

CURRICULUM OVERVIEW

Technology and Research



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Technology and Research Course Overview

This semester-long course uses the topic of technology as a way to help students develop fundamental knowledge of the steps in the research process. During the course, students learn how new technology is developed and evaluate ways that technology affects society. Students learn about the development of the personal computer, robots, blogs, and wikis. They learn research and writing skills such as how to evaluate scientific journal articles, how to write an abstract, and how and when to use different online sources.

Most of the lessons contain optional activities for students. These activities encourage students to reflect on what they've learned. The activities are not graded. Rather, they are a way for students to extend their thinking about the lesson content.

Upon completion of the course, students should be able to do the following:

- Define technology and describe how and why new technologies are developed
- Describe how science and technology are related
- Compare and contrast qualitative and quantitative research
- Develop and refine a research question
- List how and when to use different online sources
- Evaluate a scientific journal article
- Write an abstract
- Successfully write a 10- to 15-page research paper (at least 2000 words)
- Develop a creative way to present research information

Unit 1: Technology and Research	
Assignments	
Technology and Research	1. Course Overview
	2. Introduction to Technology and Research
	3. Technology Study: Part 1
	4. Technology Study: Part 2
	5. What is Technology?
	6. Project: What is Technology?
	7. Why Is New Technology Developed?
	8. Project: Why Is New Technology Developed?
	9. How Is Technology Developed? Part 1
	10. How Is Technology Developed? Part 2
	11. How Technology Affects Our Lives: Part 1
	12. Project: How Technology Affects Our Lives: Part 1
	13. How Technology Affects Our Lives: Part 2
	14. Project: How Technology Affects Our Lives: Part 2
	15. Science and Technology: Part 1
	16. Science and Technology: Part 2
	17. Quantitative Research
	18. Project: Quantitative Research
	19. Qualitative Research
	20. Evaluating Journal Articles: Part 1
	21. Evaluating Journal Articles: Part 2
	22. Technology Case Study: Part 1
	23. Technology Case Study: Part 2
	24. Technology Case Study: Part 3
	25. Technology Case Study: Part 4
	26. Technology Case Study: Part 5
	27. Project: Technology Case Study: Part 5
	28. Project Introduction
	29. Project Research
	30. Project Outline
	31. Project Writing
	32. Project Revisions
	33. PowerPoint Presentation: Part 1
	34. PowerPoint Presentation: Part 2
	35. PowerPoint Presentation: Part 3
	36. Writing an Abstract
	37. Final Project
	38. Glossary and Credits

(*) Indicates alternative assignment