



ENLIGHTIUM ACADEMY

Ignitia™ Career and Technical Education
Electives

Career Explorations II

Enlightium Academy invites you to open the door to career and college readiness with Career and Technical Education (CTE) courses from Alpha Omega Publications - Ignitia™.

These rigorous, hands-on courses for grades 7-12 promote critical thinking, emphasize problem solving, and encourage students to take responsibility for their own learning. With 24 CTE courses divided into six clusters, these courses put students on practical paths to post-graduate success.

Should you have any questions about the curriculum, please contact support@enlightiumacademy.com or call Enlightium Academy Customer Support at (866) 488-4818 ext. 2017.

If you have questions about technical support or product configuration, please see the information below for Alpha Omega Publications.

Alpha Omega Publications Technical Support

Alpha Omega Publications' technical support is Ignitia™'s full-service technical support system. We exist to promote and preserve our customers' satisfaction. Our services include:

- Technical Support
- Product Configuration and Update Management

Please use the following information to contact Alpha Omega Publications' technical support:

Online:

Access our helpful Technical Support website simply by clicking on the life preserver located in the upper-right corner of any screen in our program!

Telephone:

Toll Free: 1-877-251-6662
Monday –Friday 7 a.m. to 5 p.m. (CT)

CAREER EXPLORATIONS 2

COURSE OVERVIEW

The Career Explorations 2 course is designed to give seventh- and eighth-grade students an opportunity to explore various CTE subjects. Specifically, students will be able to learn about careers involving various technical fields from computers to agriculture.

Each unit introduces one particular field and explains its past, present, and future. The goal is to whet students' appetites for these careers. Students can then explore that career in more detail as a high school student.

Objectives

- Identify the basic components of a computer system and its use within a networking/communications environment.
- Discuss the history, development, and use of the Internet and mobile computing technology in business and society.
- Explore systems design and implementation.
- State the purpose of a computer network, and explain the role of network hardware in achieving that purpose.
- Identify the advancement of agriculture to the present day.
- Explain sustainable agriculture and its impact on society..
- Understand the STEM field along with the concepts, theories, practical applications, and STEM careers.

Assignments in this course place a strong emphasis on student inquiry, research, and writing. Links to outside Web sites play a role in course activities and learning. (Please note that we are not responsible for the content of these Web sites since their maintenance is outside our control.)

This course has six units. The first five are instructional units containing two chapters. Each chapter usually includes three lessons, two projects, and a chapter test. Each unit also contains a unit test. The sixth unit includes a course review, final exam, and a final project. Most lessons in this course are designed to take one day to complete, while most projects are intended to take from one to several days, depending on complexity. The course contains content sufficient to support seat time requirements ranging from 70 to 80 hours.

This course was edited for a junior high school audience. Still, there are vocabulary words in it that may be unfamiliar to some students. These are either defined in the text or defined in a special "key words" section at the beginning of the lesson.

This course was designed to give students enough information to think about five different career ideas in the context of their own lives. This includes their likes and dislikes, interests, aptitudes, desired lifestyle, and goals. But it goes beyond just the facts to encourage the students to think critically about various aspects of each career or different issues that may be facing people in those careers.

CAREER EXPLORATIONS 2	
UNIT 1: INFORMATION TECHNOLOGY	
Assignment Titles	
1. Course Overview	8. Internet in Business and Society
2. Computer Systems and Networks	9. Human-Centered Technology
3. Network Ethics and Security	10. Project: Biometrics Report
4. Project: Benefit Analysis Study: Small Business Expansion	11. Mobile Computing
5. Information Storage	12. Project: Geocache Treasure Hunt
6. Project: Correspondence Between Stringer and Newspaper Editor: Media Preview	13. Quiz: Internet in Business and Society
7. Quiz: Computer Systems and Networks	14. Project: Special Project
	15. Test
	16. Glossary and Credits

CAREER EXPLORATIONS 2
UNIT 2: INTRODUCTION TO INFORMATION SUPPORT AND SERVICES

Assignment Titles

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| 1. Supporting the Business Workflow Model | 8. Public Clouds |
| 2. Project: Understanding Software Development Models | 8. Project: Moving to the Cloud |
| 3. Operating Systems, Hardware, and Software Selection | 9. Private Clouds |
| 4. Project: Building a Mind Map | 10. Hybrid Clouds |
| 5. Implementation and End-User Training | 11. Project: Companies in the Hybrid Cloud |
| 6. Project: Preparing a Support Plan | 12. Quiz: Cloud-Based Systems |
| 7. Quiz: On-Premise Systems | 13. Project: Special Project |
| | 14. Test |
| | 15. Glossary and Credits |

CAREER EXPLORATIONS 2
UNIT 3: INTRODUCTION TO NETWORK SYSTEMS

Assignment Titles

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| 1. Networking Concepts | 9. Project: Slide Show: Networking Layers |
| 2. Project: Report: Technology Devices | 10. Data Encapsulation |
| 3. Network Devices and Components | 11. Project: Slide Show: Data Encapsulation |
| 4. Network Topologies | 12. Quiz: OSI and TCP/IP Networking Models |
| 5. Project: Hardware Awareness | 13. Project: Special Project |
| 6. Quiz: Computer Networks | 14. Test |
| 7. The OSI Reference Model | 15. Glossary and Credits |
| 8. The TCP/IP Networking Model | |

CAREER EXPLORATIONS 2
UNIT 4: INTRODUCTION TO AGRICULTURE, FOOD, AND NATURAL RESOURCES

Assignment Titles

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| 1. People and Agriculture | 9. Agriculture and the Economy |
| 2. Project: People, Agriculture, and Society | 10. Project: Research and Learn: Commodities and Exchanges |
| 3. Advances in Agriculture | 11. Food Distribution and Safety |
| 4. Today's Agricultural Consumer | 12. Quiz: Agriculture's Role in Society |
| 5. Project: Percent Spent | 13. Project: Special Project |
| 6. Quiz: Overview of Agriculture | 14. Test |
| 7. Sustainable Agriculture | 15. Glossary and Credits |
| 8. Project: Research and Learn: The Power of Pool! | |

CAREER EXPLORATIONS 2
UNIT 5: INTRODUCTION TO STEM

Assignment Titles

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| 1. What is STEM Education? | 9. Get Organized: Mind Maps and Mind Mapping! |
| 2. The Great Discoverers and Discoveries | 10. Education and Training in STEM |
| 3. Project: Timeline of Great Discoverers and Discoveries in the STEM Field | 11. Project: Mind Map of Personal STEM Education and Career Plan |
| 4. Identify Careers in Science | 12. Quiz: What Lies Ahead? |
| 5. Project: Exploring Careers in the STEM Field | 13. Project: Special Project |
| 6. Quiz: Introduction | 14. Test |
| 7. Get Organized: Outlines and Outliners! | 15. Glossary and Credits |
| 8. Project: Create a Google Website | |

CAREER EXPLORATIONS 2
UNIT 6: COURSE PROJECT, REVIEW AND FINAL EXAM

Assignment Titles

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| 1. Course Project: And the Results Are... | 3. Exam |
| 2. Review | |