



eCourses Technical Specifications

eCourses perform optimally when devices used to access the platform meet minimum hardware and software specifications. While eCourses may function properly on lesser hardware/software, Harris Digital Learning can effectively support users only when eCourses are delivered via devices meeting the minimum standards.

Technology

To use Harris Digital Learning eCourses, an end user must have:

- A device that meets or exceeds the minimum required specifications. See specific hardware and software requirements below
- A high-speed Internet connection (suggested minimum: 3 Mbps upload and download speed)
- Media player
- PDF viewer
- Pop-up blocker turned off in all browsers being used for eCourses
- Office suite (Google Docs, Microsoft Office, Open Office, Libre, etc)
 - Most essay responses allow for entry into a WYSIWYG, however some Language Arts courses require writing assignments uploaded as a document).
- Speakers or headphones

Recommended, but not required, items

- Printer
- Mouse
- Keyboard for tablets
- Java enabled
- Audio recording program and microphone (**only** required for foreign language courses)
- Java SDK (**only** required for Java course)

Device Specifications

While eCourses will function correctly on all configurations configured below, preferred options in each category have been bolded.

Operating System Options	Supported Browsers	Additional Specifications
PC Users		
Windows 8.1 Windows 10	Edge Latest (96) Chrome 90-9	Minimum 1024x768 screen resolution preferred
Mac Users		
Mac OS 10.13 over	Safari (latest 2 versions) Chrome (latest 2 versions)	Minimum 1024x768 screen resolution preferred
Chromebook Users		
Chrome OS		Minimum 1024x768 screen resolution preferred

TLS Ciphers supported by the Server

TLShv1.2

TLSh_EDCHL_RSA_WITH_AES_256_GCM_SHA384
TLSh_EDCHL_RSA_WITH_AES_128_GCM_SHA256

TLShv1.3

TLSh_AES_256_GCM_SHA384
TLSh_CHACHA20_POLY1305_SHA256
TLSh_AES_128_GCM_SHA256

Browser Refresh Settings

Users' Web browsers must be set to refresh every time a page is viewed (instead of loading a page from cache) in order for the system to correctly display updated information.

Email Communication Addresses and Policies:

Edison will be communicating with the users with email address no-reply@HarrisDigitalLearning.com. In order to receive the emails:

- Allow "Harris Digital Learning.com" domain in Anti-spam policy. This will ensure mail will not be diverted to spam folder.
- Whitelist the domain "harrisdigitallearning.com" at Mail exchange, so that emails with links will not be blocked.
- Whitelist "Acadeum.com" and any teaching University domains for which students are taking a Dual Enrollment course.

Firewall IP Addresses and Ports

Your firewall must allow outbound traffic to the following Internet addresses in order to access our content:

pub.harrisdigitallearning.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

esw.harrisdigitallearning.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

courseplayer.Harrisdigitallearning.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

media.harrisdigitallearning.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

mediacdn.harrisdigitallearning.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

proxy.harrisdigitallearning.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

SmartFox server

- TCP port 9339

caolacourses.harrisdigitallearning.com (if applicable)

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

portal.harrisdigitallearning.com (if applicable)

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

harrisdigitallearning.speechstream.net

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

sscache.speechstream.net

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

configuration.speechstream.net

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

connect.discoveryeducation.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

app.discoveryeducation.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

www.explorelearning.com

- TCP port 80 (HTTP) and TCP port 443 (HTTPS)

Or simply allow:

- TCP port 80 (HTTP) and TCP port 443 (HTTPS) to any host ending in ".harrisdigitallearning.com"
- TCP port 80 (HTTP) and TCP port 443 (HTTPS) to any host ending in ".provostacademy.com"
- TCP port 80 (HTTP) and TCP port 443 (HTTPS) to any host ending in ".speechstream.net"
- TCP port 80 (HTTP) and TCP port 443 (HTTPS) to any host containing ".discoveryeducation.com"
- TCP port 80 (HTTP) and TCP port 443 (HTTPS) to any host containing "explorelearning.com"
- TCP port 9339 to host 208.67.121.216

Technology Assessment

Please perform an assessment of the device(s) that will be used with eCourses prior to implementation. This will confirm that they meet the above minimum requirements. If they do not meet these requirements, please update the hardware and/or software to meet these specifications.

Compatibility Test Procedure

1. Using a supported browser connected to the internet, go to:
<https://esw.harrisdigitallearning.com>
2. On the login page, enter the following test credentials and click the **Sign In** button:

Username: siteready
Password: welcome

The student portal homepage should load and resemble the following screenshot.



Username

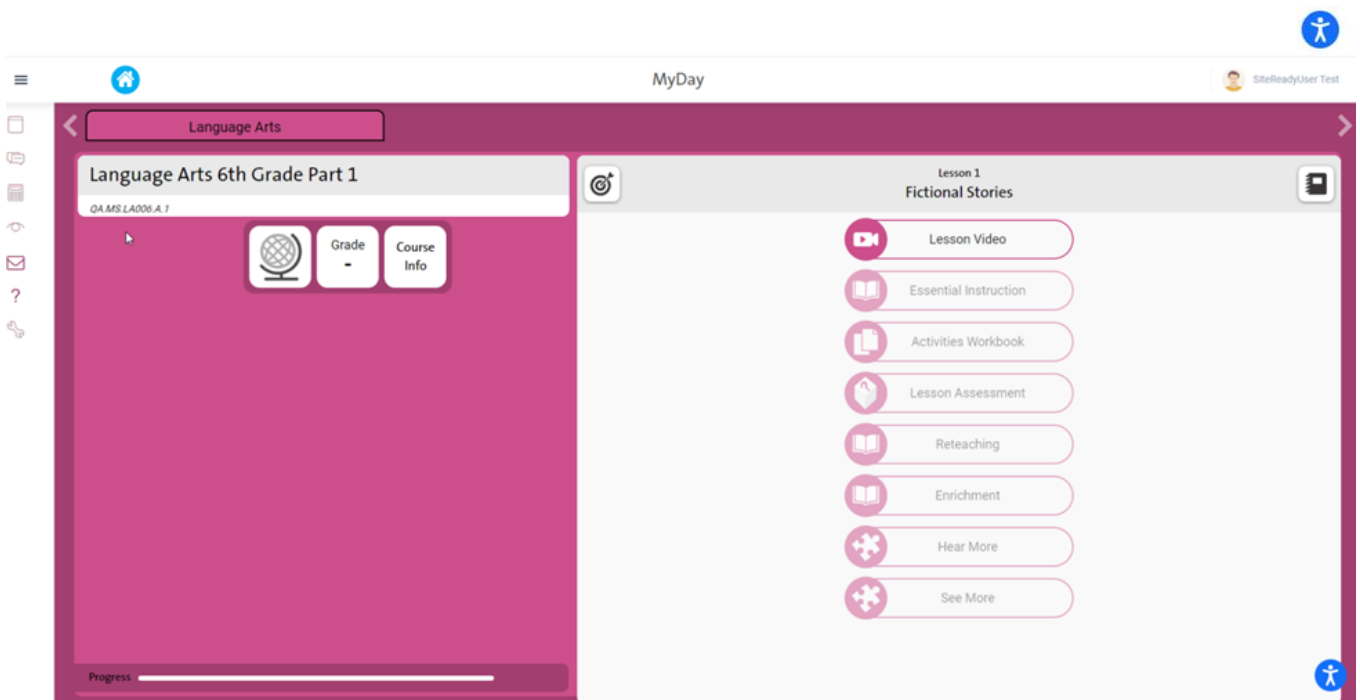
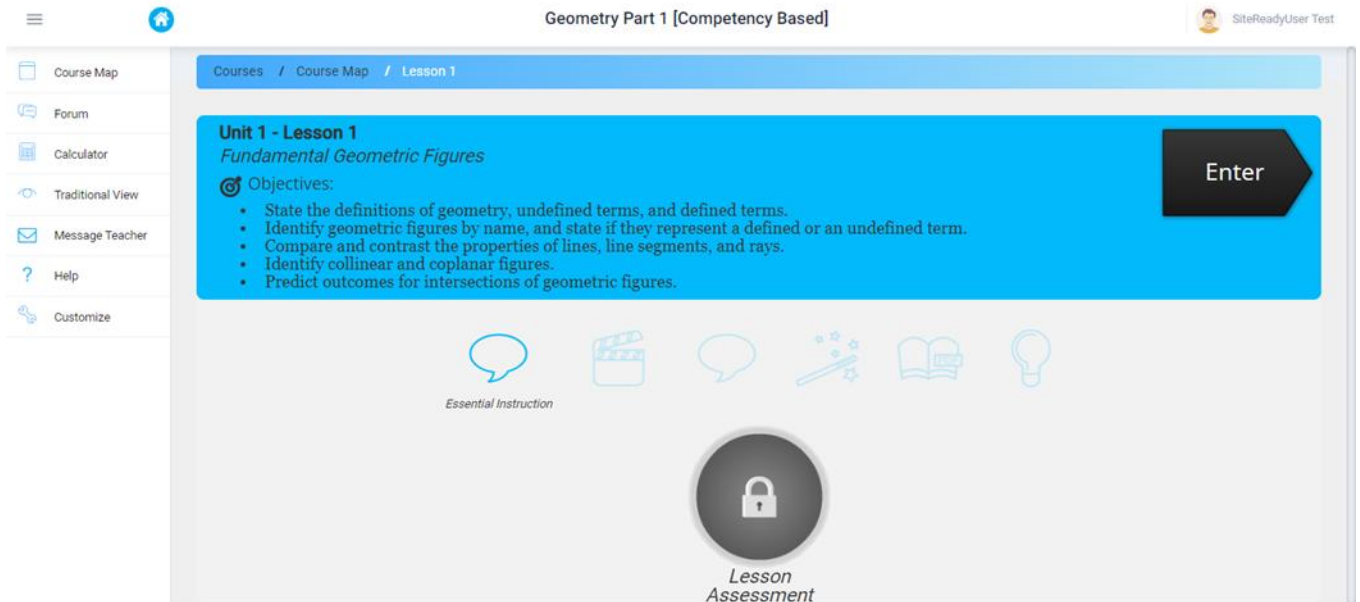
Password

[Forgot Password](#) [Sign in](#)

3. Select a course name or its icon to expand its "accordion" drawer. Inside, the individual course parts are listed, with the greyed out locked course parts indicating the student isn't actively enrolled in that course part. Click or tap anywhere in the white box for a course part to enter the course. If you don't see a course open, it may have been blocked by a pop-up blocker, so please make sure to always allow pop-ups for this site.

The screenshot shows the student portal homepage. At the top, there's a navigation bar with the Harris Digital Learning logo, a user profile icon labeled "SiteReady/User Test", and a dropdown menu set to "2024-2025 QA". Below the navigation bar, the main content area is divided into two columns. The left column features four course cards: "Astronomy" (1 part, CURRENT), "Geometry" (4 parts, PART 1 CURRENT), "Language Arts - 6th Grade" (4 parts, PART 1 CURRENT), and "World History" (4 parts, PART 1 CURRENT). Each card has an icon and a list of parts, with the current part highlighted. The right column contains three sections: "Announcements" (School Announcements, Testing 26-05-2025 - May-26-2025, View More), "My Advisor" (No advisors found), and "Other Information" (Attendance, ESW Help, My Grades, My Portfolio). At the bottom, there's a copyright notice: "© 2025 Harris Digital Learning (eScholar, LLC). All Rights Reserved."

4. Depending on the course view, the course might look like any of the following screenshots. Make sure to click around the different lesson components and ensure everything loads properly.



Menu

Content

Prev

Next

Unit 1

Lesson 1

Page 1

Page 2

Page 3

Lesson 2

Lesson 3

Lesson 4

Lesson 5

Lesson 6

Lesson 7

Lesson 8

Lesson 9

Lesson 10

Lesson 11

Lesson 12

Lesson 13

Lesson 14

Lesson 15

Unit 2

Unit 3

Astronomy [Competency Based]

Objectives

The Solar System

Introduce the basic principles of astronomy, and the solar systems role in astronomy.

Essential Instruction

Astronomy is the science that studies happenings outside of the Earth's atmosphere (such as supernovae) and celestial bodies (such as stars, planets, asteroids, and comets). Some say it is the study of "space," but what is space? Space is defined as the unlimited expanse that encompasses everything in the universe. It is cold and empty, except for the other 100 billion or so galaxies besides our own Milky Way. That kind of thing is pretty hard to imagine.

The Basic Principles of Astronomy

- The formation and life cycle of stars
- Characteristics of stars
- The relationship between the Earth and Moon
- Features and composition of the Moon
- Formation of the universe
- The structure and formation of the solar system, planets, asteroids, meteors, and comets
- Shape and structure of the Earth

By studying our solar system, we are able to learn a lot about star temperatures, orbits, comets, moons, and planets. Our solar system is not the only solar system in the universe. Astronomers have recently discovered other planets, called extra solar planets, orbiting other stars. That being said, our solar system is not a small place.

- After successfully completing these instructions, your compatibility test is complete. If you experience any issues, please let your Harris Digital Learning customer service representative know, or email Online.Support@HarrisDigitalLearning.com to generate a ticket for the support team, making sure to include all relevant details.