutions for the new semester (e.g. MWF to TTH).

Architecture: As a vendor-hosted, SaaS offering, Canvas was designed to perform at Internet scale loads and traffic, and is made up of several large subsystems. The primary data store is comprised of a cluster of databases that are dedicated to each client school. The application or computation subsystem is multi-tenant where processing power is pooled across institutions and can be transparently scaled and expanded to meet any system load. This design affords data security between client institutions while attaining higher levels of performance and robust data redundancy. Instructure will use commercially reasonable efforts to make the service available with an Annual Uptime Percentage of at least 99.9% during the Service Year.

Training: In its design of Canvas, Instructure's primary focus was on usability, where its intelligent and intuitive interface requires very little support and far less frustration. However, we do feel strongly about training to ensure successful usage and enjoyment of Canvas, and as such, will send one of our highly trained Infrastructure Engineers to UMW for three full days of training personnel of UMWs choosing; this training is included in the base cost.

Support: Instructure is passionate about contributing to a positive and productive educational experience for all participants. We have built a solution for administrators, instructors and students alike, and believe that their voice and feedback are critical to our ability to continue providing the most cutting edge innovations. Informative, responsive, and timely resolution is core to our support solutions.

II. MANDATORY REQUIREMENTS

Canvas includes all the necessary tools for course design, teaching, and learning, and is the ultimate solution to provide a wide variety of pedagogical approaches for creative and diverse learning styles—allowing instructors to teach without technology getting in the way.

Requirement	Included Feature	Comment
1. An integrated calendaring system allows users to monitor course milestones and due dates.	✓	<p>Accessible and easy to use calendaring system, where course content tied to a date is dynamically populated and color-coded for easy identification. Instructors can change due dates by simply dragging and dropping assignments or quizzes to the new date, which immediately notifies students of the change via the notification preferences set by the student.</p> <p>Each course has its own calendar, which are overlaid and consolidated into a single usable view. Users can set up calendar feeds to sync course content with personal calendars like Google Calendars, Outlook, and iCal. All changes in the calendar are updated in real time.</p>
2. Users have access to an integrated system for threaded discussions within a course.	✓	<p>Instructors and students can start and contribute to discussion topics. Discussions can be enhanced with any rich media like video, images, and wikis, and can be used for grading purposes, assignments, or simply as a forum for topical and current events. Private discussions can also be initiated within student groups, which are not viewable by others within the course.</p>
3. Basic integrated email allows communication between users.	✓	<p>Canvas provides an internal messaging system for communication between users in the course. Users can either log into Canvas to view messages, or view messages via external sources such as personal email, Facebook and Twitter accounts, or SMS text on their cell phone.</p> <p>Further, Canvas provides a consolidated Inbox that lists all messages directed to the instructor from anywhere inside the course(s).</p>
4. LMS has a system for creating and delivering tests and automated scoring of	✓	<p>Instructors have many options for test creation and delivery including:</p> <ul style="list-style-type: none"> • Time limits and date limiters

INSTRUCTION

objective tests.		<ul style="list-style-type: none"> • Allow for multiple attempts • Proctored access • Answer shuffling • Graded, ungraded, and surveys • Multiple question types • Build in comments for each answer selection • Option to show correct answer • Extra credit and auto grading • Random question selection • Question Banks • Third-party integration—like Respondus • Link to files and images • Create question groups • Define number of questions selected at random from question banks • Comment box where students can participate in self-assessment • Flexibility to allow for different teaching styles
5. Content can be imported from SCORM-compliant packages.	✓	Canvas can import SCORM compliant content.
6. The LMS is capable of importing test banks from user created text files, third party exam generation tools, and publisher test banks.	✓	With ease.
7. Assessments can be conditionally released based on instructor-definable release parameters such as time, date, and prior performance on the same or previous test.	✓	See Requirement #4 above.
8. The integrated text editor is WYSIWIG.	✓	Powerful rich text editor for the upload, or drag and drop, of any file type, video media, images—including the ability to access Flickr within the Canvas environment—URL links, and HTML embedded codes.
9. Assessment questions can be drawn from a pool or question	✓	See Requirement #4 above.

INSTRUCTURE

database.		
10. Assessments can be timed with a system to prevent or make late submissions.	✓	Date limiter prevents late submissions, and teacher can allow late submissions by removing limiter.
11. The LMS provides a tool to allow instructors to create assignments and to allow students to submit completed assignments including submission of user-created files.	✓	Create assignments with ease, allowing text entries, file uploads, URL submissions, and media recordings. Students can submit assignments with two clicks of the mouse, which then keeps a submission log, and history of all submissions.
12. The LMS provides an access level for system administrators, instructors, and students.	✓	Canvas provides fine-grain permissions for administrators to provide appropriate level of access for instructors and students.
13. The LMS allows browser-based remote system administration.	✓	Canvas is Software as a Service, and therefore, administrators to access Canvas remotely from any browser.
14. The LMS system administrator can send notifications to all users.	✓	This feature will be deployed prior to the implementation date with UMW.
15. The LMS includes delivered options for integrating all pertinent Banner student/faculty/course/enrollment data.	✓	Canvas adheres to the IMS Enterprise XML Standard for exchanging course and enrollment data—Banner also supports this standard.
16. The proposal provides for an external hosting arrangement.	✓	Canvas is Software as a Service, and is fully hosted and supported, scalable, fully redundant, and secure.
17. Users are able to access the system from Windows and Macintosh computers.	✓	Canvas works with all major web browsers for Windows and Macintosh.

III. SPECIFIC REQUIREMENTS: OPEN RESPONSE

1. Vendor Background

- a. Incorporated in 2008, Instructure has answered the market need for a state-of-the-art LMS that advances the technology from the static and dated legacy platforms of today.

Co-founding engineers Devlin Daley and Brian Whitmer met while taking usability courses for their Masters of Computer Science degrees. With extensive experience using Blackboard, they were disappointed with the lack of user friendliness and intuitiveness in the system, and found that many of the faculty would tend to work around the system rather than working with the system—if they used the system at all. Moreover, as students were becoming increasingly familiar with the highly functional, yet usable applications popular on the Web, they found themselves starved for information, and disappointed with the limited online learning and collaboration opportunities.

It was then that Devlin and Brian decided to combine their technical backgrounds and passion for improving education to create a truly revolutionary course management system. With the strict goal of making software usable and approachable, they visited approximately 20 colleges and universities nationwide to collaborate and redefine an entirely new approach to technology in education (the product validation tour). From the feedback received from CIO's, instructional designers, instructors, administrators and students, the ideal development roadmap for creating the Instructure LMS was born.

Instructure is a private company, and is venture funded, which will insure the financial stability and longevity needed to be a major force in the market. The majority shareholders of Instructure are co-founders Devlin Daley and Brian Whitmer, Epic Venture Capital, and Josh Coates, CEO and board member.

Mr. Coates began his career in distributed systems research at the University of California, Berkeley and Microsoft's Bay Area Research Center. Mr. Coates has a long history of founding technology companies beginning with Scale Eight in 1999, to most recently Berkeley Data Systems (Mozy.com) in 2005. Within two years Mozy had over 300,000 customers, including over 8,000 business contracts. Mr. Coates sold Mozy to EMC in October, 2007.

Instructure currently has 18 full time employees, and is growing at about two full-time employees per month.

- b. Instructure, Inc.
3051 West Maple Loop Drive
Lehi, UT 84043

INSTRUCTURE

- c. Canvas is a fully hosted, supported, and open LMS that is based upon modern web standards. At Instructure we are solely focused on providing a user-intuitive LMS that is clean and easy to use to minimize the learning curve and training requirements. Canvas can also integrate with many of the third-party tools you may already be using. Canvas comes with many standard features that can be costly add-ons elsewhere, including:
- RSS Feeds
 - Advanced calendaring system
 - Advanced, user defined, Communication Preferences
 - E-Portfolio
 - Rubrics and Learning Outcomes
 - Collaboration tools integrated with Google Docs.
 - Asynchronous and synchronous web conferencing.
 - Advanced reporting
 - 24/7 Support
- d. Instructure is the only native “cloud” based LMS on the market, and which has distinguished itself not only through true innovation, its phenomenal and timely support, its deep understanding of the pedagogical process, but by its continued collaboration with school administrators, instructional designers, instructors and students, to provide a technology that schools want and need, not what we define for them. Instead of asking users to adapt to us, Instructure extends great effort in matching our LMS to what instructors know and prefer. The result—a technology that “gets out of the way” so that faculty can achieve their desired goals in the classroom (or online), and an empowered student population who are independent agents in their own learning.

- e. Ben Neiswender
Technology Architect
Division of New Learning
Westminster College – Salt Lake City, UT
801.832.2564
bneiswender@westministercollege.edu

John Louviere
FACT|Utah State University
435.797.7144|435.512.0078
john.louviere@usu.edu

Scott Allen
Learning Services Administrator
Utah Educational Network
801.582.5382
scott.allen@uen.org

Mike Griffiths
Director, BYU Hawaii Online
BYU Hawaii
808.675.3871
meg46@byuh.edu

Mike Kisow
Instructional Technology
Park City School District
412.596.3589
mkisow@pcschools.us

- f. Not Applicable.
- g. Largest institutional implementation is Park City School Districts. 8,000 seats, 2,194 active users, 139 active courses, > 300 course sections using our industry unique SaaS Automated Provisioned Hosting. The main contact for reference is Mike Kisow, schedule contact via email: mkisow@pcschools.us.
- h. See item 1.e above.
- i. See item 1.e above.
- j. See item 1.e above.
- k. See item 1.e above.
- l. Instructure hosts all clients.

2. System Architecture

- a. Canvas is Software as a Service (SaaS), and is the only native Cloud based LMS on the market. Canvas can easily scale to the level of support needed by UMW, in real-time, and without school or student disruption. Canvas automatically provisions in real-time to provide capacity as needed, and with no lag time.
- b. Underlying language is Ruby and JavaScript.
- c. Backend databases are MySQL and PostgreSQL.
- d. See 2.c above.
- e. Direct SQL access is not furnished, but instead a published, stable data format definition is made accessible through the Canvas API. This data format can remain unchanged even with changes to the underlying schema.
- f. Not applicable—Instructure utilizes industry proven and security hardened Linux servers.
- g. Not applicable.
- h. Simultaneous user load capacity, which is dynamic and provisioned automatically to meet user demand in real-time.
- i. Canvas can be branded to match the color and style of UMW's web property. Canvas provides a tremendous amount of flexibility in course content creation in a variety of course styles.
- j. Canvas provides automatic provisioning where Canvas can scale to meet any demand required of the school and its users. This is all done automatically, and is the fastest and most cost effective way to meet user demand.
- k. Load is balanced through pairs of load balancers. Load balancers are deployed in pairs in order

INSTRUCTURE

to maintain high availability in the case of hardware or other failure. Requests are dispatched to dynamically sized application clusters on a stateless basis. A separate session store layer is available to the application servers to alleviate the need for session pinning. Unresponsive application servers are automatically removed from rotation by the load balancer and new application servers can be dynamically added and immediately service incoming requests.

- I. A highly motivated IT staff can accomplish a full integration of authentication systems, and the SIS in a matter of weeks. IT staff involvement in the migration process depends on the specific migration plan of the institution. We provide tools that allow individual instructors to migrate their content so dedicated IT man-hours can be minimized.
- m. Data can be accessed at more granular levels in JSON or XML format. Additionally, data reports can be exported in common formats like CSV of common features like activity, learning outcomes assessment and grade books.
- n. Our partner data centers are SAS70 compliant.
- o. UMW retains complete ownership of all institution related data. All associated data is logically segregated based on the needs of the institution. Further, Instructure can physically separate the database servers and stores for performance enhancements.

3. System Security and Development Roadmap

- a. Beta testing methodology. We have created a very agile development methodology as part of our core DNA at Instructure. The system was designed based on feedback from over 20 universities before any code was written to make certain that features and capabilities were elegant solutions to real-world problems. Our current beta testing follows this same pattern, where many times we defer the creation of features until a client encounters the specific need. This guarantees that our solutions remain focused, simple and solve real problems. Also, due to our SaaS model we are able to iteratively improve the product in much smaller pieces than traditional software systems. New features are selectively released to collaborating clients (after standard quality assurance) to test functional completeness before release to all hosted clients. For the future, we plan on continuing this very active collaborative development approach as it has lead to an incredible product advantage.
- b. Quality assurance policies. In development, all product changes at the code level go through a code review process before being applied to the test version code base. Extensive unit and functional tests are included and verified before code review, as well as after changes have been merged into the main code base. Changes are then pushed to a staging environment identical to the production environment to verify correctness and any potential performance issues. We have QA engineers review the application. After consensus with QA and development, upgrades are pushed to the production clusters typically in-place without requiring taking the service down. Performance, activity and other key metrics are closely monitored to ensure high availability and correctness.
- c. Security measures in the application include authenticity tokens to prevent Cross-Site-Request-Forgery (CSRF), robust raw content filters to prevent Cross-site Scripting (XSS), fine-grained permissions models and full audit of user activity. Institution data is logically separated and optionally physically segregated. The code base is checked regularly for security vulnerabilities including all code reviews. There are many more security approaches employed, such as soft-

- deletes to recover from accidental or malicious modifications.
- d. Instructure Canvas supports a variety of federated identity protocols including LDAP, Active Directory, SAML 2.0, and CAS. The architecture is designed to support more identity protocols as needed. Authentication is provided by the identity protocol integration, authorization is determined from the role provided in the SIS integration and enforces the fine-grained permissions control defined by the LMS administrators.
- 4. System integration/ERP/SIS Library**
- a. Instructure Canvas provides supported integration bridges with industry standard authentication systems like LDAP and SAML 2.0, content repositories like Equella, student information systems like Banner, and many other content integrations, social networks and collaborative platforms. Additionally, from Instructure Canvas was built from the ground up to support an Open API, allowing third parties to integrate all LMS features and securely access all data and content.
 - b. Clients typically configure Instructure Canvas to consume the same federated identity protocol standard as other supporting third-party applications enabling seamless movement of students between systems. Other mechanisms can be provided for less sophisticated products but this is usually accomplished with federated identity, as that is its primary purpose is to enable these important use cases.
 - c. Instructure is a full-featured suite providing industry-leading features with impressive integration between components. The constraints on turning off specific features is that it requires external components to adhere to consume and provide data and student data securely through Instructure's Open APIs. Replacement of features would be accomplished through content modification to include appropriate links to external content.
 - d. Third-party systems include but are not limited to Dim Dim, Tiny Chat, GoogleApps, Skype, Facebook, LinkedIn, Twitter, Diigo, Kaltura, Equella, Flickr, Scribd, Respondus (and other IMS QTI compliant tools).
 - e. All data is exportable in JSON or XML format via the Open API. Additionally, CSV data exports are furnished for user activity, grade book, learning outcomes assessment (for data mining and institutional accreditation) etc. Data can be imported using the open APIs and bulk imports as well. Importing into the system includes other LMS vendors.
 - f. Instructure Canvas supports the IMS Enterprise XML standard in both batches and in real-time updates. Banner exports enrollment data in this same industry standard format.
 - g. No formal relationship exists presently above compliance to exchange format standards.
 - h. In a pilot with Utah State University, we integrated with their campus LDAP authentication and batch integration with SunGard Banner. The integration went very quickly and seamlessly. Contact our provided references for more details from the school themselves.
 - i. Standard reports include CSV data reports of all raw activity, assessment, grade book etc. Other reports include aggregate activity, activity by user, activity by course, assessment of a specific artifact including teacher assessment and peer review assessments, student progress among assignments in a single course, student progress as measured against outcomes cross courses, online quiz reports of student responses and test validity among others.
 - j. Instead of providing raw SQL access that will break whenever the schema is updated to provide

INSTRUCTURE

better performance/features, we adhere to a common API or data format. The data can be pulled from the system in common data formats like CSV, XML or JSON which is easily consumable by any data analysis tool, including something simple and accessible like MS Excel.

- k. Documentation of schemas is rather directed at documenting the schema of the data API, it's columns, and data types as described above.
- l. Custom components can be any desktop or web application that can consume JSON or XML over our HTTP open API.
- m. As described above, via a RESTful API web service.
- n. Faculty can conclude courses, making them read-only to students but still backed up and hosted on our fully redundant architecture. They can also export the course in a simple zip archive, which includes course metadata in a simple to consume JSON format amenable to all programming languages.
- o. Students may have access to the course content and their own work product depending on the institution's policies (concluding courses rather than deleting courses). Additionally, students can trivially add any work submitted in any of their courses to an integrated e-portfolio tool. The portfolios can then be exported as stand alone websites or transferred to other web hosts and systems.

5. Course Content Creation, Presentation, and Management

- a. Canvas was designed using modern programming and true Web 2.0 standards so as to be both usable and accessible, and as such, building course content from scratch or migrating existing courses has never been easier. With our rich text editor, built in media tool, drag and drop capability, ease of file import, and integration with third-party applications, instructors can build course content to match their teaching styles.
- b. All course information is maintained on Instructure's servers indefinitely, which are fully redundant, secure, and backed up in place, and in real time.
- c. Instructors can easily upload content by browsing their existing files, by drag and drop of the selected file, or by linking to other content or files, all of which can be organized by a folder hierarchy.
- d. Canvas adheres to the IMS Enterprise XML Standard for exchanging course and enrollment data—Banner also supports this standard—so all adds, drops, or withdrawals will automatically be updated within Canvas.
- e. The administrator combines existing sections and courses. The SIS integration also natively understands cross-listed courses and merging sections of the same course as well as general course merges. Merging can occur after enrollments or course content have been added to the courses.
- f. Canvas doesn't integrate with Microsoft SharePoint. For content management capabilities, incorporating web content, or integration with shared content repositories like Equella, UMW can easily make links to other course content using the "content pane" and any link created is automatically updated with the content is migrated.
- g. The assignment submission process is flexible and intuitive, where students can easily submit assignments in any instructor approved format. Instructors can dictate what types of assignments acceptable, whether they are text entries, file uploads and attachments, web

INSTRUCTURE

URLs, or media files. From the assignment page, students can quickly submit the assignment with a single click of the Submit button. Instructors can use embedded tools to give students feedback on assignments through either the Speed Grader® or grade book, and where such feedback can be text, upload files, or video media. Students are then alerted via their communication preferences that the assignment has been graded. The student can also respond directly back to the teacher via text or video media.

- h. Canvas provides a rich text editor for assignment creation. This editor allows the easy creation of course content via text entry, file uploads, links to files and wikis, embed video, HTML embedded code, and the import of SCORM compliant content. Easily upload or drag and drop files of any type.
- i. Third-party authoring tools like Soft Chalk and other authoring tools that export SCORM content modules can be used to create fully integrated content.
- j. Canvas is built on modern web standards and other techniques allowing and unprecedented level of accessibility to all students and faculty. Many aspects of our user interface cannot be customized so that content remains undisturbed and continuously available to users with disabilities. Special care is taken with respect to typography, contrast ratios of colors (for vision impairments, not just blindness), topics and headings, and navigation. Moreover, with an open architecture, users can consume content and interact with the system using their own selected tools and applications; especially important for those with specialized needs.
- k. Canvas is Software as a Service, and as such, improvements to our software are done in real-time, transparent to the user, and without disruption. Therefore, all course content remains within Canvas without the need for migration as improvements to Canvas are made.
- l. Canvas incorporates a Blackboard migration tool that is superior to that of Blackboards—even Blackboard-to-Blackboard. With Canvas, migration of courses—empty or not—can occur at the time the course is created, or anytime thereafter (for example, semester to semester). The incredible simple migration assistant can be executed several times to collect and combine content from various courses and sources. Migration of content is mediated, meaning the user performing the migration can selectively choose a subset of content to be copied or transferred into the target course. The migration assistant will intelligently reschedule due dates and calendar events, as well as allow the user to specify day substitutions (MWF to TTH) for the upcoming semester.

6. Assessment /Grade book

- a. Canvas incorporates a very robust assessment feature that allows for the easy creation of tests, assessments and surveys, as well as being able to draw from questions from question banks—randomly or manually. In addition to having a self-contained authoring tool, Canvas can also integrate with third-party authoring tools like Respondus. Canvas's assessment/quiz feature includes:
 - Assignment of time limits, Access Codes (Proctoring), and Date Limiters
 - Answer shuffling
 - Allows for multiple attempts
 - Instructors can build in comments for each answer selection
 - Option to show correct answer

- Extra credit and Auto-grading
 - Use of Rich Media
 - Comment box for student self assessment
 - Multiple question types
 - Report on effectiveness of questions
- b. Questions can be created in the Canvas rich text editor, selected from question banks, individually or randomly, or through the integration of QTI format authoring tools like Respondus.
- c. Canvas is currently developing a lock-down browser to discourage student cheating.
- d. Math equations can be input with our built in LaTex math editor. A point and click math editor is under development and will be released mid-2011.
- e. Grades can be imported or exported in CSV files.
- f. Respondus
- g. Assessment types can include:
- Long and short form essays
 - Questions with variables
 - Multiple choice
 - True/False
 - Matching
 - Fill in the Blank(s)
 - Multiple Answers and Multiple Dropdowns
 - Numerical and Formula answers
 - Missing word
 - Text (no question)
- h. Students are notified via the communication preferences of their choice that their assessment has been graded, where the student will log in to view their scores and feedback from the instructor.
- i. In addition to the standard reports for grades, Canvas makes it easy to build rubrics for each assignment, course, or department, and then tie that rubric to learning outcomes. All of which can be generated in report form along with the grades.
- j. Canvas supports the QTI format.

7. Communication/Email/Discussion/Chat

- a. Canvas provides an internal messaging system for all users enrolled in the course, where the internal mailbox acts as the clearing-house for all communication—even from external sources. In addition, Canvas integrates with the outside communication tools, resulting in the free flow of information in and out of Canvas. Canvas provides the ability for users to select their own personalized communication method(s), whether it be Twitter, Facebook, SMS text, LinkedIn, or email, and can define the frequency of delivery for each communication. Users can stay connected with the course without having to be logged on to Canvas.
- b. Students can unilaterally create their own groups, which survive after the course has ended, thereby allowing users to continue communication with each other without having to be enrolled in the same course. The ability to communicate with other Canvas users not enrolled

INSTRUCTURE

- in the same course or in the same group is scheduled for a future software update.
- c. See 7.a above.
 - d. See 7.a above.
 - e. Canvas is not an email client, but does provide an internal messaging system between users in the course. Users can select communication preferences to include sending and receiving email from their external email accounts to appear in their Canvas Inbox.
 - f. For external feeds, Canvas allows users to automatically add posts from an RSS or Atom feed as announcements for the course. Users simply paste the feed URL below and any new entries will be added in the Announcement page.
- 8. Integration with 3rd Party Tools**
- a. Canvas integrates with such third-party tools as Respondus, Soft Chalk, and Turnitin. There is no cost for the integration, but the school must have their own agreements for any third-party tools.
- 9. Standards Compliance and Accessibility**
- a. Instructure Canvas is built off of modern web technologies like HTML, CSS and JavaScript. It does not rely on client-side accessibility black boxes like Java and all content is fully accessible to screen readers and other accessibility tools. We have been formally certified at the Gold Level by the National Federation of the Blind for both the student functions and also the teacher content creation portions of the system. Unique features include adherence with industry standards, encouragement of accessible content creation by default by our content creation tools, and Open API which also includes our robust Communication Preferences allowing students and faculty the ability to consume data in their preferred applications.
- 10. Implementation and Training**
- a. Instructure employs the Agile Software Development method, which allows the development of Canvas to be collaborative, facilitate quick development cycles, and to be adaptive. Below is a sample implementation plan that has been used with other institutions. As Instructure has already developed specialized course migration tools for Blackboard, and integration tool for Banner, we can be flexible to meet UMW's timing; with minimal disruption to UMW.

INSTRUCTURE PROPOSED PROJECT PLAN FOR IMPLEMENTATION OF LMS		
Tasks	Involved Parties	Duration
Finalize UMW vision	UMW and Instructure	2 weeks
Finalize project plan	UMW and Instructure	2 weeks
Finalize migration plan	UMW and Instructure	2 weeks
Conduct core team training at UMW (onsite)	Instructure	3 days
Provision and Configure LMS for UMW	Instructure	2 weeks
DNS and SSL	UMW and Instructure	1 day
Instructure partner account	Instructure	1 day
Branding	UMW and Instructure	1 week
Provision database	Instructure	3 days
Integration with Authentication System	UMW and Instructure	1 week
Integration with Student Information System	UMW and Instructure	3 weeks
Conduct live environment test	UMW and Instructure	1 week
Migrate existing courses to Instructure LMS	Instructure	Variable
Create UMW training materials	Instructure	3 weeks
Deliver training materials to UMW administration and faculty delivered via webinars, screen casts and documentation	Instructure	

- b. Implementation resources are as defined above. Instructure has built specialized migration tools for extracting all course content. The Canvas migration tool has been created with the goal of being simple and usable enough so that teachers can quickly migrate content into their own courses. However, the university's IT department can migrate all courses on behalf of the teachers, which can be automated through the Instructure open API.
- c. Redmine is the primary tool for managing our projects (www.redmine.org).
- d. Change requests are received by a variety of users, including administrators, teachers and even students. Each request is gauged according to applicability, scope, impact on teaching and learning and compared with related features already planned in the development timeline. Requests are either scheduled or queued for further consideration at weekly planning meetings. Change requests associated with campus accounts or professional services or those that are just genius are given higher priority.
- e. Instructure provides a very comprehensive package of services for its base price. Other professional services beyond its base package can be purchased—for example, advanced support services beyond what comes standard.
- f. We provide 72 hours of onsite training for administrators, faculty, and IT, as well as online training and written resources.
- g. Clients have found administrator training via multiple hour screen casts sufficient to administer the system. Other clients feel more comfortable with onsite face-to-face training. We have not found the need for additional formal training outside that included in each contract.
- h. Online resources are provided at <http://support.instructure.com>, and well as through Canvas's direct Feedback link on every Canvas page.

- i. See item 10.h above.

11. System Releases and Upgrades

- a. As Canvas is Software as a Service (SaaS) we do not issue periodic releases. Improvements to the software are done incrementally and transparent to the user.
- b. Not applicable.
- c. Fully supported in real time.
- d. Typically there is no downtime for any bug fixes, as fixes are corrected transparent to the school, and often times are corrected the same day—where the school will see the correction on the next software deployment—usually 2-3 days.
- e. The school is notified by email of any scheduled downtime.
- f. Not applicable.
- g. Not applicable.
- h. See 11.a above.
- i. Customers can make recommendations through our internal Feedback feature. Each page has a Feedback link that allows the user to send problems or ideas directly to Instructure, where the notifications are assigned a ticket#, and where the user gets an immediate email of receipt. Users can also track the status of any bugs at support.instructure.com.
- j. Not applicable. See 11.a above.
- k. Not applicable.
- l. Online support as well as phone consultations as needed.

12. Support

- a. Canvas is finalizing its support options beyond what comes standard. Please see the table below.
- b. Problems are logged immediately and can be tracked at support.instructure.com. See 12.a above.

13. Professional Services

- a. Support and others as negotiated
- b. Support and others as negotiated

14. Hosting

- a. Canvas is a vendor-hosted, SaaS offering. The application is architected to perform at Internet scale loads and traffic is made up of several large subsystems. The primary data store is comprised of a cluster of databases that are dedicated to each client school. The application or computation subsystem is multi-tenant where processing power is pooled across institutions and can be transparently scaled and expanded to meet any system load. This design affords data security between client institutions while attaining higher levels of performance and robust data redundancy. Instructure may at its discretion dedicate portions of the application clusters to specific clients.

INSTRUCTURE

Instructure will use commercially reasonable efforts to make the service available with an Annual Uptime Percentage (defined below) of at least 99.9% during the Service Year. A sample Service Level Agreement is at the end of this document.

Instructure has scheduled maintenance every Wednesday from 12:00AM - 2:00AM MST. Any maintenance that may require downtime or is a major software upgrade will be scheduled during this window. Partners will also be notified of this maintenance by email with at least 72 hours notice. Any major maintenance that must happen outside this window will be preceded by a notification at least 72 hours in advance.

Instructure utilizes various cloud computing providers and data centers not directly owned by Instructure. Each data center is a top-tier hosting facility with stringent security. Some providers currently in use are the industry-standard Amazon Web Services, Rack Space, and Slice Host.

Instructure isolates each client's data into completely separate data stores. Additionally, any data stored on behalf of the client is made inaccessible to any user and is associated with the appropriate authorization policy. These policies apply both to the client as well as to employees internal to Instructure. Any access of client data consults the access policy, which takes into account the creator/owner of the content and the specific role of the administrator in allowing access.

Any data that enters the Instructure Canvas platform is automatically saved redundantly across several servers and data centers. Data backups occur in real-time and require no specific intervention or request, and course content can be exported outside the system into a package easily accessible to other computer programs.

As a full-service solution, Canvas has taken great leaps forward in alleviating the need for manual backups. For example, when content or enrollment data is "deleted" by a student or instructor, Canvas performs a soft-delete; an action analogous to the Recycle Bin. This allows the data to be recovered directly from within the system without requiring the user to have saved the data at regular intervals to their desktop machines. Content pages are versioned, along with student submissions.

With an open architecture system, schools don't require approval or consent of their LMS provider to integrate learning management features and functionality into other products and services. All Instructure functionality and school data is available programmatically outside of the Instructure system. This open system approach allows schools to control their own destiny while enjoying the benefits of a fully hosted and supported enterprise system. Our open API will allow UMW to integrate with any 3rd party tools in the future.

Canvas is Software as a Service (SaaS), and is the only native Cloud based LMS on the market. Canvas can easily scale to the level of support needed by UMW, in real-time, and without school or student disruption.

Figures 1, 2, & 3 graphically summarize the differences between Fixed Provisioning, On-Demand Provisioning, and Instructure's Automated Provisioning.

INSTRUCTURE

With Fixed Provisioning, capacity is predetermined, resulting in LMS overrun at peak times over the course lifecycle. With overrun, the LMS will run extremely slow or not at all.

On-Demand Provisioning is common with many LMS models, where capacity is estimated in advance to meet demand, and added manually when capacity is needed. While better than Fixed Provisioning, it is not ideal. Institutions must either add capacity in anticipation of the demand, which can be costly if the capacity is not used, or added as demand is known, which creates a lag in capacity, where again, students will experience a drop in LMS performance. Further, small peaks in demand may not justify the cost of adding more capacity, which will result in small LMS disruptions or performance degradation for the user.

Instructure provides Automatic Provisioning to automatically and dynamically respond to the institutions demand for increases in capacity. Instructure will provide the needed capacity for all critical times, planned or otherwise, regardless of the institution's size. This automated approach will virtually eliminate LMS overruns and drops in performance.

Fixed Provisioning Infrastructure

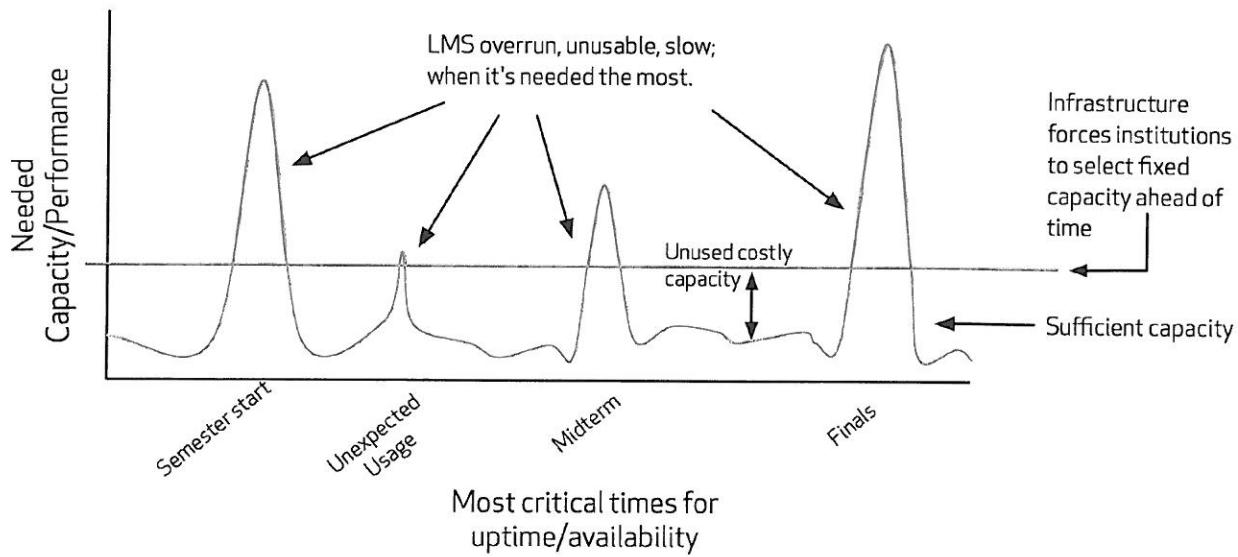


Figure 1

On-demand Provisioning

Characteristics of typical ASP or traditional LMS models

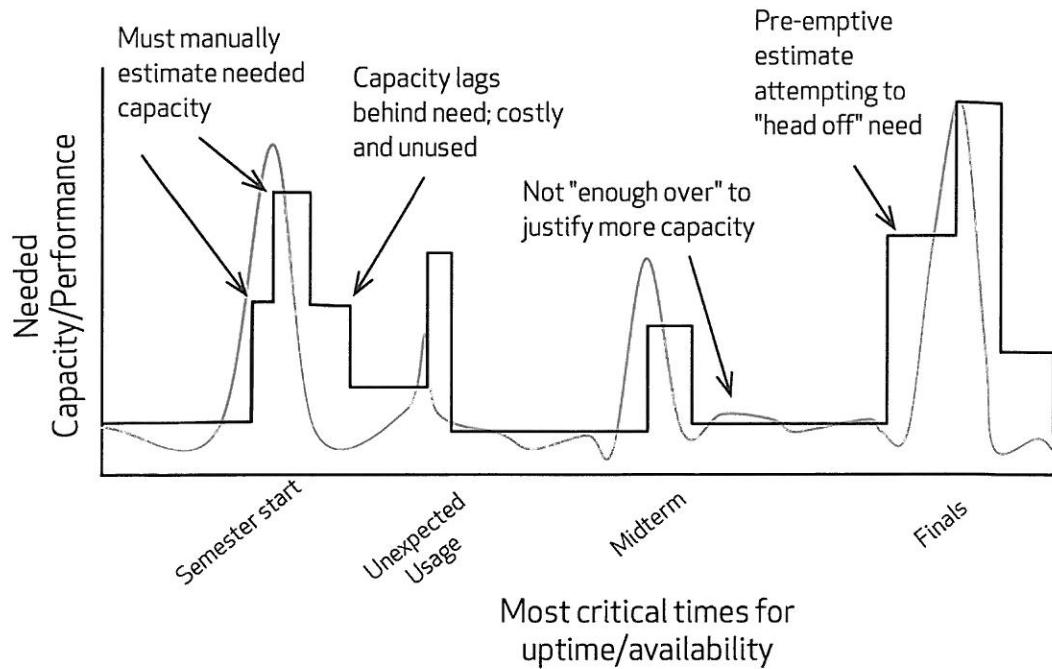


Figure 2

Instructure Automated Provisioning

Dynamically responds to Institutions' needs

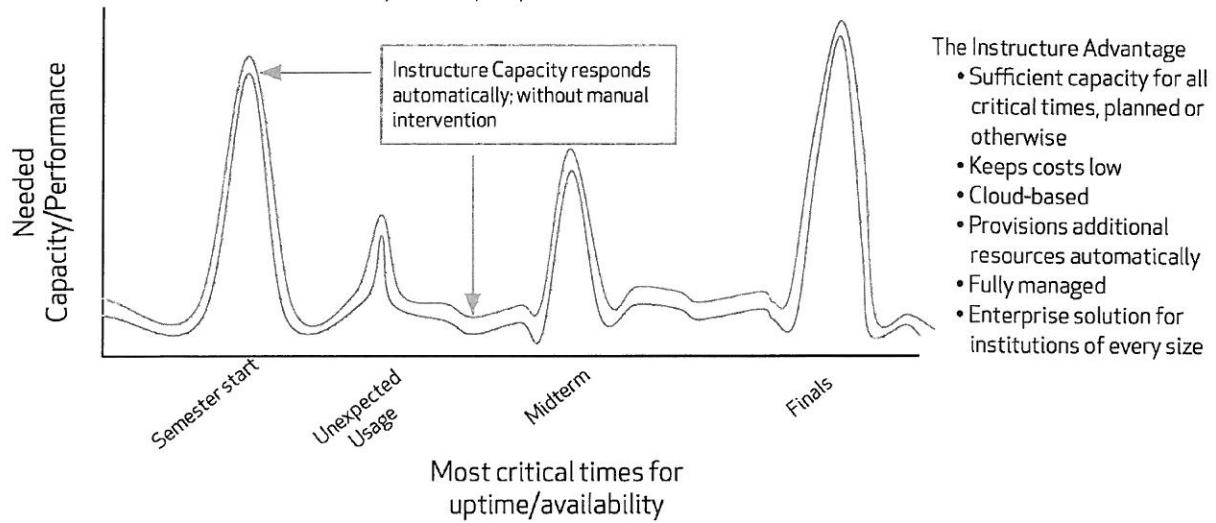


Figure 3

b. Attachment V.

INSTRUCTION

- c. Attachment IV
- d. See 14.a above.
- e. See 14.a above.

15. Price

- a. - h. Canvas pricing is based on a \$/FTE, and includes a standard set of features than can be costly add-ons with other LMS providers. The following table itemizes the minimum that comes standard based on a UMW FTE of 5,000 between both campuses.

INSTRUCTURE

INSTRUCTURE BASE PRICING FOR: UMW	PRICE		
	Year 1	Year 2	Year 3
Unlimited User License and Hosting for up to: 5,000 FTE/Users			
List price: \$16/FTE	\$80,000	\$80,000	\$80,000
Hosting Initiation Fee	Included	Included	Included
Development/Testing Environment	Included	Included	Included
Installation and Configuration	Included	Included	Included
Product Upgrades, Software License and Hosted Systems Maintenance	Included	Included	Included
Data Integration with SIS and Consulting	Included	Included	Included
Implementation Services (up to 120 hours)	Included	Included	Included
SSL Services	Included	Included	Included
Bandwidth for Website	Included	Included	Included
Bandwidth for Storage 2.5 terabytes minimum annually)	Included	Included	Included
Course Content Storage (up to 2.5 terabytes annually - 500 MB per FTE)	Included	Included	Included
Bandwidth for Video Streaming (100 GB/Month) ¹	Included	Included	Included
Video Storage (48 GB/Month) ²	Included	Included	Included
Development of Course Content Migration Tool, and Consulting	Included	Included	Included
Onsite Core Team Training (up to 3 full days)	Included	Included	Included
Administrator Support (Ongoing until end of Subscription Agreement)	Included	Included	Included
Unlimited Support Tickets (Ongoing until end of Subscription Agreement)	Included	Included	Included
Training Webinars, Screen Casts, and Documentation	Included	Included	Included
ePortfolio (Available to every user enrolled)	Included	Included	Included
Single Sign-on Integration	Included	Included	Included
Administration Training	Included	Included	Included
Maintenance Training	Included	Included	Included
Base 24/7 Support	Included	Included	Included
TOTAL ANNUAL COST	\$80,000	\$80,000	\$80,000

¹Overage for Bandwidth for Video Streaming \$1/GB/Month

²Overage for Video Storage \$0.50/GB/Month

16. Warranty

- a. - b. See 14 b. above.

17. Ease of Use

- a. Canvas has been granted Gold Level Certification by the National Federation for the Blind.
- b. Documents can be uploaded by using the file browse button, or by drag and drop into the course Files section of Canvas.
- c. Usability is what defines Canvas above all others on the market. Setting up Discussion Boards is simple one click of the mouse to open up the rich text editor to create the discussion, and one click to post it. With Canvas's Speed Grader®, within one screen the instructor can grade assignments, give text or video feedback to the student, grade with a rubric, where the grade is automatically input into the grade book. Likewise for tests, easily created with our rich text editor, with the ability to provide in-depth feedback for right or wrong answers.
- d. Initial course setup is simple and quick depending upon how much content is being created. In a matter of minutes, files from previous courses can be uploaded, or created from scratch.
- e. Canvas allows for drag and drop to upload files of any type.
- f. Usability is what defines Canvas, where instructors of various technical abilities will have no problem with course creation—in fact, they will look forward to it.
 - i. HTML knowledge is not needed to create gorgeous course content. However, those proficient with HTML have the option to use HTML.
 - ii. Importing and cross linking of course materials, and use of the Canvas tools does not require knowledge of HTML. All course materials are permanently archived and can be used between courses and sections. Instructors always have access to their content and can reuse material over multiple courses, semesters, and disciplines. Our course migration tool allows instructors to migrate all course material from previous courses, or select only what is needed, in a simple two click process.
 - iii. Canvas's rich text editor, drag and drop functionality, and built-in, robust, and fully integrated multimedia framework, makes course creation, formatting, editing, and reuse course content, a joy to do. Easily embed images, video, hyperlinks, for creative course material—or student submissions—the functionality is the same.
 - iv. Upload a single document via the traditional “browse” method, or simply drag and drop.
 - v. Easily link, or create links to, external web sources with Canvas's URL link feature. Further, web links to assets within Canvas, or to external resources are easy to formulate, and various content tools are provided, like the content linking pane.
 - vi. Content can be released using the Course Modules tool and can be predicated on date, completion of previous content, and assignments or competency.
 - vii. Course pages can be customized.
 - viii. Canvas allows the easy input of math and science notation with its built in math equation editor. Music is a specialized application, and is not supported at this time. However, sheet music in or images in other file formats are easily imported.
 - ix. Canvas supports the UTF-8 standard so any language can be typed within Canvas.
 - x. Canvas is currently developing an internal spell-checker for early 2011 release. In the

INSTRUCTURE

- meantime, users can use the spell checker contained in the web browser.
 - xi. Forms and Flash animation are supported.
 - xii. CD and DVD content can be integrated.
 - xiii. Copying, moving, and re-ordering content is a simple drag and drop process.
 - xiv. Integrating different LMS functions into single units or modules is as simple as it gets with Canvas.
 - xv. Course content organization into modules can be done with two clicks of the mouse—click to open up the content selection, then click that content. It is as simple as that.
 - xvi. On development schedule.
 - xvii. Instructors can easily develop glossary's with Canvas Wiki's or file uploads.
 - xviii. Help wizards are provided throughout Canvas, and Canvas provides a robust support website (<http://support.instrurture.com>) for FAQ's, ticket tracking, or requests to Canvas engineers.
 - xix. Canvas is a Turnitin partner.
 - xx. With an open API, we can integrate with any third-party content providers. We can also build custom integrations based on client need.
 - xxi. Not applicable (although we integrate with Respondus, Equella, etc.)
 - xxii. Not applicable.
- g. Usability is what defines Canvas. Instructors and course designers can easily move files, modules, into and out of the course.
- i. With the Canvas course migration tool, easily copy entire courses, or select only what is needed for any new course. All files are kept available for the instructor who can easily link files to any new course or section.
 - ii. Files are accessible to the instructor across all courses taught. Files, images, wikis are contained within the Course File page, and are easily viewed, accessed, and with the click of a mouse, this content can be added to any new assignment, forum, discussion, or quiz.
 - iii. The naming convention is simple and can be as descriptive as the instructor needs. No Canvas defined naming convention is required.
 - iv. Canvas recognizes all file types.
 - v. Import and export files is by browsing or simple drag and drop.
 - vi. Reusable learning objects can be easily imported/exported.
 - vii. Student files are viewed by instructors via the Canvas Speed Grader® or ePortfolio tool. All within one screen, the instructor can view assignments, provide feedback with text, file uploads, or video media.

18. Faculty Incentive to Use

- a. Canvas has redefined usability by providing a deep level integration with Web 2.0 tools, resulting in a simple and unified interface to both manage the course as well as integrate with external tools. With major advancements in usability and simplicity, instructors and students can leverage these new tools for teaching and learning. Canvas includes all the necessary tools for course design, teaching, and learning, and is the ultimate solution to provide a wide variety of pedagogical approaches for creative and diverse learning styles.
- b. Canvas is as important to Face-to-Face teaching as it is to online instruction. Students will have

INSTRUCTURE

a comprehensive and integrated resource for course communication, assignments, syllabi, grades, documents and files, and course instruction. In addition to being a Green application, students can stay connected without having to stay logged on to Canvas.

- c. The beauty of Canvas is that it takes very little time is required to learn it. Within minutes, instructors and students will be having a blast with an LMS that is like no other. More time is creating using Canvas than any other LMS on the market today. Usability, functionality, flexibility, and intuitiveness are what defines Canvas. Instructors will actually look forward to using Canvas.
- d. With Canvas, it is not all or nothing. Use what is attractive, simple, or go as deep as you want with embedded video, images, modules, learning outcomes, or URL links to the outside world. For example, perhaps a student is taking a lecture only course—no assignments, no readings, no assessments. The instructor could then use Canvas to simply post the lecture topics and dates on the course home page. The lecture dates and topics are then dynamically populated on the course Calendar, which can be synced with iCal, Google Cal, or Outlook.

IV. Specific Requirements; Limited Response

Y = Yes, included in base cost

S = Yes, with stipulations not involving additional costs (explain in comments)

C = Yes, for additional cost not included in base cost (explain in comments)

F = To be provided in future released (provide expected release date)

N = Not available

Number	Communication Features (Section 1)	Response (Y,S,C,F,N)	Comment
1.1	Users are able to create community groups not otherwise associated with a particular course.	S	Administrators only.
1.2	Integrated instant messaging (chat) system allows users to communicate synchronously.	Y	
1.3	Users are able to record events that occur within the LMS and make them available as resources inside and outside course.		
1.4	Users have access to an integrated blogging system at individual user level and at course level.	Y	
1.5	Users have access to an integrated system for threaded discussions external to course.	Y	
1.6	Instructor has ability to monitor and filter public, course-related threaded discussions.	Y	
1.7	Basic integrated email allows communication between users external to course but within LMS.	Y	
1.8	Advanced integrated email includes features in basic email plus ability to send and receive, store, manage and archive messages from internal and external addresses.	S	Canvas has an advanced and flexible communication system to push notifications out to students and teachers defined by them. All communication is archived.
1.9	System allows access to email before, during, and after course enrollment; that is, access to email function is not dependent on course enrollment but rather an active account within the system.	N	Not applicable as we don't provide an email account. Canvas does provide ability to push information to emails of the users choice, and will alert users within Canvas when an external email has been received.
1.10	Integrated LMS email system can inter-operate with campus email system via Exchange, IMAP, and POP.	Y	
1.11	Users are able to send messages from the LMS to mobile devices via SMS text messaging.	Y	

INSTRUCTION

Number	Group Work Features (Section 2)	Response (Y,S,C,F,N)	Comment
2.1	Users are able to collaborate interactively in small groups to manage and perform assigned tasks.	Y	
2.2	Integrated decision support software facilitates whole class and small group decision-making.	Y	
2.3	Blogging support is available for small groups.	Y	
2.4	Users have access to integrated wiki system.	Y	
2.5	System is inter-operable with Microsoft SharePoint team workspaces.	N	Many of SharePoint's features are already included in Canvas.
2.6	System is inter-operable with multi-user virtual environments.	Y	
2.7	System is inter-operable with Twitter	Y	
2.8	System is inter-operable with Facebook.	Y	
2.9	System is inter-operable with third party social networking sites other than Twitter and Facebook.	Y	
2.10	10 System facilitates collaborative group file exchange.	Y	
2.11	System facilitates student community-building tools.	Y	
2.12	Instructors are able to filter communications by user.	Y	
2.13	Instructors are able to accept group submitted assignments and give group feedback and grades that automatically propagate to the individuals in the group.	Y	
Number	Learner Feedback Features (Section 3)	Response (Y,S,C,F,N)	Comment
3.1	Integrated and dedicated course evaluation system allows students to anonymously evaluate courses for which they are enrolled.	Y	
3.2	Agreement feedback (applause, thumbs up/down, or other) mechanisms are available during synchronous presentations.	Y	
3.3	System facilitates feedback after presentations.	Y	
3.4	Hand raising or other attention-getting mechanisms are available during synchronous presentations.	Y	
3.5	Audience polling with result indicator are available during synchronous presentations.	C	Not include in Synchronous tools, be Canvas can integrate with third-party tools such as Wimba.
3.6	Pace indicators are available during synchronous presentations.	C	Not include in Synchronous tools, be Canvas can integrate with third-

INSTRUCTURE

			party tools such as Wimba.
3.7	Users are able to record synchronous presentations.	C	Not include in Synchronous tools, be Canvas can integrate with third-party tools such as Wimba.
Number	Note Taking Features (Section 4)	Response (Y,S,C,F,N)	Comment
4.1	Users are able to create private/personal notes within the system.	Y	
4.2	Users are able to publish private/personal notes.	Y	
4.3	Instructors are able to monitor and evaluate private/personal notes.	Y	
4.4	System administrators are able to monitor private/personal notes.	Y	
Number	Offline Features (Section 5)	Response (Y,S,C,F,N)	Comment
5.1	Users are able to work offline and subsequently synchronize work product with LMS.	N	Currently unavailable.
Number	Organizational Features (Section 6)	Response (Y,S,C,F,N)	Comment
6.1	Users are able to bookmark or otherwise mark place or progress within course content.	Y	
6.2	Instructor-created and student-created checklists permit users to monitor task performance.	N	Currently unavailable.
6.3	Users are able to monitor study plan or progress to course completion.	Y	
6.4	Users are able to perform keyword search of all materials for which the user is authorized to view.	F	To included mid-2011.
6.5	Users may create study guides within the system.	Y	
Number	Self-Help Features (Section 7)	Response (Y,S,C,F,N)	Comment
7.1	System allows specific courses to be available via self-registration.	N	Canvas integrates with SIS, but teachers and administrators have the to add students by hand, which auto generates an invitation to the student.
7.2	System allows users to self-test microphone and speaker from within the LMS.	Y	
7.3	System is inter-operable with university course catalog.	Y	
7.4	Instructors are able to create self-assessments for users.	Y	
7.5	System has an integrated help function for using the LMS.	Y	

INSTRUCTURE

7.6	User self-orientation or guided tutorial for LMS is available.	Y	
Number	User-Generated Content Features (Section 8)	Response (Y,S,C,F,N)	Comment
8.1	System allows users to add user-generated content.	Y	
8.2	Content can be generated using the browser.	Y	
8.3	A built-in WYSIWYG editor is available for any user text input.	Y	
8.4	Users are able to insert hyperlinks for user-generated content.	Y	
8.5	Integrated and dedicated system for student portfolios exists within the system.	Y	
8.6	Integrated suite of design templates for user-generated content exists within the system.	F	On development schedule for Spring 2011 release.
Number	User-Workspace Features (Section 9)	Response (Y,S,C,F,N)	Comment
9.1	LMS-related browser toolbars are available and configurable.	N	Not necessary for Canvas.
9.2	Users are able to configure and customize LMS menu options.	S	Can change order—custom name changes scheduled for future release.
9.3	Users are able to configure and customize screen layout of LMS assets.	S	School logo and colors. Design templates scheduled for future release.
9.4	Users are able to save interface customizations.	Y	
9.5	System interface allows Web 2.0-like drag and drop layout based on user preferences.	Y	
9.6	The LMS supports copying user specific archival courses.	Y	
Number	Audio-Video Features (Section 10)	Response (Y,S,C,F,N)	Comment
10.1	Users are able to capture embedded audio and video.	Y	
10.2	Users can access multiple simultaneous audio streams.	Y	
10.3	System has integrated mechanism for streaming video.	Y	
10.4	System has integrated mechanism for streaming audio.	Y	
10.5	System has integrated mechanism for streaming telephone conferencing.	Y	
10.6	System has integrated mechanism for VOIP support.	Y	
10.7	System has integrated mechanism for	Y	

INSTRUCTURE

	synchronous web conferencing.		
Number	Whiteboard Features (Section 11)	Response (Y,S,C,F,N)	Comment
11.1	System has integrated whiteboard with mechanism for application sharing.	Y	
11.2	System has integrated whiteboard with mechanism for content capture.	C	Can integrate with third-party tools like Wimba.
11.3	System has integrated whiteboard with mechanism for file sharing.	Y	
11.4	System has integrated whiteboard with drawing tools.	Y	
11.5	System has integrated whiteboard with chat, voice, and webcam.	Y	
Number	Student Evaluation Features (Section 12)	Response (Y,S,C,F,N)	Comment
12.1	The LMS has an integrated system of grading tools which allow instructors to record a grade and move directly from one student submission to the next student submission without returning to an intermediate screen such as the grade book or roster.	Y	
12.2	The LMS has an integrated system for creating assessment rubrics, which can be applied during the grading process.	Y	
12.3	Instructors can implement alternate prescriptive content for students with identified subject matter weaknesses.	F	2012 release.
12.4	System allows tracking of user actions within the system and allows instructors to monitor student time-on-task for content, discussions, and assessment activities.	Y	
12.5	Evaluation data can be exported to external systems.	Y	
Number	Course Management Features (Section 13)	Response (Y,S,C,F,N)	Comment
13.1	LMS has integrated calendaring system.	Y	
13.2	LMS has entry screen for instructors to enter grades, user feedback, and private instructor only comments.	Y	
13.3	LMS has integrated system for learner evaluation of courses.	Y	
13.4	LMS supports multiple time zones.	Y	
13.5	The LMS supports logical segmentation of access and branding for multi-site organizations (multiple campuses).	Y	
Number	Presentation Delivery Features (Section 14)	Response	Comment

INSTRUCTURE

		(Y,S,C,F,N)	
14.1	LMS is capable of distributing media files including files of type 3GP, AAC, AVI, DivX, FLA, FLV, GIF, JPG, M4A, M4P, MOV, MP3, MP4, MPG, OGG, PDF, PSD, SWF, VOB, WAV, WMA, and WMV.	Y	
14.2	The LMS supports embedding external content into internal content pages via the html object embed method and via iframes.	Y	
14.3	The LMS supports embedding external content into internal content pages via RSS feeds.	Y	
Number	Polling Features (Section 15)	Response (Y,S,C,F,N)	Comment
15.1	LMS supports audience polling or testing during presentations.	N	Is on the Canvas development schedule.
15.2	2 LMS supports reporting results of polling in both tabular and graphical formats.	N	Is on the Canvas development schedule.
Number	Instructor Feedback Features (Section 16)	Response (Y,S,C,F,N)	Comment
16.1	The LMS supports an early warning method which alerts the instructor and affected student of lack of attendance, a lack of performance or failed performance on a graded activity, and a cumulative average below a threshold set by the instructor.	Y	
16.2	Learners can attach rating to content.	N	
Number	Instructor Support Features (Section 17)	Response (Y,S,C,F,N)	Comment
17.1	LMS contains an integrated system of context sensitive help for all basic LMS functions.	Y	
17.2	LMS contains a rubric creation tool.	Y	
17.3	LMS contains a survey creation tool.	Y	
17.4	LMS contains a system for community building and communication between and among instructors.	Y	
17.5	LMS can track email delivery and read status and report this status back to the email sender for messages sent from within the LMS.	N	Unnecessary for Canvas.
17.6	LMS contains a system to support listserv-type mailing lists.	Y	
17.7	The LMS contains an online grade book with	S	Instructor can sort by student

INSTRUCTURE

	the ability for the instructor to customize the view by filtering by student ID, student last name, and by score for any numeric grade book column.		section and re-order or collapse assignments.
17.8	The LMS contains an online grade book with the ability to apply a weight to specific grades, display a running total, display a weighted average, and apply instructor created formulas including dropping the lowest score.	Y	
17.9	Instructor can post announcements within the course and track which users have accessed the announcement page.	Y	
17.10	10 Instructor can create frequently asked questions (FAQ) file.	Y	
17.11	Instructor can track student attendance including time per page of content.	Y	
17.12	LMS grade book provides a process to import mid-term and final grades from the LMS to Banner Student .		
17.13	LMS has an integrated notification system to alert instructors of new discussion entries, quizzes to be graded, internal emails, assignment submissions, and drop box entries.	Y	
Number	Interoperability with Custom Courseware (Section 18)	Response (Y,S,C,F,N)	Comment
18.1	LMS supports Adobe Acrobat PDF files.	Y	
18.2	LMS is interoperable with Panopto.	Y	
18.3	LMS supports content creation in Dreamweaver with import directly into the LMS via integrated FTP or WebDAV rather than local save followed by file upload or copy/paste.	N	Canvas's rich text editor eliminates the need for Dreamweaver. Canvas also uses HTML drag and drop instead of WebDAV.
18.4	LMS supports Flash content served from within the LMS system.	Y	
18.5	LMS supports Java content served from within the LMS system.	Y	
18.6	LMS supports PowerPoint content served from within the LMS system.	Y	
18.7	LMS is interoperable with third party content creation tools including Soft Chalk.	Y	
18.8	The LMS is interoperable with SMART Technologies Sympodium and interactive whiteboard and Senteo Clickers and Notebook files.	C	If needed Canvas can integrate, or write plug-in on the schools SMART board.
18.9	The LMS is interoperable with Promethean	C	

INSTRUCTION

	Planet interactive whiteboard and flip chart files.		
18.10	The LMS is interoperable with Microsoft OneNote and Evernote notes.	Y	
18.11	LMS supports Microsoft Word and Excel documents.	Y	
Number	Output Features (Section 19)	Response (Y,S,C,F,N)	Comment
19.1	The LMS can be configured to deliver full functionality (content, communication, assessment) for a user accessing via a web browser.	Y	
19.2	The LMS can be configured to deliver full functionality (content, communication, assessment) for a user accessing via a mobile device including laptops, tablets, smart phones, ipod touches, and ipads.	Y	
19.3	The LMS allows printing of single content pages, user selected collections of pages, single discussion postings, user selected collections of discussion postings, single email messages, and user selected collections of email messages.	S	All but email, as we are not an email client.
19.4	Courses can be exported in XML format as a reusable form.	S	We can do this in JSON, which is equivalent to XML, but simpler.
19.5	Courses can be exported in PDF format.	N	
19.6	Courses can be exported in a ZIP formatted archive.	S	See 19.4 above. Zip archive includes all digital assets of all files.
Number	Content Features (Section 20)	Response (Y,S,C,F,N)	Comment
20.1	The LMS has the ability to create and manage templates for institution, department, and course level branding and content presentation purposes.	Y	
20.2	The LMS is able to import and export SCORM compliant learning objects.	S	Import Yes—Export Q3-2011.
20.3	The LMS uses an integrated, full-featured, web based formatted text editor for direct creation of content, email, discussions, paragraph test answers and other places where text is entered into the system.	Y	
20.4	The LMS is able to auto-create a course menu/map.	Y	
20.5	The LMS supports bookmarking.	Y	
20.6	The LMS can launch third party applications.	Y	
20.7	The LMS provides course designers a choice	N	Only institution branding.

INSTRUCTURE

	of navigation buttons and design tools.		
20.8	The LMS provides a course level glossary tool for creating course-related entries.	S	Use with Canvas Wiki pages.
20.9	The LMS can import content from PowerPoint.	Y	
20.10	The LMS can import content from Word with the ability for the user to strip the imported document of text and paragraph styles so as to implement the style information used in the LMS.	Y	
20.11	The LMS is able to edit In-line CSS for web-based content.	Y	
20.12	The LMS allows the user to insert hyperlinks.	Y	
20.13	The LMS provides a link checker and a means to manage and update links.	S	Canvas does not check external links to determine functionality, but Canvas does auto update links when is migrated to a new course.
20.14	The LMS provides a preview mode for pre-published content, discussions, and email.	Y	
20.15	The LMS provides a number of templates for suggested course design.	F	Q3-2011
20.16	The LMS employs version control for content pages.	Y	
20.17	The LMS provides wizards for routine tasks requiring multiple steps to complete.	Y	
20.18	The LMS has a workflow system to manage content development.	N	Workflow is based on teacher or designer creation.
20.19	The vendor supports API for the LMS.	Y	
Number	Rich Media Features (Section 21)	Response (Y,S,C,F,N)	Comment
21.1	The LMS provides a tool to create animations.	N	
21.2	The LMS provides a tool to record and edit audio.	S	But cannot edit in-line currently.
21.3	The LMS provides a tool to record and edit video.	S	But cannot edit in-line currently.
21.4	The LMS provides a tool to edit images.	F	Coming with annotation tool in 2011.
Number	Interactive Features (Section 22)	Response (Y,S,C,F,N)	Comment
22.1	The LMS supports branching based on learner responses.	S	Currently only fixed path. User can open modules as prerequisites are completed.
22.2	The LMS supports computer screen simulations.	N	
22.3	The LMS supports interactivity via hot spots in images.	N	
22.4	The LMS supports non-graded pre-tests to	F	Scheduled release TBD.

	build course curriculum.		
22.5	The LMS supports role-play simulations.	N	
Number	Assessment & Evaluation Features (Section 23)	Response (Y,S,C,F,N)	Comment
23.1	The LMS supports assessments.	Y	
23.2	Included as part of course authoring tool.	Y	
23.3	The LMS includes instructor notification of student submissions and communications to support rapid feedback.	Y	
23.4	The LMS requires Java support at the end user.	N	Canvas does not require client-side Java.
23.5	The LMS provides a system for reporting learner performance per student for instructor use in monitoring progress toward course goals.	Y	
23.6	The LMS stores learner performance data for retrieval via print or export to external systems.	Y	
23.7	The LMS provides a survey creation tool.	Y	
23.8	The LMS supports the IMS Tests and Question Interoperability specification (QTI).	Y	
23.9	The LMS supports standards and competency correlation tools (allow an instructor to align course materials with standards/competencies and track which users are meeting those standards).	Y	
Number	Test Format Features (Section 24)	Response (Y,S,C,F,N)	Comment
24.1	The LMS provides a drag-and-drop question type.	N	
24.2	The LMS provides a essay (lengthy text) question type.	Y	
24.3	The LMS provides a fill-in-the-blank questions type.	Y	
24.4	The LMS provides a hot spot questions type.	N	
24.5	The LMS provides a Likert scale questions type.	Y	
24.6	The LMS provides a matching questions type.	Y	
24.7	The LMS provides a multiple choice questions type.	Y	
24.8	The LMS provides a multiple response questions type (more than one answer choice correct).	Y	
24.9	The LMS provides a numerical answer questions type.	Y	
24.10	The LMS provides a calculated question type; that is, a question in which variables	Y	

INSTRUCTURE

	are used as placeholders for randomly generated values. The question presented to the learner contains values and the random selection process is transparent to the learner.		
24.11	Answer choices can be randomized.	Y	
24.12	Question order can be randomized.	F	Mid-2011 release.
24.13	The LMS provides a ranking questions type.	N	
24.14	The LMS provides a short-answer questions type.	Y	
24.15	Individual questions can be timed.	N	Canvas can time the entire quiz/assessment.
24.16	The LMS provides a true/false question type.	Y	
24.17	The LMS supports sharing of assessments with other instructors, departments, organizations.	Y	
24.18	The LMS supports the ability for awarding extra credit or manual scoring of individual questions and whole tests.	Y	
24.19	The LMS supports the ability to proctor tests and assignments via alternative authentication of proctors.	Y	
Number	Language Features (Section 25)	Response (Y,S,C,F,N)	Comment
25.1	Arabic: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Arabic including any language-specific character sets.	S	Rich text editor allows for input of any language or character set. User interface currently only in English. User interface will be international in 2012.
25.2	Chinese: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Chinese including any language-specific character sets.	S	See 25.1.
25.3	English: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in English including any language-specific character sets.	Y	
25.4	French: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in French including any language-specific character sets.	S	See 25.1
25.5	German: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in German including any language-specific character sets.	S	See 25.1

INSTRUCTURE

25.6	Italian: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Italian including any language-specific character sets.	S	See 25.1
25.7	Japanese: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Japanese including any language-specific character sets.	S	See 25.1
25.8	Russian: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Russian including any language-specific character sets.	S	See 25.1
25.9	Spanish: Users may communicate within the system and all elements of the user interface such as menus and dialog prompts are available in Spanish including any language-specific character sets.	S	See 25.1
Number	Learner Feedback Features (Section 26)	Response (Y,S,C,F,N)	Comment
26.1	The LMS provides instructors an interface for online essay evaluation including in-line comments and separate summary comments.	S	Canvas can do all, including video and audio feedback. Inline annotation is coming early 2011.
26.2	The LMS allows instructors to provide hints on objective questions in self-tests and graded tests.	Y	
26.3	The LMS allows instructors to implement immediate feedback with correct answers.	Y	
26.4	The LMS allows instructors to implement immediate feedback without correct answers.	F	By year-end 2010.
26.5	The LMS allows instructors to authorize multiple attempts on an assessment.	Y	
26.6	The LMS allows instructors to provide a performance summary for assessments.	Y	
26.7	The LMS allows instructors pre-select feedback for correct and for incorrect quiz question responses.	Y	
Number	Levels of Access Features (Section 27)	Response (Y,S,C,F,N)	Comment
27.1	The LMS provides an access level for student.	Y	
27.2	The LMS provides an access level for teaching assistant or graduate assistant.	Y	
27.3	The LMS provides an access level for guest.	Y	

INSTRUCTURE

27.4	The LMS provides multiple levels of customized instructor and administrative permissions.	Y	
27.5	The LMS allows the creation of new user types and the customization of permissions for that new type.	Y	
Number	Reporting Features (Section 28)	Response (Y,S,C,F,N)	Comment
28.1	The LMS provides a system for authorized, select administrative users to query the live database or recent copy of the database and all log files.	S	Canvas does not provide direct SQL access, but does provide a structured data interface of all data.
28.2	Custom reports can be created on all data.	S	Canvas uses external tools presently (See 28.1).
28.3	The vendor provides a set of commonly requested report templates.	Y	
28.4	Report data can be exported in common file formats.	Y	
Number	Administrative Features (Section 29)	Response (Y,S,C,F,N)	Comment
29.1	The LMS requires separate administrative client software.	N	
29.2	The LMS allows multiple concurrent sessions for users.	Y	
29.3	The LMS supports multiple time zones.	Y	
29.4	The LMS provides a system of scheduling users for synchronous events.	Y	
29.5	The LMS supports user profiles.	Y	
Number	Client Software Features (Section 30)	Response (Y,S,C,F,N)	Comment
30.1	All functions of the LMS are available to users running Apple Macintosh OS X (10.4.x and prior).	Y	
30.2	All functions of the LMS are available to users running Apple Macintosh OX S (10.5 and up to current as of the time of the RFP).	Y	
30.3	All functions of the LMS are available to users running BSD/Linux (such as Debian, SUSE, or Red Hat).	Y	
30.4	All functions of the LMS are available to users running a supported operating system in a Java Virtual Machine (JVM).	S	No JVM required.
30.5	All functions of the LMS are available to users running Unix.	S	Webcam and desktop sharing currently requires Flash.
30.6	All functions of the LMS are available to users running Microsoft Windows 2000.	Y	
30.7	All functions of the LMS are available to	Y	

INSTRUCTURE

	users running Microsoft Windows XP.		
30.8	All functions of the LMS are available to users running Microsoft Windows Vista.	Y	
30.9	All functions of the LMS are available to users running Microsoft Windows 7.	Y	
Number	Web Browser Features (Section 31)	Response (Y,S,C,F,N)	Comment
31.1	All functions of the LMS are available to those using: Chrome (version 5.0 and above).	Y	
31.2	All functions of the LMS are available to those using: Konqueror (version 4.4.5 and above).	S	Not a supported browser perse, however Konqueror shares lineage with Webkit, which we do support.
31.3	All functions of the LMS are available to those using: Microsoft Internet Explorer (version 6.0 and above).	S	IE 7+
31.4	All functions of the LMS are available to those using: Mozilla/Firefox (version 3.6 and above).	Y	
31.5	All functions of the LMS are available to those using: Opera (version 10 and above).	S	
31.6	All functions of the LMS are available to those using: Safari (version 5.0 and above).	Y	
Number	Web Services Features (Section 32)	Response (Y,S,C,F,N)	Comment
32.1	The LMS supports key web service standards (SOAP, UDDI, WSDL, etc).	N	Canvas uses RESTful, XML, JSON, HTTP.
32.2	The LMS can aggregate data from multiple web services.	Y	
32.3	The LMS renders external web services into standard HTML, PDF, spreadsheet, or XML.	Y	
32.4	The LMS can capture data visualization via external Web services.	N	
32.5	Third party XML authoring products can integrate natively with the LMS.	N	Not applicable.
32.6	Third party taxonomy management tools can integrate natively with the LMS.	N	Not applicable.
Number	LDAP Features (Section 33)	Response (Y,S,C,F,N)	Comment
33.1	Authenticates users or authors from third party LDAP directories.	Y	
33.2	The LMS supports Windows Active Directory.	Y	
33.3	The LMS supports federated identity management via Shibboleth and SAML.	S	SAML 2.0
Number	Integration with Other Systems (Section 34)	Response (Y,S,C,F,N)	Comment

INSTRUCTURE

34.1	The LMS integrates with SharePoint without the need for custom coding by in-house staff or professional services engagements.	N	
34.2	The LMS integrates with third party LMSs/LCMSs without the need for custom coding by in-house staff or professional services engagements.	Y	
34.3	The LMS can integrate with Banner Student in batch and (near) real time population of courses and grade exchange without the need for custom coding by in-house staff or professional services engagements.	Y	
34.4	The LMS integrates with library systems such as that used at UMW without the need for custom coding by in-house staff or professional services engagements.	S	Need clarification on which Library System UMW uses.
34.5	The vendor provides API (Application Program Interfaces) access to facilitate creation of custom applications.	Y	
Number	Help Desk Features (Section 35)	Response (Y,S,C,F,N)	Comment
35.1	The LMS vendor maintains a 24x7x365 toll free phone support for faculty, students, and institutional technical support staff.	S/C	24/7 support for school administrators—see included support matrix.
35.2	The LMS vendor maintains a 24x7x365 toll free phone support for the local LMS system administrator with a prescribed escalation plan for emergency situations.	Y	
35.3	The LMS vendor maintains an open collection of recommended best practice pedagogical methods demonstrated using the LMS.	N	
35.4	The LMS vendor offers a Help Desk support solution that includes reporting tools based on usage level, question type, resolution statistics, required resolution time, and unresolved inquiry tracking.	Y	
35.5	The LMS vendor offers a Help Desk support solution that includes a system to track end user self-service usage and effectiveness.	Y	
35.6	The LMS vendor offers a Help Desk support solution that measures average response times for all service requests.	Y	
35.7	The LMS vendor offers a Help Desk support solution that includes an end user accessible knowledge base.	Y	
35.8	The LMS vendor offers a Help Desk support solution that can monitor effectiveness of	Y	

INSTRUCTION

	knowledge base information/FAQs.		
35.9	The LMS vendor offers a Help Desk support solution that allows end users to track the progress of a trouble ticket.	Y	
35.10	The LMS vendor offers a Help Desk support solution that is operated directly rather than by a contracted third party.	Y	
35.11	The LMS vendor offers a Help Desk support solution that tracks product enhancements/refinement suggestions.	Y	
Number	Miscellaneous Features (Section 36)	Response (Y,S,C,F,N)	Comment
36.1	The LMS facilitates combining (merging) sections before and after student enrollments have been added to the sections.	Y	
36.2	The LMS allows the instructor to open parts of a course to guest users; both users with accounts created via Banner integration and also temporary ad hoc users not existing in Banner.	Y	
36.3	The LMS allows the instructor to set parts of the course as open access available via an RSS feed.	Y	
36.4	The LMS can scale to able to handle expected enrollments (up to 10,000) through 2014.	Y	
36.5	The LMS meets accessibility standards such as W3C, WCAG 2, IMS ACCMD, and W3C ATAG.	Y	Canvas has been granted Gold Level Certification from the National Federation for the Blind.
36.6	Access log files are available to the local system administrator for forensic, data mining, and reporting purposes.	S	All activity data can be exported.
36.7	The LMS is able to import/export individual courses with and without embedded student data.	S	No student data, just content. Student data available through open API.
36.8	The LMS is interoperable with third party tools that are IMS LTI compliant.	F	When LTI is published.
36.9	The LMS vendor provides conversion services for migrating existing UMW courses, content, and assessments from Blackboard version 8.	Y	
36.10	The LMS vendor maintains a disaster recovery plan for vendor hosted solutions that is capable of bringing all courses, users, and user data back into an active state in no longer than 3 days after a catastrophic event (complete system crash or natural disaster).	Y	
36.11	The LMS vendor maintains a backup plan	Y	

INSTRUCTURE

	that includes individual course restore points.		
36.12	The LMS has a significant and active end user community.	Y	
36.13	The LMS prompts users to download and install codec's as needed.	N	Codec does not need to be installed.
36.14	The vendor has an established road map for HTML-5 implementation and compliance.	Y	Already incorporate some HTML-5 features.

ATTACHMENT I: OPTIONAL INFORMATION

Calendar: Canvas provides an easily accessible and easy to use calendaring system. All course content tied to a date is dynamically populated on the calendar, and where each course is color coded for easy identification. Instructors can easily change assignment or quiz due dates by simply dragging and dropping those items to the new date. Students are then immediately notified of the change via the notification preferences they have set for themselves.

Each course has its own calendar in addition to any personal calendars, which are then overlaid and consolidated into a single usable view. All users can set up a calendar feed for any calendar that uses a calendar feed like Google Calendars, Outlook, and iCal. All changes in the calendar are updated in real time.

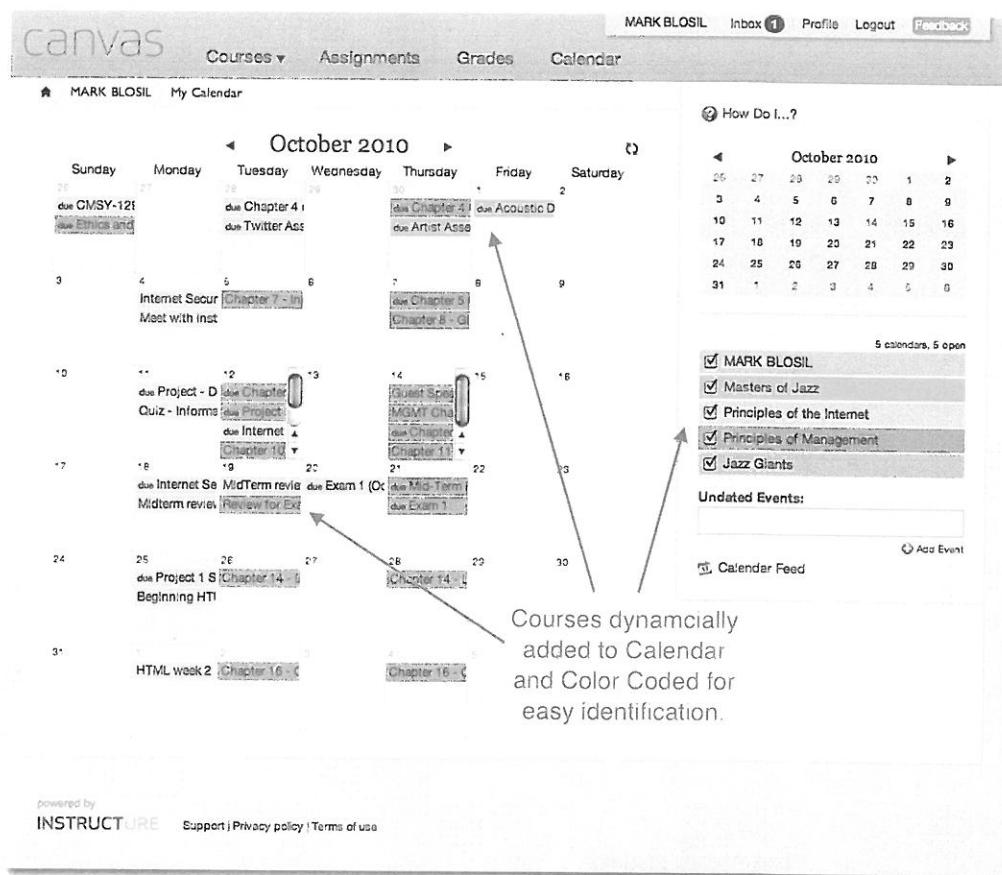


Figure 4: Integrated Calendaring System

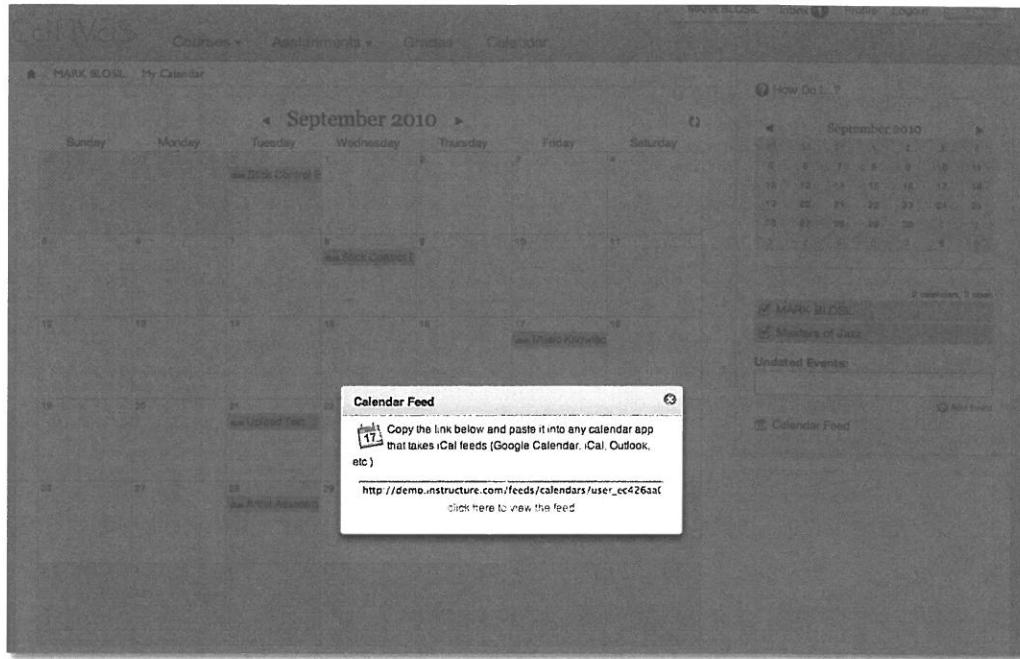


Figure 5: Sync to external calendars

Discussions: Both instructors and students alike can start and contribute to discussion topics. Discussions can be enhanced with any rich media like video, images, and wikis, and can be used for grading purposes, assignments, or simply as a forum for topical and current events. Private discussions can also be initiated within student groups, which are not viewable by others within the course.

The screenshot shows a Canvas course page for 'MUS 450'. The left sidebar lists course navigation links: Home, Syllabus, Assignments, Modules, Grades, Announcements, Pages, Chat, Discussions, Files, People, Outcomes, Quizzes, Conferences, Collaborations, and Settings. The main content area is titled 'Discussion Topics' and shows a post from 'Your Beginning' with a text excerpt about playing style. To the right, there's a sidebar with buttons for 'Start a New Topic', 'Reorder Topics', and 'Recent' (2 Topics, 1 Announcement). Below the sidebar, there's a section for 'View Topics and Announcements'. At the bottom of the page, there's a video player showing a video titled 'Jack DeJohnette - Keith Jarrett ...'.

Figure 6—Discussion threads integrated within Canvas

Email: Canvas provides an internal messaging system for communication between users in the course. In order to access the message sent to the individual, users can either log into Canvas to see the message or receive the message based on the method they choose in their communication preferences. Canvas users can receive messages via their personal email addresses, Facebook and Twitter accounts, or SMS text on their cell phone.

Further, as instructors will be receiving messages from students across all courses being taught, Canvas provides a consolidated Inbox that lists all messages directed to the instructor from anywhere inside the course (likewise for students, where they can use the messaging system to email users in their class or group).

Test

Delivery: Creating and delivering tests within Canvas is simple—either by manual creation with our rich text editor, or by integrating with third-party applications like Respondus. Teachers have the option to set test parameters including:

- Date of delivery
- Multiple attempts
- Proctored access
- Question shuffling
- Question type
- Auto scoring
- Announcements regarding grading alerts, calendar changes, discussions, reminders, course changes, etc. will be delivered based on the users' selection of communication.

Grade Book: Canvas incorporates a Grade Book that provides ease of use—for student and instructor—and incorporates supreme functionality for the input and distribution of grades. Canvas also provides communication between the student and instructor, including the ability to alert the instructor of high-risk students.

The Canvas Grade Book is a fully featured management tool that allows:

- Simultaneously viewing of grade information across all courses.
- Instructor notification when a student has submitted an assignment or that a quiz/assessment needs to be graded.
- Student notification when an instructor has completed grading an assignment or quiz/assessment.
- Single, central interface where instructors can see all students enrolled in the course, and where grade additions or changes can be easily made.
- Reporting of all grade history. Each grade change that is made in the system is auto-saved in a unique version to ensure that all changes are recorded allowing the instructor to go back to any date and revert to the grades on that particular date.

INSTRUCTURE

- Instructors to leave private grading notes and comments, including video comments, while grading the assignment.
- Grades to be downloaded or uploaded as a csv file.
- Offline grading capability for those instructors that do not have connectivity. Instructors can download assignment submissions into a zip file and upload their grading when connectivity is available.
- Students to view their grades and use a “what if” grading tool to see how different score scenarios could affect their final course grade. This provides students with the benefit of understanding their progress within the course as well as being able to predict their grade for the course.
- The Canvas Speed Grader® to streamline the grading process by automatically taking student submissions, in any format the instructor allows, and converts them to a format suitable for display in a web browser for the instructor to review. Within one frame, instructors can view, grade, initiate discussions, and provide the student with written and audio commentary.
- Instructors to create their own rubric, or reuse a rubric already created for a previous assignment. The rubrics are displayed for students to see so they have a clear understanding of how their work will be assessed.
- Open API allows for the exporting of grades to schools customized SIS.

The screenshot shows the Canvas Speed Grader interface. On the left, there is a video player window displaying a video titled "Thomas Lang Solo at Meinl Drumfest 2009". Below the video player, there is a message: "Watch a video while simultaneously comment on what is being watched". On the right, there is a rubric panel titled "Assessment" with a grade of 25 out of 30. The rubric includes criteria such as "Strong Patterns", "Rhythm", and "Dynamics", each with a description and a score. At the bottom right, there is a "Discussion" section where a user named "MARK KLOST" has posted a comment: "love it you really get this". Arrows from the text "Watch a video while simultaneously comment on what is being watched" point to the video player and the comment section. Another arrow points from the text "Make video or text comments back to the student" to the comment section.

Figure 6: Speed Grader® fast and flexible

MUS 450

Grades For Keith Moon

Name	Due	Score	Out of
Evaluation			
Your Beginning	Aug 12 by 11:59pm	20.0	26
Biographies of the Giants of Jazz	Aug 16 by 9am		
Pulse			
Time			
Stick Control Exercise 41			
Stick Control Exercise 42			
Music Knowledge			
Upload Test			
Artist Assessment	Sep 23 by 11:59pm	9	30
Course		51.8 %	
Final Grade		51.8 %	-

Final Grade: 51.8%

Show Saved "What-if" Scores

Course assignments are not weighted. The final score will be based on the sum of the points for all assignments.

Calculate based only on graded assignments

Click any score and enter a new value to see how the change will affect your final grade.

Student can run "What if" scenarios to determine final grade

powered by INSTRUCTURE Support | Privacy policy | Terms of use

Figure 7: Students can run “What if” grade projections

Wiki's/Blogs: Creating wiki's is a snap with Canvas. With its rich text editor, text, video, images, and any file type can be included. Plus, the instructor can give permissions to edit or not edit the wiki. Students can also create their own wiki.

MUS 450

STEVE SMITH BIOGRAPHY

Steve Smith's drumming, while always decidedly modern, can best be described as a style that embodies the history of U.S. music. His original love of rudimental parade drumming is evident in his intricate solos. Likewise, his command of jazz, from New Orleans music, swing, bebop, avant-garde to fusion, is applied with his powerful rock drumming sensibilities and allows him to push the boundaries of all styles to new heights. His musical focus is committed to the exploration of improvised music incorporating styles as diverse as Blues, Jazz, R&B, Funk, Cajun and South Indian Carnatic.

Originally drawn to the drums by hearing marching bands in parades as a child in his native Massachusetts, Smith began studying the drums at age nine, in 1963. After high school, Smith studied music at the Berklee College of Music in Boston from 1972-76. There he received valuable instruction from such renowned teachers as Gary Chaffee and Alan Dawson.

In 1974 Smith's professional career began in full, at 19 years old, with his tenure in the Lin Biviano Big Band, which he toured and recorded with for the next two years. At that same time he also performed with bebopper Buddy DeFranco and was a member of free-jazz group The Fringe featuring George Garzone. In 1976, Smith began his association with jazz/fusion by joining

Common Pages

- Front Page
- Biographies Of The Giants
- Welcome
- Instructor Biography
- more...

Recent Changes

- Instructor Biography
- Welcome
- Front Page
- more...

All Pages

show all...

Edit this Page

Delete this Page

Create a New Page

Figure 8: Create Wikis in the Canvas rich text editor

Assessment Engine: Canvas incorporates a very robust assessment feature that allows for the easy creation of Quizzes and Assessments, as well as being able to draw from questions from question banks—randomly, or manually. In addition to having a self contained test authoring tool, Canvas can also integrate with third party authoring tools like Respondus.

Below is a sample of some of the quiz/assessment features contained within Canvas:

- Assignment of time limits, Access codes (Proctoring), and date limiters
- Answer shuffling
- Allows for multiple attempts
- Instructors can build in comments for each answer selection
- Option to show correct answer
- Extra credit and Auto-Grading
- Use of Rich Media
- Comment box where students can participate in self-assessment
- Creation of multiple question types

The screenshot shows the Canvas LMS interface for a course titled "MUS 450". The left sidebar contains links for Home, Syllabus, Assignments, Modules, Grades, Announcements, Pages, Chat, Discussions, Files, People, Outcomes, Quizzes, Conferences, Collaborations, and Settings. The main content area is titled "Assignment Quizzes" and lists two quizzes: "Biographies of the Giants of Jazz (20 pts)" and "Music Knowledge (20 pts)". Each quiz card includes details like due date, time limit, latest submission, and score. Below the quizzes, there is a call-to-action button: "Create new Quiz or Draw from Question Banks". A large arrow points from this button towards the "Create a New Quiz" button in a sidebar on the right. The sidebar also contains a "Manage Question Banks" button. The top navigation bar includes links for Courses, Assignments, Grades, Calendar, and user profile information (MARK BLOSIL, inbox, Profile, Logout, Feedback).

Figure 9: Quiz/Assessment Creation

The screenshot shows the Canvas LMS interface. At the top, there's a navigation bar with links for Courses, Assignments, Grades, and Calendar. The user is currently in the MUS 450 course under the Quizzes tab. On the left, a sidebar lists various course modules like Home, Syllabus, Assignments, Modules, Grades, Announcements, Pages, Chat, Discussions, Files, People, Outcomes, Quizzes, Conferences, Collaborations, and Settings. The main content area is titled "Edit Quiz" and contains "Quiz Instructions:" and a rich text editor toolbar. To the right, there's a "Quiz Options" panel with settings for the quiz type (Graded Quiz), group (Course), name, shuffle answers, show correct answers, time limit, allow multiple attempts, due date, and lock times. Below the options is a note about points possible and buttons for saving or publishing. A callout box with an arrow points to the "Show Question Details" section, which includes a "Group" dropdown set to "Pick 10 questions, 2 pts per question", a "Create Group" button, and a "Cancel" button. The callout box contains the text: "Create a Quiz Group and select the number of questions to be drawn at random".

Figure 10: Pick questions at random from Quiz Bank

WYSIWIG HTML: Canvas provides a rich text editor that allows for the upload, or drag and drop of any file type, video media, images—including the ability to access Flickr within the Canvas environment—URL links, and HTML embedded codes.

The screenshot shows a web browser window for 'Biographies Of The Giants: Masters of Jazz' on the 'http://demo.instructure.com/courses/20674/wiki/biographies-of-the-giants' page. The browser's address bar and various tabs are visible at the top. Below the header, the 'canvas' logo and navigation links for 'Courses', 'Assignments', 'Grades', and 'Calendar' are present. On the left, a sidebar menu for 'MUS 450' lists various course sections like Home, Syllabus, Assignments, Modules, Grades, Announcements, Pages, Chat, Discussions, Files, People, Outcomes, Quizzes, Conferences, Collaborations, and Settings. The main content area contains a rich text editor toolbar with bold, italic, underline, etc., buttons. Below the toolbar is a section titled 'BIOGRAPHIES OF THE GIANTS' containing text about drumming styles and influences. To the right of the content area is a 'Page Tools' sidebar with options to 'Rename this page' and 'Delete this page'. A larger 'Insert Content Into the Page' sidebar on the far right includes tabs for 'Links', 'Files', and 'Images'. Under the 'Links' tab, a tree view shows 'Wiki Pages' with nodes for Art Blakey, Biographies Of The Giants, Biography, Buddy Rich, etc. Other collapsed sections include Assignments, Quizzes, Announcements, Discussion Topics, and Course Navigation.

Figure 11: Rich text WYSIWYG HTML editor allows for creative course development.

INSTRUCTURE

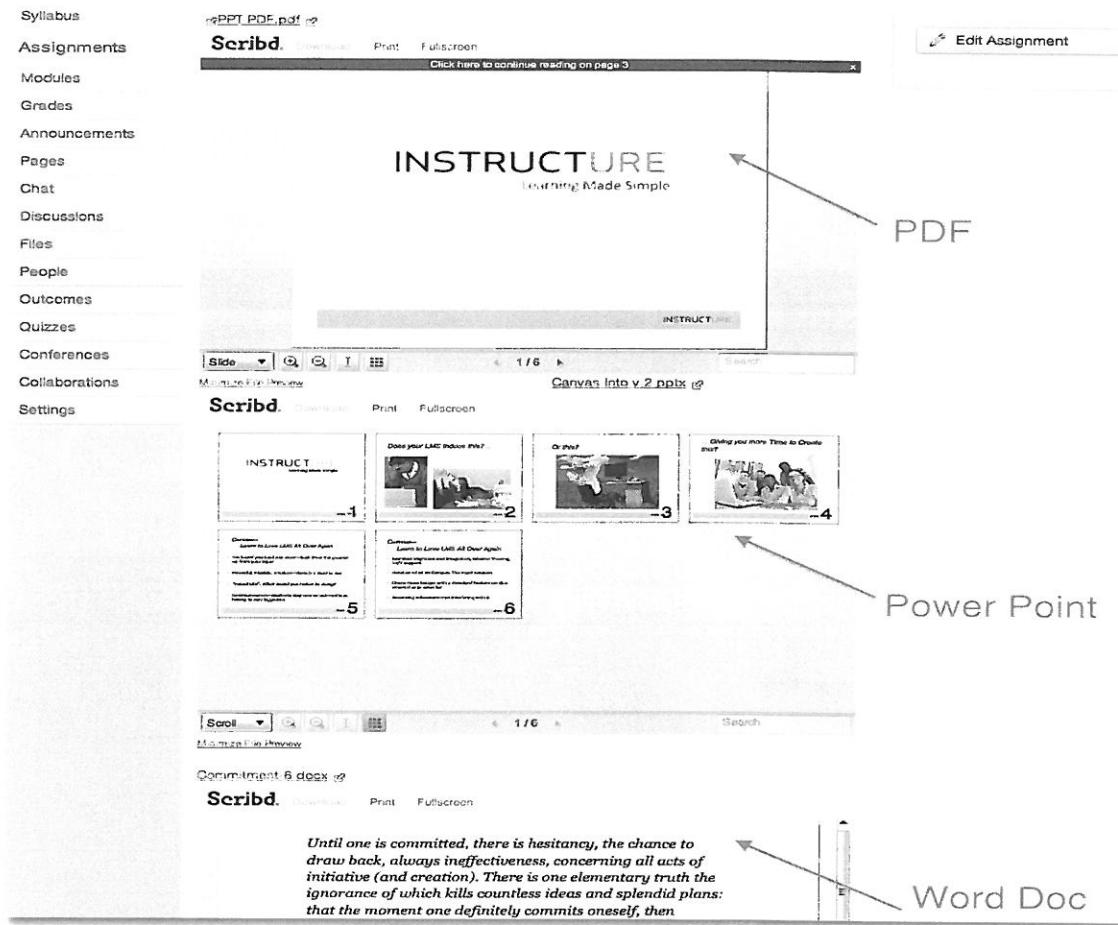


Figure 12: View multiple files in the same window without the need for software

Help: Users of Canvas are made more productive via the built-in wizard for in-context help. Wizard tools provide a step-by-step guide for activities such as creating courses, creating assignments, creating a calendar event, or building ePortfolios.

Canvas also provides a robust support website that includes Forums with other users, FAQ's, and the ability to track the status of support tickets.

Canvas is also developing in context help videos where users can watch short videos that pertain to the particular function needing to be utilized.

Tracking Tools: Within Canvas, administrators and instructors have the ability to track and pull several types of reports including, but not limited to:

- Count users by semester and role
- Count users in active courses by semester
- List courses by semester (active and non-active)
- List users by semester and role
- List users in active courses by semester

INSTRUCTURE

- User activity by date / time / course
- Page views across entire school over time
- Most active courses
- Activity by user
- .csv file for custom reporting

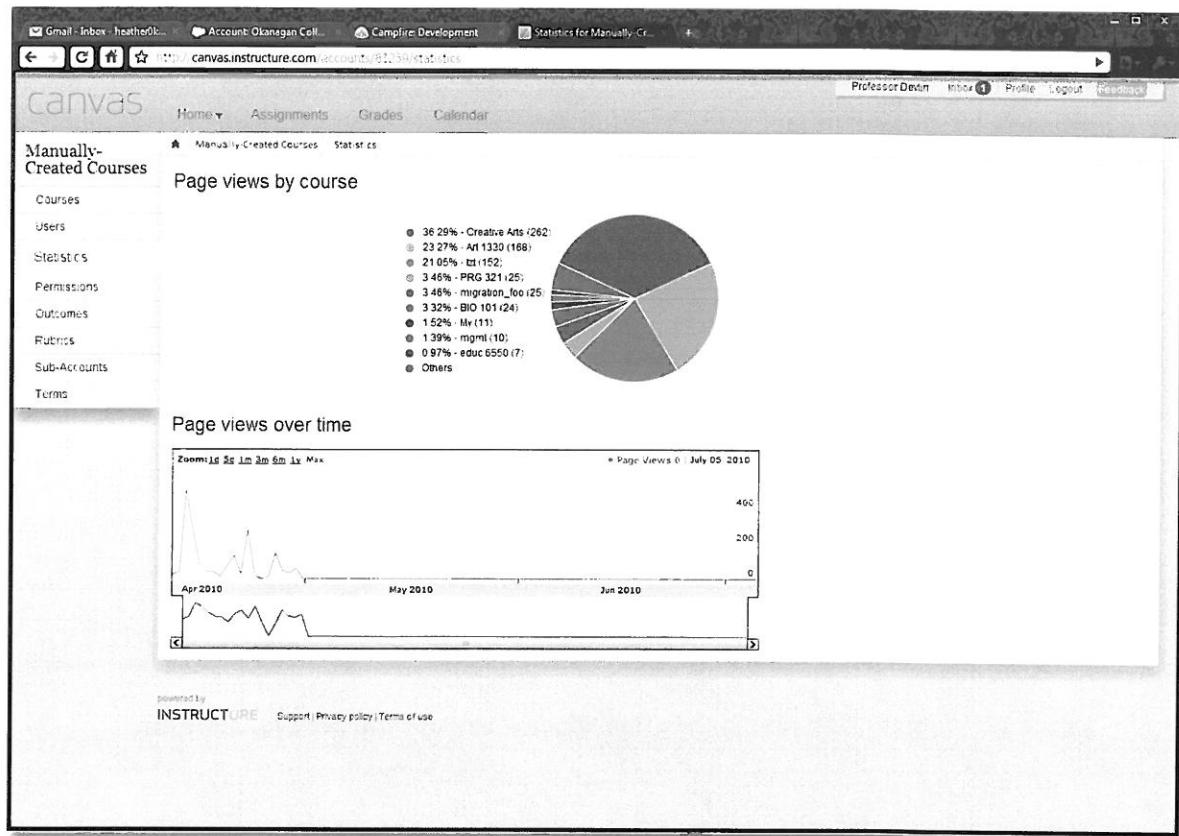


Figure 13: Sample Report

Foreign Languages: Canvas supports the UTF-8 character set and can encode every known language, which is native to Canvas, not a third-party tack-on. Below is a screen shot of our wiki page editor with samples of various languages typed directly into Canvas. Canvas will provide its User Interface in foreign languages as we expand internationally.

MUS 450 Pages Languages

Switch Views

Korean: 소디니 히 터치스 씨미 토 터치 씨 퍼 퍼.

Persian: آه شنیهار رخ سعث صاغنهت فاهن سشنر

Russian: Руддщд фпфштю

Hebrew: קורם שעמץ | יספַק טמו בשם רקש איזד

ints

Page Tools

Links

Link to other c
to insert a link

Wiki Page

– Art Blak
– Biograph
– Biograph
– Buddy F
– Class R
– Contact
– David M
– Drum Ar
– Elvin Jo
– Formula

Assignn
Quizzes
Announ
Discuss
Course

Figure 14: Examples of foreign languages typed into the Canvas rich text editor.

Assistive Technology: Canvas is only the second LMS on the market to receive the Gold Level Certification from the National Federation of the Blind. Canvas also provides the flexibility for special needs testing—expanded time limits, multiple attempts, and so on.

Archival ability: Instructure never deletes any course material, and will ensure that data is preserved in accordance with current Statewide or UMW standards. Instructure keeps all course and student data until the school decides to permanently delete the data. Instructure provides more than enough storage for all stored data, along with fully redundant systems and daily backups, and provides security and ease of access to data for any reason—auditing or otherwise.

The Instructure system saves all data, including:

- All Course Activity
 - Assessments (grading, quizzes, peer reviews, etc.)
 - Artifacts
 - Content
 - Communications
 - Learning Outcomes
 - Discussions

- Groups:** Canvas allows students to work in groups, defined by the instructor, or organized by the students themselves. Moreover, individuals not enrolled in the course can be allowed to audit or observe the course as a guest. Instructors can also set up peer reviews within groups.

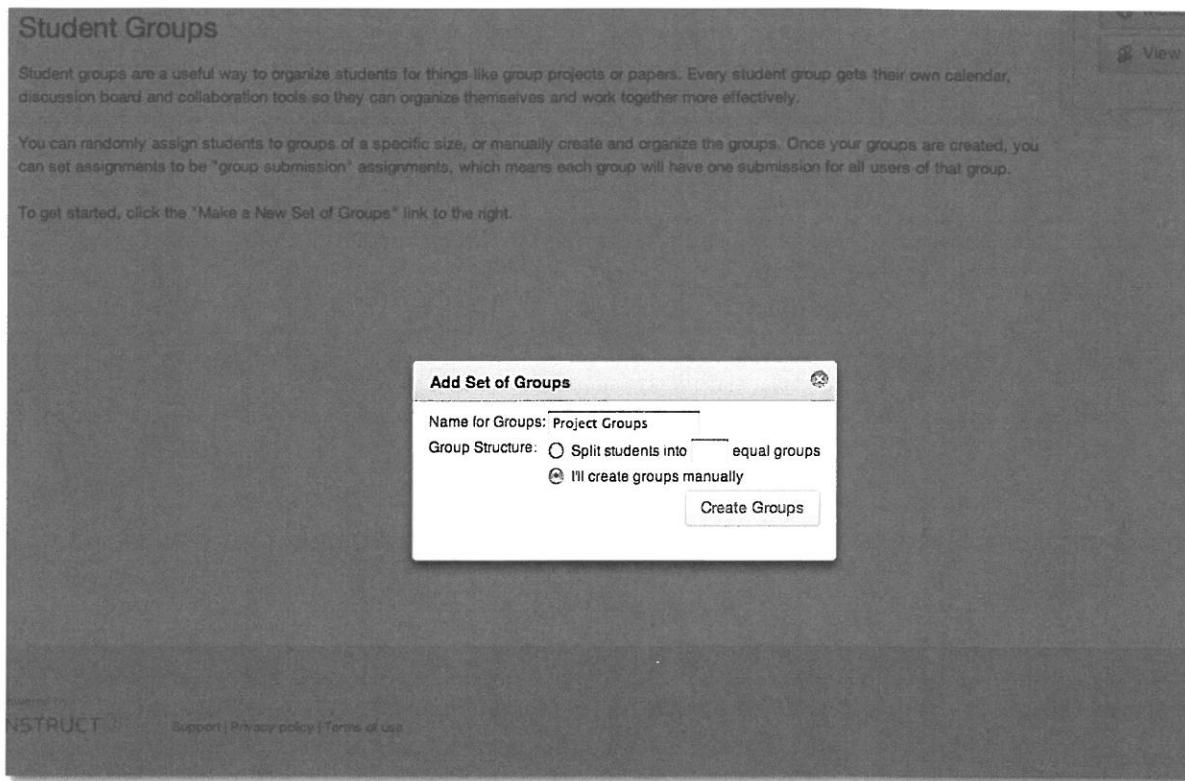


Figure 15: Create groups manually or automatically

- Display Grades:** Students have the ability to view their grades for each course, as well as run “what if” scenarios to determine what scores for each assignment or quiz are needed for the desired final grade. See Grade Book above.
- Branding:** Instructure will brand, or “private label” Canvas to include school logo and school colors. In addition, instructors can customize the look and feel of the home page of their course with banners, images, or any other content. Instructors can also determine the use of the navigation tabs for each class.
- Administration:** Administrators can dictate all levels of permissions, from course designers, to TA's, and down to the students.

The screenshot shows the 'Manage Permissions for L' page in the Canvas interface. The left sidebar lists 'Instructure Admin' and 'Courses'. The main area has a heading 'Explanation' with instructions about checkboxes. A table lists permissions for 'Students', 'TAs', 'Teachers', and 'Course Designers'. Most checkboxes are checked (green), except for 'View all grades' under 'Students' which is unchecked.

	Students	TAs	Teachers	Course Designers
View all grades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
View the group pages of all student groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
See the list of users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moderate the discussion forum (delete / edit other's posts, lock topics)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
View all student submissions and make comments on them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create web conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage default permissions (define these permissions for course role types)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit grades (includes assessing rubrics)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add / edit and delete events on the course calendar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage wiki (add / edit, delete pages)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add/Remove other (teacher, Course, Class, others) or TAs to the course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage add / edit / delete course files	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assign students to the course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create student collaborations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage Learning Outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
View usage reports for the course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage add / edit, delete assignments and quizzes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Send messages to course members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manage: create / edit / delete groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post to the discussion forum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Save Changes **Cancel**

Figure 16: Fine grain permissions

USABILITY

Canvas has redefined usability by providing a deep level integration with Web 2.0 tools, resulting in a simple and unified interface to both manage the course as well as integrate with external tools. With major advancements in usability *and* simplicity, instructors and students can leverage these new tools for teaching and learning.

The screenshot shows the Canvas course dashboard for 'MUS 450 Masters of Jazz'. The left sidebar includes links for Home, Syllabus, Assignments, Modules, Pages, Quizzes, Discussions, Files, and Posts. The main content area displays course details like 'Welcome', 'Instructor Biography', 'Office Hours', 'Contact Information', and a 'To Do' list. A calendar for the current month is shown at the bottom right.

Figure 17: Elegant and well organized user interface for maximum usability

A variety of teaching styles and methods can be accommodated with Canvas. Whether a course is face-to-face, instructor-lead, or self-paced, Canvas provides the tools for instructors to build their course according to their desired teaching styles. For example, instructors can establish prerequisites within course modules to control the pace of course delivery.

With Canvas, students can access their course tools even if their instructors are not logged in. Discussions, chat, web conferencing, and collaborations are made available to students, requiring no instructor mediation or communication outside of the classroom.

With an open architecture, Instructure doesn't require approval or consent from the institution to allow the institution to integrate learning management features and functionality into their other products and services. All Instructure functionality and school data is available programmatically outside of the Instructure system. This open system approach allows schools to control their own destiny while enjoying the benefits of a fully hosted and supported enterprise system. Our open API will allow UMW to integrate with any 3rd party tools in the future.

With an open architecture system, UMW is allowed to work and integrate with just about any external system. Below is a sample of systems that Instructure can already integrate with:

- Banner
- Delicious
- Outlook
- LDAP
- YouTube
- Equella
- Facebook
- Google Docs
- Scribd
- Respondus
- RSS/Atom Feeds
- Tiny Chat
- Twitter
- Google Calendar
- iCal
- Dim Dim
- Turnitin
- Wimba
- Soft Chalk

Canvas also supports the following web browsers:

1. Internet Explorer 7+
2. Safari 4+
3. Firefox 3+
4. Chrome

Instructure will strive to support all new versions of the browsers listed above at the time of release as long as a pre-release has been made available. In the case where a pre-release is not available, Instructure will provide support within 30 days of its release.

Communication: In addition to the communication tools built within Canvas, Canvas integrates with outside communication tools, resulting in the free flow of information in and out of Canvas. With the ability to select their own personalized communication method(s) (e.g. Twitter, Facebook, SMS Text, email), users can stay connected with the course without having to be logged on to Canvas. Users can also define the frequency of each notification. For example, if an instructor makes an assignment due date change, the student can receive an immediate, or delayed, notification via the communication method used most.

INSTRUCTURE

Users can be notified of over 15 different course events, including:

- Calendar changes
- Due date changes
- Grading alerts
- Course changes
- Assignment changes
- Announcements
- Policy changes
- New topics
- Topics the user has commented on
- New email messages
- Private messages from students

The screenshot shows the Canvas user profile interface for 'MARK BLOSIL'. The top navigation bar includes 'Courses', 'Assignments', 'Grades', 'Calendar', 'MARK BLOSIL' (profile icon), 'Inbox', 'Profile', and 'Logout'. The left sidebar lists 'MARK BLOSIL' under 'User Profile' with options: Home, Profile, Communication Preferences, Files, and ePortfolios. The main content area is titled 'User Profile' and displays the following information:

- Full Name: MARK BLOSIL (Note: This name is also used by teachers for grading)
- Display Name: MARK BLOSIL (Note: People will see this name in forums, messages, and comments)
- Time Zone: Mountain Time (US & Canada)

Below this is a section titled 'Web Services' with the note: 'Canvas can make your life a lot easier by tying itself in with the web tools you already use. Click any of the services in "Other Services" to see what we mean.' A checkbox is present: 'Let fellow course/group members see which services I've linked to my profile'. The 'Registered Services' section shows 'No Registered Services'. The 'Other Services' section contains a list of social media and service icons with the instruction: 'Click any service below to register:' followed by: Google Docs, Skype, Facebook, LinkedIn, Twitter, Delicious, and Diigo.

Figure 18: User Profile Screen

The screenshot shows the 'Communication Preferences' section of the Canvas interface for user 'MARK BLOSIL'. The left sidebar includes links for Home, Profile, Communication Preferences, Files, and ePortfolios. The main content area is titled 'Notification Preferences' with a sub-section for 'Assignment submissions in courses you teach'. It lists five categories with checkboxes for 'Email Me' and 'And Also' options, and radio buttons for 'Right Away', 'Daily', 'Weekly', and 'Never'. The categories are: 'For all assignment submissions in courses you teach', 'For new announcements', 'For calendar changes', 'For changes to course pages', and 'For new topics'. A note states: 'Will notify you of changes to any wiki or assignment pages (could be a lot of notifications)'. On the right, there's a 'Ways to Contact' sidebar with sections for 'Email Addresses' (listing 'mark@instructure.com') and 'Other Contacts' (with a 'Type' column and a 'Add Contact Method' link).

Figure 19: Sample of Notification Preferences

- Chat:** Canvas provides a synchronous chat feature whereby all users logged into the system, and in the same class and/or group, can communicate with each other.
- Discussions:** Both instructors and students can start, and contribute, to discussion topics. Discussions can be enhanced with any rich media like video, images, and wiki pages, and can be used for grading purposes, assignments, or for topical and current events.
- Web Conferencing:** All users have access to a web conferencing within Canvas. Web Conferencing extends beyond the classroom, allowing students to work on group assignments, participate in course discussions, or as a vehicle to get to know classmates in distance education programs.
- Mail:** Canvas has an internal email messaging system, which allows users to message the other individuals in their courses. Access to the users email can either be through Canvas, or via the notification preferences set by the user. For example, if the user has elected SMS text as one of their notification preferences, the user will be immediately notified when an email has been sent to them.
- Whiteboard:** Canvas Integrates with the third party application Dim Dim for synchronous Web Conferencing and Whiteboard, both real time and delayed.
- Synchronous Collaboration:** Canvas integrates with both Google Docs and Ether Pad for online collaborations.

Announcements:

Announcements can be created through our rich text editor. In addition to text, announcements can include images, video files, word docs, spreadsheets, and PDFs. The announcement history is maintained through the end of the course, and saved indefinitely along with all course content for future access or auditing.

Student Work**Assignments:**

Instructors can determine how assignments are submitted, either as a forum, text entry, website URL, media recording, or file upload. The instructor can also define submissions as online submissions or as paper submissions.

Submissions are date stamped, and the instructor can allow for multiple submissions, as well as late submissions, which are marked as such. Canvas also keeps a record of all submissions in sequence so that the instructor and student can refer back to previous submissions to see assignment changes and progress.

Instructors can also make group assignments, as well as have assignments peer reviewed—assigned randomly or manually.

The screenshot shows the Canvas LMS interface for creating an assignment. The left sidebar lists course navigation options like Home, Syllabus, Assignments, Modules, Grades, Announcements, Pages, Chat, Discussions, Files, People, Outcomes, Quizzes, Conferences, Collaborations, and Settings. The main content area shows a rich text editor toolbar above a text area containing a video link and assignment instructions. To the right is a sidebar titled 'Insert Content Into the Page' with tabs for Links, Files, and Images. It includes a 'Wiki Pages' section with a list of course pages and sections like Assignments, Quizzes, Announcements, Discussion Topics, and Course Navigation. The assignment details form on the left includes fields for Type (Assignment), Title (Stick Control Exercise #1), Assignment Group (Course), Score (30), Due Date (Aug 31 at 10:59pm), Grade By (Points), and various submission and review settings.

Figure 20: Determine how assignments are to be submitted

INSTRUCTURE

The screenshot shows a Canvas assignment page for 'Stick Control Exercise #1'. The assignment is due Aug 31 by 10:59pm, with a duration of 32 seconds. A video thumbnail of John Reily playing drums is displayed. The submission area includes tabs for 'File Upload', 'Text Entry', 'Website URL' (which is selected), 'Google Doc', and 'Media'. Below these tabs is a text input field containing the URL <http://ringostarr.com/home.php>. There is also a comments input field with the same URL. At the bottom are 'Submit Assignment' and 'Cancel' buttons.

This assignment can be submitted as a file upload, a text entry box, a website url, or a media recording

Submission

Turned In!
Sep 29 at 12:02am (late)
Submission Details
View the Original Page

Assigned Peer Reviews
None Assigned

Comments: No Comments

Course Sequence

Stick Control Exercise #1
Stick Control Exercise #2
see 'U' sequence

Teacher defined submission options.
Student is submitting a URL

Figure 21: Student sees submission options

MUS 450 Courses Assignments Grades Calendar

Stick Control Exercise #1

due Aug 31 by 10:53pm
out of 30

View the video below as I discuss a simple stick control exercise with John Reily--who is himself a master big band performer and teacher.

Take the time to study this relatively simple RLRL sticking with the bass drum added between hand strokes.

Assignment: Practice this stick control exercise, and once you feel proficient, video yourself and upload for my review.

Submission

- Turned In
- Sep 29 at 12:02am (late)
- Submission Details
- View the Original Page

Assigned Peer Reviews
None Assigned

Comments: No Comments

Re-submit Assignment

Course Sequence

- Stick Control Exercise #1
- Stick Control Exercise #2

see full sequence

Figure 22: Submission details

← □ Ringo Starr → (4th of 4 students) Gradebook (Course Home) Stick Control Exercise #1 (MUS 450)

This submission was a URL to an external page. We've included a snapshot of what the page looked like when it was submitted. Or you can click to view the original submission.

View the Original Submission for Ringo Starr

<http://ringostarr.com/home.php>

Assessment

Grade out of 3

Settings | Feedback 0/1 Graded

Submitted: Sep 29 at 12:02am
Note: This Submission Was LATE

Discussion

Teacher notified of late submission

Figure 23: Instructor notified of submission

File Management:	Instructors will always have access to their course content, and can reuse that content over multiple courses, semesters, and disciplines. With generous storage and bandwidth limits, past courses and their associated content need not be deleted. Instructure also provides automatic archival and restoration features to migrate content from one course to another. Likewise, sharing content between colleagues, and across courses, can be performed via the content migration tool. If UMW uses content sharing software like Equella, Instructure will provide the integration tool.
Assignments:	The submission process is flexible and intuitive, where students can easily submit assignments in any instructor approved format. Instructors can dictate what types of assignments are acceptable, whether they be text entries, file uploads and attachments, Website URL's, or media files—video and audio. From the assignment page, students are quickly guided through the submission process. Instructors can use embedded tools to give students feedback on assignments through either the Speed Grader® or the Grade Book.
Math/Science Editor:	Canvas has an integrated tool for math and science formulas called Latex—the industry standard for academic publication. This tool can also be given to students within the LMS for assignment submissions or in assessment features. However, Canvas is also looking at adding an alternative math equation editor that isn't so programming intensive.
Preview Mode:	Canvas looks identical to all users—instructors and students alike—making a preview function unnecessary.
Roles:	Administrators and instructors have the ability to change course settings, provide certain permissions, or restrict content by date.
Organization:	A variety of teaching styles and methods can be accommodated within Canvas. Whether a course is face-to-face, instructor-lead, or self-paced, the tools will allow instructors to build their course according to their desired teaching styles. Modules are supported and can be designed to be self-paced by locking modules until the previous module is complete, or as otherwise determined by the instructor. The instructor can also control the delivery of content within the modules.
Media Integration:	Canvas provides deep level integration with Web 2.0 tools such as blogs, RSS feeds, and wikis. Canvas has a simple and unified interface to manage not only course content, but also allowing the integration with external tools. Canvas allows instructors and students to leverage these new tools for teaching and learning without losing Canvas's advances in usability and simplicity. Anything that can be viewed in a web browser can be used as a learning tool.
Feedback:	Instructure believes that the user should guide the direction of Canvas. One way the user can provide this direction is through the use of a "Feedback" button built into every page of Canvas. This feedback button allows users in the

INSTRUCTURE

system to provide ideas for improvement or report that rare bug, which is received in real time by the Instructure support team and development engineers. Students can either provide feedback directly to Instructure, or privately to the instructor.

Learning Outcomes:

Canvas provides a resource for administration and faculty to ensure that student progress is tracked and measured by pedagogical goals or desired outcomes. Assessments will show what students know, or will demonstrate the specific skills they are to perform as a result of a learning activity established by the school, program, and/or instructor. Learning outcomes can be aligned using rubrics, our formal assessment tool (which can also be used for simultaneous grading). Assessing or grading student work is automatically collected and compiled, and the student data and progress is then easily reported for improving teaching, identifying at-risk students and/or for accreditation purposes. Assessment of a learning outcome can be reported at the course, program, department or school level. This unified approach dramatically lowers the amount of work required to begin implementing learning outcomes by intelligently re-using assessment workflows in grading to streamline the process.

Mobility:

Canvas is built using modern web standards making the application inherently accessible through mobile devices. Canvas looks good and functions well in both droid and apple devices, and Instructure is launching an iPad app for our SpeedGrader® tool. Instructure is committed to providing the best tools for education, and advancing the technology for use with mobile devices is part of that commitment.

ATTACHMENT II: LMS SOLUTION ARCHITECTURE DETAIL

Canvas is a vendor-hosted, SaaS offering. The application is architected to perform at Internet scale loads and traffic is made up of several large subsystems. The primary data store is comprised of a cluster of databases that are dedicated to each client school. The application or computation subsystem is multi-tenant where processing power is pooled across institutions and can be transparently scaled and expanded to meet any system load. This design affords data security between client institutions while attaining higher levels of performance and robust data redundancy. Instructure may at its discretion dedicate portions of the application clusters to specific clients.

Instructure will use commercially reasonable efforts to make the service available with an Annual Uptime Percentage (defined below) of at least 99.9% during the Service Year. A sample Service Level Agreement is at the end of this document.

Instructure has scheduled maintenance every Wednesday from 12:00AM - 2:00AM MST. Any maintenance that may require downtime or is a major software upgrade will be scheduled during this window. Partners will also be notified of this maintenance by email with at least 72 hours notice. Any major maintenance that must happen outside this window will be preceded by a notification at least 72 hours in advance.

Instructure utilizes various cloud computing providers and data centers not directly owned by Instructure. Each data center is a top-tier hosting facility with stringent security. Some providers currently in use are the industry-standard Amazon Web Services, Rack Space, and Slice Host.

Instructure isolates each client's data into completely separate data stores. Additionally, any data stored on behalf of the client is made inaccessible to any user and is associated with the appropriate authorization policy. These policies apply both to the client as well as to employees internal to Instructure. Any access of client data consults the access policy, which takes into account the creator/owner of the content and the specific role of the administrator in allowing access.

Any data that enters the Instructure Canvas platform is automatically saved redundantly across several servers and data centers. Data backups occur in real-time and require no specific intervention or request, and course content can be exported outside the system into a package easily accessible to other computer programs.

As a full-service solution, Canvas has taken great leaps forward in alleviating the need for manual backups. For example, when content or enrollment data is "deleted" by a student or instructor, Canvas performs a soft-delete; an action analogous to the Recycle Bin. This allows the data to be recovered directly from within the system without requiring the user to have saved the data at regular intervals to their desktop machines. Content pages are versioned, along with student submissions.

With an open architecture system, schools don't require approval or consent of their LMS provider to integrate learning management features and functionality into other products and services. All Instructure functionality and school data is available programmatically outside of the Instructure system. This open system approach allows schools to control their own destiny

INSTRUCTURE

while enjoying the benefits of a fully hosted and supported enterprise system. Our open API will allow UMW to integrate with any 3rd party tools in the future.

INTEGRATION

Currently, Datatel sells a separate integration "bridge" for each LMS product, which are often slight deviations of the IMS Enterprise XML Standard Instructure adheres to. Instructure will attempt to reuse one of the existing supplied bridges to make our integration tool flexible enough to accept output from Datatel. Otherwise, Instructure will create a Datatel bridge whose output is either the XML endpoint we use, or simply our CSV endpoint.

Once completed, when any relevant information changes in regards to course registration or student enrollment within the SIS, those changes are made manifest in the XML data exchanged with the SIS and pushed into the Instructure system. Instructure accepts the data and reflects those changes in user enrollments and policies. Instructure adds native support for merging courses and sections of students as well as cross-listed courses (the same course offered under various names and through separate departments).

Canvas integrates with a variety of identity protocols to enable single sign-on for users of the system. Instructure creates an identity adapter for each different authentication system allowing Canvas to "speak" to different systems specific for each client. These adapters are created, maintained and supported by Instructure. LDAP is among the current adapters as well as SAML, the same protocol that is used to integrate with Google Apps for Education, which also provides the basis for Shibboleth.

Canvas can be integrated with practically any external identity system, including federated authentication systems like SAML (Shibboleth is a profile of SAML), Central Authentication System (CAS), or OpenID.

Canvas seamlessly utilizes a variety of communication channels and vehicles for keeping all users actively engaged in the educational experience. These channels include e-mail, text (SMS), Facebook, and RSS. Since Canvas is built on an open architecture, other systems can be given direct access to data and LMS functionality. This makes it very straightforward to integrate Canvas with any portal since the data inside Canvas is openly available.

Canvas contains the same characteristics of many Web 2.0 applications; ease-of-use, usability, and interactivity. Canvas was designed to be "of the web", meaning that anything that can be viewed within a web browser can be trivially integrated within Canvas; whether it be content, media, or submitted as a learning activity. Canvas can be integrated with content repositories, but natively integrates with the Web, the largest content repository ever built.

Canvas was built from an incredible collaboration between several dozen universities. Each institution that employs Canvas is not merely another client, but an active collaborator in improving the product to attain their specific education goals. This is a different kind of company, and a different way of developing software solutions. Engineers from Instructure reach out to the technical providers at each institution and create an implementation plan collectively. Any problems that arise are immediately brought to the selected technical team members of UMW and the implementation plan is adjusted accordingly. The end-goal is to

INSTRUCTURE

improve teaching and learning; the Instructure team is committed to making any deployment of Canvas completely successful in all respects.

Instructure has built specialized tools for extracting course content, assignments, quizzes and other course materials out of Blackboard CE8, and 9, Vista, Angle, and WebCT. These tools have been created to be simple and usable so that instructors can quickly migrate content into their own courses individually. Alternatively, through Instructure's open API, UMW's IT department can automatically schedule the migration of all courses on behalf of the instructors.

Migration of content can occur at the time the course is created or anytime thereafter. Migration of content is performed on an existing course, empty or not. The migration assistant can be executed several times to collect and combine content from various courses and sources. Migration of content is mediated, meaning the user performing the migration can selectively choose a subset of content to be copied or transferred into the target course.

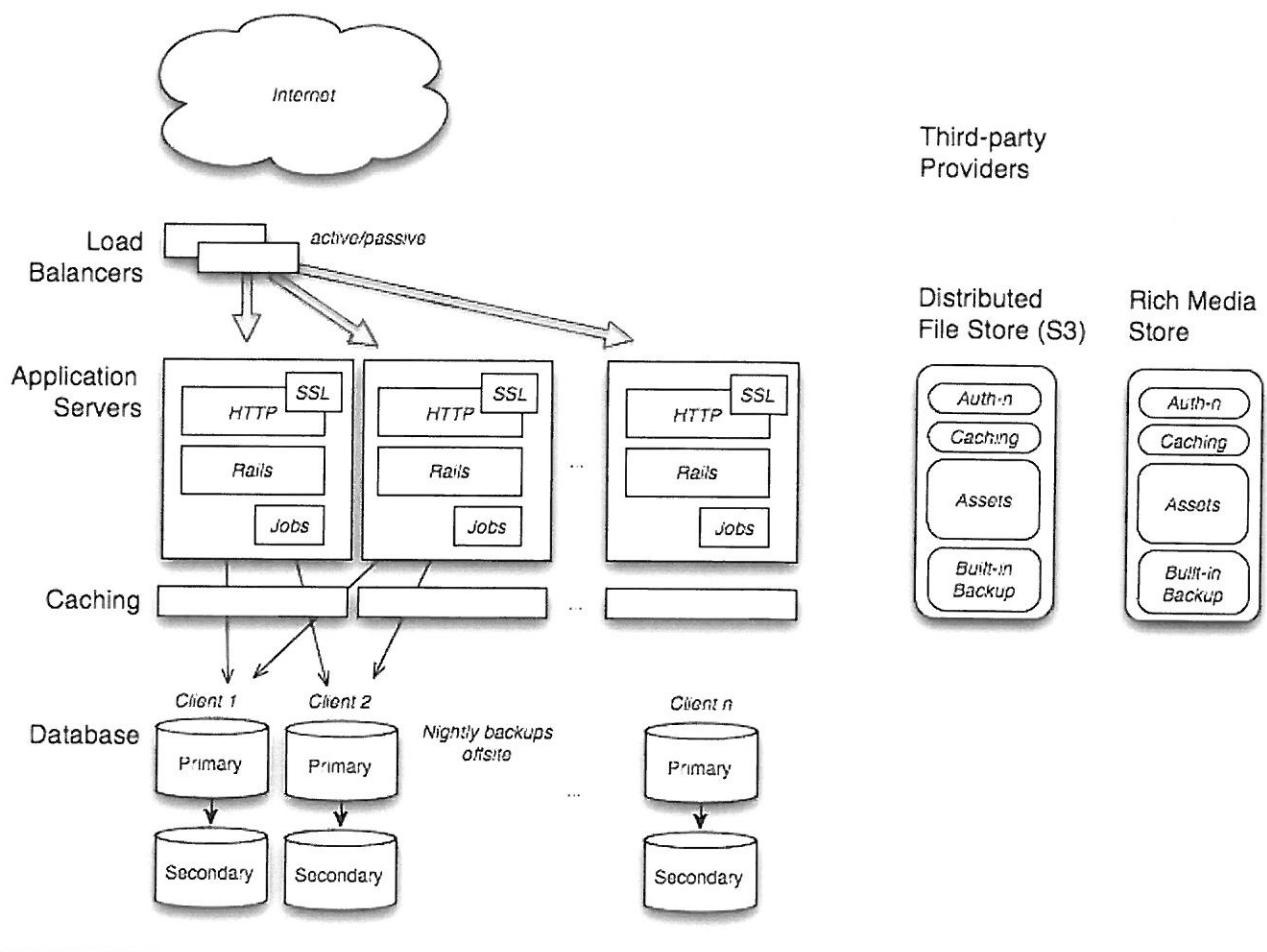
Migration is typically performed when moving course material from one LMS system to another, but migration is also utilized to move content from one Canvas course to another (for example, from semester to semester). In addition to recreating the structure and content of the course, the migration assistant will intelligently reschedule due dates and calendar events to the new date ranges for the new semester. The migration tool can also specify day substitutions, as in the case where a Monday-Wednesday-Friday course will be rescheduled to Tuesdays-Thursdays for the upcoming semester.

Instructure is intensely focused on usability. We have an intelligent and intuitive interface, which requires far less support, thus far less frustration. We feel strongly about training, and will send one of our highly trained Infrastructure Engineers to UMW for three days of training for the primary administrators, and/or faculty. UMW can elect to spend all three days with technical staff, or dedicate some portion to faculty training. We maintain exceptional training for both user types, and all described training is included in the base license cost. Alternate or additional training methods and plans may be explored at UMW's request.

ATTACHMENT III: INSTRUCTURE ARCHITECTURE DOCUMENT

Canvas is based on a multi-tier cloud-based architecture. This section will describe the various tiers and components in those tiers that make up the Instructure service. It will also describe how Instructure can scale to high loads and how Canvas is resilient to component failure.

This is logical overview of the different tiers. Each will be described below separately.



DESCRIPTION OF TIERS

Load Balancers

Load balancers are deployed in pairs in an active/passive configuration. The active load balancer handles all incoming requests and dispatches the underlying connection to available application servers. The load balancer maintains a dynamic list of available application servers for dispatch. Approximately every 5 seconds the load balancer sends a heartbeat, a simple network message to verify that the application server is still up, available, and capable of receiving additional work—the load balancer does not dispatch work to unresponsive application servers. This list of

live application servers is mirrored in near real-time to the passive load balancer, and load balancers are fully monitored for load and potential failure.

Component Failure

The passive load balancer continuously verifies that the primary load balancer is available and servicing requests by sending a heartbeat every second. When the primary load balancer stops responding to heartbeat checks, the passive load balancer:

1. assumes the IP address of the failed primary load balancer
2. promotes itself as the primary load balancer by making an API call
3. sends an alert to the NOC (Network Operations Center)

Capacity

Additional capacity can be added to the load-balancing tier when the monitoring system detects load saturation. Load balancers are always added in active/passive pairs to maintain high availability. Additional load balancer pairs are allocated IP addresses, and then registered for DNS round-robin lookups.

Updates/patches

Load balancer operating systems are updated regularly with security patches. These are done one at a time so that there is no interruption in servicing clients.

APPLICATION SERVERS

Application servers process incoming requests from the load balancers. They are responsible for executing the business logic, rendering HTML, and returning static assets to the web browser.

Component Failure

The application servers are monitored continuously by the load balancers via a heartbeat mechanism. When an application server stops responding to heartbeat checks, the load balancer will remove it from the pool of servers to send requests to. The load balancer will keep checking the application server until it starts responding again, at which point it will start sending it new traffic.

The application servers do not persist any state, so losing one does not affect the service directly. Because there is no shared state between application servers—it is quick and easy to deploy new ones when necessary.

Capacity

Application servers are constantly monitored individually for load and capacity information. When all application servers reach a certain load threshold, a new application is automatically provisioned and deployed. The Instructure operations team also has the ability to schedule new application servers in anticipation of high load times, like during the beginning and end of semesters. For larger partners we may, depending on size and performance requirements, dedicate application servers for specific clients.

Updates/patches

Application server operating systems are updated regularly with security patches. These are done one at a time so that there are no interruptions in servicing clients.

Upgrades to the application itself are also done in a way that does not affect the clients using the service.

CACHING LAYER

The caching layer provides a substantial performance optimization. A healthy cache means that the application servers need to make fewer trips to the database, thereby speeding up response times. The caching layer is made up of several machines running memcached. Data is spread out across all machines, and all data stored by the cache is ephemeral, so losing a caching node does not include data loss.

Component Failure

The cache servers are constantly monitored. When a cache server dies, a new one is provisioned and deployed to take its place. While it's down, the data that would have been stored on it is simply retrieved from the database instead. This may have a temporary performance impact on the service until the new cache node is deployed.

Capacity

Cache servers are completely memory based, and monitored continuously by Instructure, and if the cache hit rate falls below an acceptable threshold, new cache servers are provisioned and deployed.

Updates/patches

Cache server operating systems are updated regularly with security patches. These are done one at a time so that there is no interruption in servicing clients.

RELATIONAL DATABASES

Important course and user data is stored in relational databases. Databases are partitioned for each institution for performance and data isolation reasons. Each institution has a pair of databases: a primary and secondary, and in separate locations. The primary replicates all data to the secondary in near real-time. A complete backup is also taken every 24 hours and stored in a third geographically separate location

Component Failure

On failure of the primary database, the secondary will be promoted to primary and a new secondary database is provisioned and deployed. Upon failure of the secondary database, a new secondary database is provisioned and deployed. In the unlikely event of simultaneous component failure or data corruption, the most recent daily backup will be used to create a new database pair.

Capacity

Databases are constantly monitored for resource usage and response time. If either database begins reaching peak load, it will be migrated to a machine with higher resources. Our

experience and testing show that "scaling up" is adequate for most institutions. For special situations where this will not suffice, we can partition again within an institution (for example, between colleges).

Updates/patches

Since the databases together form a "single point of failure" for a given population of users, updates to each system are performed carefully and with planning. Generally, one database will be updated at a time. First the secondary database will be updated, then promoted to be the primary, then the (new) secondary will be updated.

DIGITAL ASSET STORE

Digital assets like files, documents and learning artifacts are stored outside the database in a separate and scalable service. Metadata and access controls are stored and maintained within the relational database. The architecture of this storage tier is very similar to the Instructure architecture outlined in this document. Additional capacity and scaling is performed independent of the other tiers on an as-needed basis. Instructure has partnered with Amazon S3 to provide industry-proven scaling, reliability and data integrity.

RICH MEDIA STORE

Rich media like videos, audio recordings and webcam captures are stored outside the database in a separate and scalable service. Metadata and access controls are stored and maintained with the relational database. The architecture of this media tier is very similar to the Instructure architecture outlined in this document. Additional capacity and scaling is performed independent of the other tiers on an as-needed basis. Instructure has partnered with Kaltura to provide industry leading storage, streaming and recording of digital media.

ATTACHMENT IV: CUSTOMER SUPPORT

Instructure is passionate about contributing to a positive and productive educational experience for all participants. We have built a solution for administrators, instructors and students alike, and believe that their voice and feedback are critical to our ability to continue providing the most cutting edge innovations.

Informative, responsive, and timely resolution is core to our support solutions.

1. Instructure provides its partners with the following support solutions:
 - a. Live Telephone support Monday – Friday 7am to 6pm MST
 - b. After-hours On-Call support (24/7/365)
 - c. 24/7 Online support via FAQs, Knowledgebase and Support Forums
 - d. 24/7 Security and monitoring of the hosted solution
 - e. 99.9% system uptime guarantee
 - f. LMS Admin Portal access to Support Center resources and support ticket information
2. Instructure provisions updates automatically and generally without any visible performance impairment, so uptime is maintained.
3. Instructure has a weekly scheduled maintenance window every Sunday 2:00AM - 4:00AM MST. Any maintenance that may require downtime or is a major software upgrade will be scheduled during this window. Institutions will be notified at least 48 hours in advance of any major maintenance that must occur outside the weekly scheduled maintenance window.
4. Support solutions are provided for all user types.

Support Solutions	Primary System Administrator	Faculty	Students
Live Phone Support 7a – 6p, MST	Yes		
After-hours On-Call support Support Engineer on call (24/7/365)	Yes		
24/7/365 Email Support	Yes		
Support Ticket Issuing via Canvas integrated “Support Tool”	Yes	Yes	Yes
Searchable FAQs & Knowledgebase	Yes	Yes	Yes
Support Forums	Yes	Yes	Yes

INSTRUCTURE

Support Escalation By Ticket Type	Institution Provides	Instructure Provides to All Users	Instructure Service Center Provides support to Institution Primary System Administrator
<ul style="list-style-type: none">• Enrollment• Login• Course or Institution Policy	Yes		
<ul style="list-style-type: none">• Bug Reporting		Yes	Yes <i>Ticket status via email</i> <i>LMS Admin portal access</i>
<ul style="list-style-type: none">• Integration• Migration• Other system issue			Yes <i>Ticket status via email</i> <i>LMS Admin portal access</i>

ATTACHMENT V: SAMPLE INSTRUCTURE SUBSCRIPTION/SLA AGREEMENT

This Instructure Service Level Agreement ("SLA") is a policy governing the use of Instructure services ("Instructure") under the terms of the Instructure Customer Agreement (the "contract") between Instructure, Inc. ("Instructure", "us" or "we") and users of Instructure's services ("you"). This SLA applies separately to each account using Instructure. We reserve the right to change the terms of this SLA in accordance with the Contract Agreement.

Service Commitment

Instructure will use commercially reasonable efforts to make the Instructure service available with an Annual Uptime Percentage (defined below) of at least 99.9% during the Service Year. In the event Instructure does not meet the Annual Uptime Percentage commitment, you will be eligible to receive a Service Credit as described below.

Definitions

- "Service Year" is the preceding 365 days from the date of an SLA claim.
- "Annual Uptime Percentage" is calculated by subtracting from 100% the percentage of 5-minute periods during the Service Year in which Instructure was in the state of "Unavailable." If you have been using Instructure for less than 365 days, your Service Year is still the preceding 365 days but any days prior to your use of the service will be deemed to have had 100% Region Availability. Any downtime occurring prior to a successful Service Credit claim cannot be used for future claims. Annual Uptime Percentage measurements exclude downtime resulting directly or indirectly from any Instructure SLA Exclusion (defined below).
- "Unavailable" means that all of your Instructure hosted services have no external connectivity during a five-minute period.
- The "Eligible Credit Period" is a single month.
- A "Service Credit" is a dollar credit, calculated as set forth below, that we may credit back to an eligible Instructure account.

Service Commitments and Service Credits

If the Annual Uptime Percentage for a customer drops below 99.9% for the Service Year, that customer is eligible to receive a Service Credit equal to 10% of their monthly bill (excluding any one-time payments) derived from their annual rate for the Eligible Credit Period. To file a claim, a customer does not have to have wait 365 days from the day they started using the service or 365 days from their last successful claim. A customer can file a claim any time their Annual Uptime Percentage over the trailing 365 days drops below 99.9%.

INSTRUCTURE

We will apply any Service Credits against future Instructure payments otherwise due from you. Service Credits shall not entitle you to any refund or other payment from Instructure unless you are in your final year of contract and are terminating your Instructure Customer Agreement. Service Credits may not be transferred or applied to any other account. Unless otherwise provided in the customer Agreement, your sole and exclusive remedy for any unavailability or non-performance of Instructure or other failure by us to provide Instructure services is the receipt of a Service Credit (if eligible) in accordance with the terms of this SLA or termination of your use of Instructure.

Credit Request and Payment Procedures

To receive a Service Credit, you must submit a request by sending an e-mail message to sla-request@instructure.com. To be eligible, the credit request must (i) include your full institution name in the subject of the e-mail message; (ii) include, in the body of the e-mail, the dates and times of each incident of Unavailable that you claim to have experienced; (iii) include your request logs that document the errors and corroborate your claimed outage (any confidential or sensitive information in these logs should be removed or replaced with asterisks); and (iv) be received by us within thirty (30) business days of the last reported incident in the SLA claim. If the Annual Uptime Percentage of such request is confirmed by us and is less than 99.9% for the Service Year, then we will issue the Service Credit to you within one billing cycle following the month in which the request occurred. Your failure to provide the request and other information as required above will disqualify you from receiving a Service Credit.

Instructure SLA Exclusions

The Service Commitment does not apply to any unavailability, suspension or termination of Instructure services, or any other Instructure performance issues: (i) that result from Service Suspensions described in the Customer Agreement; (ii) caused by factors outside of our reasonable control, including any force majeure event or Internet access or related problems beyond the demarcation point of Instructure; (iii) that result from any actions or inactions of you or any third party; (iv) that result from your equipment, software or other technology and/or third party equipment, software or other technology (other than third party equipment within our direct control); (v) that result from failures of individual instances not attributable to Unavailability; or (vi) arising from our suspension and termination of your right to use Instructure in accordance with the Customer Agreement (collectively, the "Instructure SLA Exclusions"). If availability is impacted by factors other than those explicitly listed in this agreement, we may issue a Service Credit considering such factors in our sole discretion.

A. Services and Training

Instructure is intensely focused on usability. We have an intelligent and intuitive interface, which requires far less support, thus far less frustration. We feel strongly about training, and will send one of our highly trained Infrastructure Engineers to UMW for three days of training for the Primary Administrators, and/or Faculty. UMW

INSTRUCTURE

can elect to spend all three days with technical staff, or dedicate some portion to faculty training. We maintain exceptional training for both user types.

- 1: Technical Staff - 3 days training services and materials are provided for technical staff.
 - a. Interactive presentation and hands-on training
 - b. Informative and searchable library of video and written training.
- 2: Faculty – Training for the technical staff would generally be provided by UMW following Instructure's training of the Administrators and Technical Staff.
- c. UMW may opt to modify the training agenda to include Faculty time with our trainers.
- d. Informative and searchable library of video and written training.
- e. Students – Training for students will be provided by UMW, as well as Instructure's informative and searchable library of video and written training.

INSTRUCTURE



where great minds get to work

Procurement Services
1301 College Ave
Fredericksburg, Va. 22401

RENEWAL OF CONTRACT NOTICE

July 21, 2014
RFP 11-03

Name: Instructure
Address: 3051 W. Maple Loop Dr.
Lehi, UT 84043

To Furnish: Learning Management System for the University of Mary Washington

Initial Contract Period: April 18, 2011 – July 31, 2014

The contract is hereby extended for the period from August 1, 2014 – July 31, 2015 subject to all conditions and requirements of the resulting contract, purchase specifications, warranties, and other stipulations, with the following exceptions:

As of October 2013, the University of Mary Washington was approved by the State of Virginia for Tier II Operating Authority for Procurement.

Effective with this renewal and future matters of this contract:

- Contractual references to the [Virginia Public Procurement Act \(VPPA\)](https://vascupp.org/rules.pdf) will convert to **the Rules Governing Procurement of Goods, Services, Insurance, and Construction by a Public Institution of Higher Education of the Commonwealth of Virginia**. The link can be found at <https://vascupp.org/rules.pdf>
- Contractual references to the [Agency Procurement and Surplus Property Manual \(APSPM\)](https://vascupp.org/hem.pdf) will convert to the **Commonwealth of Virginia Purchasing Manual for Institutions of Higher Education and their Vendors**. The link can be found at <https://vascupp.org/hem.pdf>
- General terms and conditions of the original solicitation and resulting contract will convert to **University's mandatory and non-negotiable General Terms and Conditions**. The link can be found at : <http://adminfinance.umw.edu/procurement/umw-policies-and-procedures-2/>

All other terms and conditions remain unchanged.

PUBLIC POSTING OF COOPERATIVE CONTRACTS: University of Mary Washington maintains a web-based contracts database with a public gateway access. Any resulting cooperative contract will be posted to the publicly accessible website. Contents identified as proprietary information will not be made public.

Please forward a current certificate of insurance for our files.

This signed acknowledgment of extension will become part of the contract documents which include the original solicitation and your bid/proposal.

Matthew Seal

Signature

Sr. SRA Analyst

Title

8/8/14

Date

Sincerely,
Erma A. Baker CPPO, VCCO, VCO
Assistant VP for Business Services & CPO



where great minds get to work

Procurement Services
1301 College Ave
Fredericksburg, Va. 22401

RENEWAL OF CONTRACT NOTICE

June 15, 2015
RFP 11-03

Name: Instructure
Address: 3051 W. Maple Loop Dr.
Lehi, UT 84043

To Furnish: Learning Management System for the University of Mary Washington

Initial Contract Period: April 18, 2011 – July 31, 2014

The contract is hereby extended for the period from August 1, 2015 – July 31, 2016 subject to all conditions and requirements of the resulting contract, purchase specifications, warranties, and other stipulations. Please forward a current certificate of insurance for our files.

This signed acknowledgment of extension will become part of the contract documents which include the original solicitation and your bid/proposal.



Signature
Erma A. Baker

Title
CORP. COUNSEL

Date
6/15/15

Sincerely,
Erma A. Baker CPPO, VCCO, VCO
Assistant VP for Business Services & CPO



COMMONWEALTH OF VIRGINIA
UNIVERSITY OF MARY WASHINGTON
NOTICE OF CONTRACT RENEWAL
June 03, 2016

UCPUMW 11-28
Learning Management System

From: Erma Baker, VCO, VCCO, CPPO
Assistant VP for Business Services & CPO

Contractor Name: Instructure
3051 W. Maple Loop Dr
Lehi, UT 84043

Contract Period: 8/1/2015 – 7/31/2016 with 3 one year renewal options remaining

Renewal Period: 8/1/2016 – 7/31/2017

In accordance with the "Renewal of Contract" provision within the special terms and conditions of the original contract, UCPUMW 11-28, the contract is hereby extended for the aforementioned renewal period. This signed acknowledgment of extension will become part of the contract documents which include the original solicitation, all addenda, the original bid/proposal, the standard contract/purchase order and any subsequent contract modifications. All contract pricing and services will remain the same.

A handwritten signature in blue ink, appearing to read "Robert Matthews", is written over a horizontal line.

Signature

Robert Matthews

Name

Pricing Manager

Title

7/7/2016

Date