



DESIGN A MANOR VILLAGE CIRCA 1268

World History

Ages 13 and up

Two 50-minute class periods, with options to extend to several weeks

It's the year 1268 and the Lord and Lady have contracted you to design their manor. It is up to you to create a beautiful manor house and at least one additional structure as part of the manor village. Give them a home suitable for the era.

In this lesson, students will apply historical research to make authentic designs of structures that could be found on a manor within a feudal culture during the Middle Ages. They will build their manor in Unreal Engine so others can tour their virtual manor village.

Lesson/Author/Class Information

Lesson Title: Design a Manor Village Circa 1268

Content/Grade: World History/Ages 13 and up

Lesson Timeframe: Two 50-minute class periods, with options to extend to several weeks

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Description of class/learning environment

The World History course follows the curriculum standards presented by the state of Ohio. The course focuses on cultures and time periods beginning with Ancient Greece and ending with global exploration in the 1600s. Topics include: Ancient Greece, Ancient Rome, African, Asian and Islamic Empires, the Middle Ages, the Renaissance, and the Columbian Exchange.

Although students choose to attend the Dayton Regional STEM School and are selected through a lottery system, not all students are excited to incorporate the STEM field. We allow students to have a choice in the final products that are created as part of their projects. Incorporating the Unreal Engine into lessons supports students' choices to focus on game design, architecture, or interior design, as well as academic content. Students will need access to a computer and Unreal Engine software to complete this lesson. A laptop computer will suffice, and a computer mouse is strongly recommended.

Lesson Overview

It's the year 1268 and the Lord and Lady have contracted you to design their manor. It is up to you to create a beautiful manor house and at least one additional structure as part of the manor village. Give them a home suitable for the era.

The purpose of this lesson is to motivate students to learn academic content by including video game design technology and the acquisition of real-world skills into the creation of an interactive final product. The final product encourages students to engage with an audience—in this case, players of their Level. This requires that students demonstrate an understanding of the content and the technology.

Students will learn how to create buildings within a virtual environment from imported assets. They will apply historical research to make the designs of a variety of structures that could be found on a manor within a feudal culture during the Middle Ages. In addition to creating buildings, students will add different materials and textures to make their virtual world as authentic as possible.

DESIRED RESULTS

What are the learning outcomes for students?

Essential Questions/Big Ideas

How can we use interactive 3D environments to teach others about World History?

How can we get others excited to learn about the different building structures found in a manor during the Middle Ages?

How can we teach others what we have learned about feudalism in a fun, relevant, and interactive way?

Learning Outcomes/Objectives

The student will be able to:

- Create a virtual environment within the Unreal Engine software
- Place assets and materials within the Unreal Engine software to replicate manor structures
- Teach others what s/he learned about World History content
- Teach others what s/he learned about Unreal Engine

LESSON PLAN

Learning Activities

Context of Lesson

Students will learn about the fall of the Roman Empire, which led to feudalism in Western Europe. During the first day of this lesson, students conduct research, and design their manor concept. The second day has students using video game design technology to create a Level that includes at least two manor buildings to represent a virtual manor system.

Objective

After learning about feudalism, students will be able to make connections between social classes and the types of buildings that exist in a manor system.

Learning Activities

1. Students will complete the “Life on a Manor and Medieval Towns” handout to apply research to a conceptual design that will be used to design a manor village.
2. Students will learn how to create buildings and add materials with Unreal Engine.
3. Students will create a 3D virtual environment in Unreal Engine including at least two manor buildings.
4. Students will create a screen-recording navigation of their virtual environment. This will include a narration of Unreal Engine skills used, and an explanation of the historical content covered about the social classes and building types within a manor system.

There are a variety of screen-recording options including software and online recording tools. Some are free, including [Screencast-o-matic](#), an online screen-recording option. Other options include [OBS Studio](#), [Camtasia Studio](#), and the Windows 10 Game Bar or the Windows 10 video editor (both included with Windows 10). It is suggested that the teacher seek guidance from the IT Department to ensure district guidelines are followed.

External Resources

Unreal Engine tutorials provided by Epic Games:

<https://docs.unrealengine.com/en-US/GettingStarted/index.html>

ASSESSMENT

Assessments

Assess Social Studies assignments, such as individual and group research on manor systems, and the completion of the “Life on a Manor and Medieval Towns” handout, which requires students to sketch out their ideas of a manor before applying this concept art to their Level.

Create a Level (manor) in Unreal Engine.

Meet with each student to discuss goals and potential struggles as the student completes the final Level.

Summative: assess student’s final manor by grading the screen recording. This should include a narration of the applicable skills students demonstrate in Unreal Engine, as well as the historical content being shared.

Rubric

Manor Structures Unreal Engine Project

Category	Components	Points	Comments
Conceptual Design	Complete the “Life on a Manor and Medieval Towns” handout. This includes authentic concept art based on your research of the buildings and people who existed on a manor during the Middle Ages.	/20 total	
Virtual Environment	Create at least two manor building structures using the Unreal Engine computer software. Your structures should represent at least two different social classes. Different materials should be used for each building.	/30 total	
	Working Level with all actor requirements	/20	
	Ease of mobility throughout Level	/5	
	Professionalism	/5	
Screen Recording	Upload a playthrough of your Level that shows off all of your historical artifacts, narration, and design. Your narration should explain the different social classes within a manor as well as the video game design technology that was used to create your Level.	/15	
Total	Conceptual design, video game Level with artifacts, and screen recording.	/65	

Notes and comments:

Standards Mapping

International Society for Technology in Education Standards

1 Empowered Learner

- 1a Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes.
- 1c Students use technology to seek feedback that informs and improves their practice, and to demonstrate their learning in a variety of ways.
- 1d Students understand the fundamental concepts of technology operations; demonstrate the ability to choose, use, and troubleshoot current technologies; and are able to transfer their knowledge to explore emerging technologies.

3 Knowledge Constructor

- 3a Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
- 3c Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
- 3d Students build knowledge by actively exploring real-world issues and problems; developing ideas and theories; and pursuing answers and solutions.

4 Innovative Designer

- 4a Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems.
- 4c Students develop, test, and refine prototypes as part of a cyclical design process.

6 Creative Communicator

- 6a Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
- 6b Students create original works or responsibly repurpose or remix digital resources into new creations.
- 6c Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.
- 6d Students publish or present content that customizes the message and medium for their intended audiences.

Common Core Standards

Key Ideas and Details

CCSS.ELA-LITERACY.RH.9-10.1

Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.

CCSS.ELA-LITERACY.RH.9-10.2

Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.

CCSS.ELA-LITERACY.RH.9-10.3

Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them.

Craft and Structure

CCSS.ELA-LITERACY.RH.9-10.4

Determine the meaning of words and phrases as feudalism they are used in a text, including vocabulary describing political, social, or economic aspects of history/social science.

Integration of Knowledge and Ideas

CCSS.ELA-LITERACY.RH.9-10.7

Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.

CCSS.ELA-LITERACY.RH.9-10.8

Assess the extent to which the reasoning and evidence in a text support the author's claims.

CCSS.ELA-LITERACY.RH.9-10.9

Compare and contrast treatments of the same topic in several primary and secondary sources.

Grade 7 World History (Ohio) Standards, Retrieved from <http://education.ohio.gov/getattachment/Topics/Learning-in-Ohio/Social-Studies/Ohio-s-Learning-Standards-for-Social-Studies/SSFfinalStandards01019.pdf.aspx?lang=en-US>

3. Germanic invasions helped to break up the Roman Empire and set the stage for the development of feudal and manorial systems. Later invasions helped establish Mongol dominance in central Asia and led to the destruction of the Byzantine Empire by the Turks.

13. Geographic factors promote or impede the movement of people, products, and ideas.

18. With the decline of feudalism, consolidation of power resulted in the emergence of nation states.

[Common Core Standards](#)
[ISTE Standards for Students](#)
[NCSS Standards](#)
[NGSS Standards](#)

Interdisciplinary and 21st-Century Connections

Indicate the 21st century skills that are addressed in this lesson. [More information on 21st Century Skills](#)— from Applied Educational Systems.

This lesson provides the flexibility for an interdisciplinary approach. The Level can contain any content, not simply historical content. The conceptual design portion of the lesson aligns well with an arts class, and the tutorial completion aligns with a technical reading and writing class. Any game design class will naturally fit as well.

The 21st-century skills that students will demonstrate during this lesson are:

- Critical thinking
- Creativity
- Communication
- Information literacy
- Technology literacy
- Flexibility
- Initiative

Modifications and Accommodations

Modifications for students with IEPs may include extended time to complete the lesson, shortened research requirements, or fewer artifacts required within the virtual environment. For students who cannot use technology, an alternative assignment, such as a short story describing what a person within their virtual world may experience, or a more detailed version of the concept art that would have been used within their Level, can be used.

Challenges to pose to gifted students may be an increase in artifacts within the Level, the teaching of skills to others, or the use of inquiry skills to obtain additional skills within the Unreal Engine software, such as incorporating visual scripting through Blueprints to make the Level interactive, the inclusion of Artificial Intelligence through Behavior Trees, or imported 3D models. Gifted students may be required to undertake more in-depth research or include more than two buildings within their Level.

Additional Teaching Materials

Please include other teaching materials as separate documents (handouts, etc.)

Handout: Sketch a Manor Design

Name:

Date:

Period:

Life on a Manor and Medieval Towns

1. Use the space below to **DRAW** and **LABEL** the layout of a manor:
Be sure to include:

- Manor
- Huts
- Mill
- Fields
- Chapel
- Woods
- Shops

2. **DRAW** and **LABEL** the clothing that was worn by serfs.

3. Sketch a serf's house below:

Additional Teaching Materials **Continued**