Everett School District Framework: Computer Applications / Office User Specialist

Course: Computer Applications	**Total Framework Hours:** 180 Hours
CIP Code: 110699	**Type:** Preparatory
Career Cluster: Information Technology	**Date Last Modified:** November 16th, 2016

Resources and Standard used in Framework Development:

Standards used for this framework are from:
National Standards for Business Education (2007) National Business Education Association
ITSE National Educational Technology Standards
Microsoft ITA Curriculum

Unit 1 FOUNDATIONS — Hours: 15

Performance Assessment(s):

By classifying and analyzing research information on a chosen career, students will acquire, read, evaluate, summarize and share new information regarding theiri career choice. Students will present their findings in a written document as well as a formal or informal presentation to their peers in the class.

Leadership Alignment:

Students will access and evaluate information and appply technology effetively through online career research using the Naviance career and college readiness system. Students will further communicate their research findings clearly through both written documents and classroom presentations.

Standards and Competencies

C-1 Foundation – Required for all certification areas

1.1 Read, write, define, understand and use computer terminology.
1.2 Read, interpret, and follow documentation concerning the care and operation of software and hardware.
1.3 Identify and demonstrate the use of computer peripherals including printers, input devices, utilizing written and electronic references.
1.4 Demonstrate appropriate file management techniques.
1.5 Demonstrate the purpose and care of computer components including peripherals.
1.6 Use help menus and reference manuals as needed for technical help and formatting of documents.
1.7 State ways in which the honesty and integrity of coworkers affect work performance.
1.8 Evaluate several occupational interests, based on various criteria (e.g., education requirements, starting salaries, and career ladder opportunities.
1.9 Relate the importance of education to meeting identified goals.
1.10 Describe benefits of participating in school and community activities.
1.11 Describe techniques for eliminating gender bias and stereotyping.
1.12 Formulate strategies for working effectively with coworkers of varying age groups, cultures, and mental or physical abilities.
1.13 Describe ways tasks and the workplace environment can be structured to accommodate the diverse needs of workers.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

CC: Reading for Literacy in Science and Technical Subjects

Key Ideas and Details (11-12)

2 - Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

Craft and Structure (11-12)

4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.

Integration of Knowledge and Ideas (11-12)

7 - Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

Science

Social Studies

Writing

CC: Writing for Literacy in History/Social Studies, Science, and Technical Subjects (9-10)

Text Types and Purposes

2 - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

Production and Distribution of Writing

4 - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- ☐ Think Creatively
- ☐ Work Creatively with Others
- ☐ Implement Innovations

Creative Thinking and Problem Solving
- ☐ Reason Effectively
- ☐ Use Systems Thinking
- ☐ Make Judgements and Decisions
- ☐ Solve Problems

Communication and Collaboration
- ☑ Communicate Clearly
- ☐ Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- ☑ Access and Evaluate Information
- ☑ Use and Manage Information

Media Literacy
- ☐ Analyze Media
- ☐ Create Media Products

Information, Communications, and Technology (ICT Literacy)
- ☑ Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- ☐ Adapt to Change
- ☐ Be Flexible

Initiative and Self-Direction
- ☐ Mange Goals and Time
- ☐ Work Independently
- ☐ Be Self-Directed Learners

Social and Cross-Cultural
- ☐ Interact Effectively with Others
- ☐ Work Effectively in Diverse Teams

Productivity and Accountability
- ☑ Manage Projects
- ☑ Produce Results

Leadership and Responsibility
- ☐ Guide and Lead Others
- ☐ Be Responsible to Others

Unit 2 MS WORD - CORE | Hours: 30

Performance Assessment(s):

Performance Tasks:
- Working with text
- Working with paragraphs
- Working with documents
- Managing Files
- Using Tables
- Working with pictures and charts

Assessment through Microsoft Specialist Core Exam.
Assessment through FBLA Competitive Event, Word Processing.

Leadership Alignment:

Students will make judgments and decisions, apply technology effectively, create media products, and produce results by creating business documents such as memos, letters, reports, tables, and announcements. In addition, students will demonstrate understanding and application of writing strategies including editing and proofreading skills throughout the process of drafting and finalizing of the creation of these documents.

Standards and Competencies

Word Processing - Core

Sharing and Maintaining Documents
- Apply different views to a document
- Apply protection to a document.
- Manage document versions.
- Share documents.
- Save a Document.
- Apply a template to a document.

Formatting Content
- Apply font and paragraph attributes.
- Navigate and search through a document.
- Apply indentation and tab settings to paragraphs.
- Apply spacing settings to text and paragraphs.
- Create tables.
- Manipulate tables in a document.
- Apply bullets to a document.

Applying Page Layout and Reusable Content
- Apply and manipulate page setup settings.
- Apply themes.
- Construct content in a document by using the Quick Parts tool.
- Create and manipulate page backgrounds.
- Create and modify headers and footers.

Including Illustrations and Graphics in a Document
- Insert and format Pictures in a document.
- Insert and format shapes, WordArt, and SmartArt.
- Insert and format Clip Art.

- Apply and manipulate text boxes.

Proofreading documents

- Validate content by using spelling and grammar checking options.
- Configure AutoCorrect settings.
- Insert and modify comments in a document.

Applying References and Hyperlinks

- Apply a hyperlink.
- Create Endnotes and Footnotes in a document.
- Create a Table of Contents in a document.

Performing Mail Merge Operations

- Setup mail merge.
- Execute mail merge.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

CC: Reading for Literacy in Science and Technical Subjects

Key Ideas and Details (9-10)

3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks attending to special cases or exceptions defined in the text.

Craft and Structure (9-10)

4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

Integration of Knowledge and Ideas (9-10)

7 - Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

Science

Social Studies

Writing

CC: Writing for Literacy in History/Social Studies, Science, and Technical Subjects (9-10)

Text Types and Purposes

2 - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

2a - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

Production and Distribution of Writing

4 - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- ☐ Think Creatively
- ☐ Work Creatively with Others
- ☐ Implement Innovations

Creative Thinking and Problem Solving
- ☐ Reason Effectively
- ☐ Use Systems Thinking
- ☑ Make Judgements and Decisions
- ☐ Solve Problems

Communication and Collaboration
- ☐ Communicate Clearly
- ☐ Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- ☐ Access and Evaluate Information
- ☐ Use and Manage Information

Media Literacy
- ☐ Analyze Media
- ☑ Create Media Products

Information, Communications, and Technology (ICT Literacy)
- ☑ Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- ☐ Adapt to Change
- ☐ Be Flexible

Initiative and Self-Direction
- ☐ Mange Goals and Time
- ☐ Work Independently
- ☐ Be Self-Directed Learners

Social and Cross-Cultural
- ☐ Interact Effectively with Others
- ☐ Work Effectively in Diverse Teams

Productivity and Accountability
- ☑ Manage Projects
- ☑ Produce Results

Leadership and Responsibility
- ☐ Guide and Lead Others
- ☐ Be Responsible to Others

Unit 3 MS WORD - EXPERT | Hours: 15

Performance Assessment(s):

Performance Tasks:
- Customizing Paragraphs
- Formatting documents
- Customizing Tables
- Creating and modifying graphs
- Customizing Word
- Workgroup collaboration
- Utilize mail merge

Assessment through Microsoft Specialist Expert Exam
Assessment through FBLA Competitive Event, Advanced Word Processing.

Leadership Alignment:

Students will make judgments and decisions, apply technology effectively, create media products, collaborate with others, produce results, and demonstrate advanced word processing skills by creating business documents such as memos, letters, reports, tables, and announcements. In addition, students will demonstrateunderstanding and application of writing strategies including editing and proofreading skills throughout the process of drafting and finalizing the creation these documents

Standards and Competencies

Word Processing - Expert

Sharing and Maintaining Documents
- Configure Word options.
- Apply protection to a document.
- Apply a template to a document.

Formatting Content
- Apply advanced font and paragraph attributes.
- Create tables and charts.
- Construct reusable content in a document.
- Link sections.

Tracking and Referencing Documents
- Review, compare, and combine documents.
- Create a reference page.
- Create a Table of Authorities in a document.
- Create an index in a document.

Performing Mail Merge Operations
- Execute Mail Merge.
- Create a Mail Merge by using other data sources.
- Create labels and forms.

Managing Macros and Forms
- Apply and manipulate macros.
- Apply and manipulate macro options.
- Create forms.
- Manipulate forms.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

CC: Reading for Literacy in Science and Technical Subjects

Key Ideas and Details (9-10)

3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks attending to special cases or exceptions defined in the text.

Craft and Structure (9-10)

4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

Integration of Knowledge and Ideas (9-10)

7 - Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

Science

Social Studies

Writing

CC: Writing for Literacy in History/Social Studies, Science, and Technical Subjects (9-10)

Text Types and Purposes

2 - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

Production and Distribution of Writing

4 - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

6 - Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- ☐ Think Creatively
- ☐ Work Creatively with Others
- ☐ Implement Innovations

Creative Thinking and Problem Solving
- ☐ Reason Effectively
- ☐ Use Systems Thinking
- ☑ Make Judgements and Decisions
- ☐ Solve Problems

Communication and Collaboration
- ☐ Communicate Clearly
- ☑ Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- ☐ Access and Evaluate Information
- ☐ Use and Manage Information

Media Literacy
- ☐ Analyze Media
- ☑ Create Media Products

Information, Communications, and Technology (ICT Literacy)
- ☑ Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- ☐ Adapt to Change
- ☐ Be Flexible

Initiative and Self-Direction
- ☐ Mange Goals and Time
- ☐ Work Independently
- ☐ Be Self-Directed Learners

Social and Cross-Cultural
- ☐ Interact Effectively with Others
- ☐ Work Effectively in Diverse Teams

Productivity and Accountability
- ☑ Manage Projects
- ☑ Produce Results

Leadership and Responsibility
- ☐ Guide and Lead Others
- ☐ Be Responsible to Others

Unit 4 MS POWERPOINT	Hours: 30

Performance Assessment(s):

Using decision-making, critical and creative thinking skills, individual students will demonstrate proper presentation skills and use of presentation software by:

- Creating, customizing and modifying a presentation
- Working with text
- Working with visual elements
- Delivering a presentation
- Managing files
- Integrating with other software packages

Assessment through Microsoft Office User Specialist Exam, and/or personal presentations delivered to an audience. Self, peers and instructor will evaluate the student's communication and artistic skills.

Leadership Alignment:

Using skills in making judgments and decisions, thinking creatively, apply technology effectively, and creating media products, students emonstrate proper presentation skills and use of presentation software.

Standards and Competencies

PowerPoint

Managing the PowerPoint Environment

- Adjust views.
- Manipulate the PowerPoint window.
- Configure the Quick Access Toolbar.
- Configure PowerPoint file options.

Creating a Slide Presentation

- Construct and edit photo albums.
- Apply slide size and orientation settings.
- Add and remove slides.
- Format slides.
- Enter and format text.
- Format text boxes.

Working with Graphical and Multimedia Elements

- Manipulate graphical elements.
- Manipulate images.
- Modify WordArt and shapes.
- Manipulate SmartArt.
- Edit video and audio content.

Creating Charts and Tables

- Construct and modify tables.
- Insert and modify charts.
- Apply chart elements.
- Manipulate chart layouts.
- Manipulate chart elements.

Applying Transitions and Animations

- Apply built-in and custom animations.
- Apply effect and path options.
- Apply and modify transitions between slides.
- Manipulate animations.

Collaborating on Presentations

- Manage comments in presentations.
- Apply proofing tools.

Preparing Presentations for Delivery

- Save presentations.
- Share presentations.
- Print presentations.
- Protect presentations.

Delivering Presentations

- Apply presentation tools.
- Set up slide shows.
- Set presentation timing.
- Record presentations.

Aligned to Washington State Standards

Arts

Arts 2.0 The student demonstrates thinking skills using artistic processes.

2.1. Applies a creative process to the arts (dance, music, theatre and visual arts):

- Identifies audience and purpose.
- Implements choices of arts elements, principles, foundations, skills, and techniques in a creative work.
- Presents work to others in a performance, exhibition, and/or production.

Arts 3.0 The student communicates through the arts.

3.2 Uses the arts to communicate for a specific purpose.

Arts 4.0 The student makes connections within and across the arts to other disciplines, life, cultures and work.

4.1. Demonstrates and analyzes the connections among the arts disciplines.

Communication - Speaking and Listening

Comprehension and Collaboration (9-10)

2 - Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

Presentation of Knowledge and Ideas (9-10)

4 - Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

5 - Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Health and Fitness
Language
Mathematics
Reading
CC: Reading for Literacy in Science and Technical Subjects Key Ideas and Details (9-10) 3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks attending to special cases or exceptions defined in the text. Craft and Structure (9-10) 4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics. Integration of Knowledge and Ideas (9-10) 7 - Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

Science

Social Studies

Writing

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- [x] Think Creatively
- [ ] Work Creatively with Others
- [ ] Implement Innovations

Creative Thinking and Problem Solving
- [ ] Reason Effectively
- [ ] Use Systems Thinking
- [x] Make Judgements and Decisions
- [ ] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [ ] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [ ] Access and Evaluate Information
- [ ] Use and Manage Information

Media Literacy
- [ ] Analyze Media
- [x] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [ ] Adapt to Change
- [ ] Be Flexible

Initiative and Self-Direction
- [ ] Mange Goals and Time
- [ ] Work Independently
- [ ] Be Self-Directed Learners

Social and Cross-Cultural
- [ ] Interact Effectively with Others
- [ ] Work Effectively in Diverse Teams

Productivity and Accountability
- [x] Manage Projects
- [ ] Produce Results

Leadership and Responsibility
- [ ] Guide and Lead Others
- [ ] Be Responsible to Others

Unit 5 MS EXCEL - CORE | Hours: 35

Performance Assessment(s):

Performance Tasks:
- Working with cells and cell data
- Working with files and workbooks
- Formatting, modifying and printing worksheets and workbooks
- Creating and revising formulas
- Creating and modifying graphics
- Page setup and printing
- Working with formulas and functions
- Using charts and objects

Assessment through Microsoft Specialist Core Exam
Assessment through FBLA Business Computations and Computer Applications competitive events.

Leadership Alignment:

Students, working independently or in a diverse teams, will demonstrate Microsoft Excel Core skills, including accessing and evaluating data and information related to business tasks such as maintaining inventory, accounting for expenses, sales and profits and summarizing data in table and graphic forms. Throught these tasks, students will demonstrat the ability to work creatively with others, make judgments and decisions, apply technology effectively, and produce results.

Standards and Competencies

Excel - Core

Managing the Worksheet Environment
- Navigate through a worksheet.
- Print a worksheet or workbook.
- Personalize environment by using Backstage.

Creating Cell Data
- Construct cell data.
- Apply AutoFill.
- Apply and manipulate hyperlinks.

Formatting Cells and Worksheets
- Apply and modify cell formats.
- Merge or split cells.
- Create row and column titles.
- Hide and unhide rows and columns.
- Manipulate Page Setup options for worksheets.
- Create and apply cell styles.

Managing Worksheets and Workbooks
- Create and format worksheets.
- Manipulate window views.
- Manipulate workbook views.

Applying Formulas and Functions
- Create formulas.
- Enforce precedence.
- Apply cell references in formulas.

- Apply conditional logic in a formula.
- Apply named ranges in formulas.
- Apply cell ranges in formulas.

Presenting Data Visually

- Create charts based on worksheet data.
- Apply and manipulate illustrations.
- Create and modify images by using the Image Editor.
- Apply Sparkline's.

Sharing worksheet data with other users

- Share spreadsheets by using Backstage.
- Manage comments.

Analyzing and Organizing Data

- Filter data.
- Sort data.
- Apply conditional formatting.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

Quantities (N-Q)

1 - Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.*

CC: Functions (F)

Building Functions (F-BF)

1 - Write a function that describes a relationship between two quantities.*

CC: Mathematical Practices (MP)

4 - Model with mathematics.

5 - Use appropriate tools strategically.

Reading

CC: Reading for Literacy in Science and Technical Subjects

Key Ideas and Details (9-10)

3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks attending to special cases or exceptions defined in the text.

Integration of Knowledge and Ideas (9-10)

7 - Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

Science

Social Studies

Writing

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation

- ☐ Think Creatively
- ☑ Work Creatively with Others
- ☐ Implement Innovations

Creative Thinking and Problem Solving

- ☐ Reason Effectively
- ☐ Use Systems Thinking
- ☑ Make Judgements and Decisions
- ☐ Solve Problems

Communication and Collaboration

- ☐ Communicate Clearly
- ☐ Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy

- ☑ Access and Evaluate Information
- ☐ Use and Manage Information

Media Literacy

- ☐ Analyze Media
- ☐ Create Media Products

Information, Communications, and Technology (ICT Literacy)

- ☑ Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability

- ☐ Adapt to Change
- ☐ Be Flexible

Initiative and Self-Direction

- ☐ Mange Goals and Time
- ☑ Work Independently
- ☐ Be Self-Directed Learners

Social and Cross-Cultural

- ☑ Interact Effectively with Others
- ☑ Work Effectively in Diverse Teams

Productivity and Accountability

- ☐ Manage Projects
- ☑ Produce Results

Leadership and Responsibility

- ☐ Guide and Lead Others
- ☐ Be Responsible to Others

Unit 6 MS EXCEL - EXPERT | Hours: 20

Performance Assessment(s):

Performance Tasks:
- Importing and exporting data
- Managing workbooks
- Formatting numbers
- Working with ranges
- Customizing Excel
- Auditing Worksheet
- Summarizing and Analyzing data
- Workgroup collaboration

Assessment through Microsoft Specialist Expert Exam.
Assessment through On the state, local, and national levels, FBLA Business Computations and Computer Applications competitive events.

Leadership Alignment:

Using reasoning, problem-solving, and decision-making skills, students will collaborate with others to analyze and summarize numerical data in realistic situations such as documenting inventory, expenses, sales and profits. Individual students demonstrate Microsoft Excel Expert skills.

Standards and Competencies

Excel - Expert

Sharing and Maintaining Workbooks
- Apply workbook settings, properties, and data options.
- Apply protection and sharing properties to workbooks and worksheets.
- Maintain shared workbooks.

Applying Formulas and Functions
- Audit formulas.
- Manipulate formula options.
- Perform data summary tasks.
- Apply functions in formulas.

Presenting Data Visually
- Apply advanced chart features.
- Apply data analysis.
- Apply and manipulate PivotTables.
- Apply and manipulate Pivot Charts.
- Demonstrate how to use the slicer.

Working with Macros and Forms
- Create and manipulate macros.
- Insert and manipulate form controls.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

Quantities (N-Q)

1 - Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.*

CC: Functions (F)

Building Functions (F-BF)

1 - Write a function that describes a relationship between two quantities.*

1c (+) - Compose functions. For example, if T(y) is the temperature in the atmosphere as a function of height, and h(t) is the height of a weather balloon as a function of time, then T(h(t)) is the temperature at the location of the weather balloon as a function of time.

CC: Mathematical Practices (MP)

4 - Model with mathematics.

5 - Use appropriate tools strategically.

Reading

CC: Reading for Literacy in Science and Technical Subjects

Key Ideas and Details (9-10)

3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks attending to special cases or exceptions defined in the text.

Craft and Structure (9-10)

4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

Integration of Knowledge and Ideas (9-10)

7 - Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

Science
Social Studies
Writing

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- ☐ Think Creatively
- ☐ Work Creatively with Others
- ☐ Implement Innovations

Creative Thinking and Problem Solving
- ☑ Reason Effectively
- ☐ Use Systems Thinking
- ☑ Make Judgements and Decisions
- ☐ Solve Problems

Communication and Collaboration
- ☐ Communicate Clearly
- ☑ Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- ☑ Access and Evaluate Information
- ☐ Use and Manage Information

Media Literacy
- ☐ Analyze Media
- ☐ Create Media Products

Information, Communications, and Technology (ICT Literacy)
- ☑ Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- ☐ Adapt to Change
- ☐ Be Flexible

Initiative and Self-Direction
- ☐ Mange Goals and Time
- ☐ Work Independently
- ☐ Be Self-Directed Learners

Social and Cross-Cultural
- ☐ Interact Effectively with Others
- ☐ Work Effectively in Diverse Teams

Productivity and Accountability
- ☑ Manage Projects
- ☑ Produce Results

Leadership and Responsibility
- ☐ Guide and Lead Others
- ☐ Be Responsible to Others

Unit 7 MS ACCESS | Hours: 35

Performance Assessment(s):

Students will demonstrate efficient use of database software by:
- Planning, designing and creating databases
- Creating and modifying databases, tables, and forms
- Creating and modifying queries
- Viewing and organizing information
- Defining relationships
- Producing reports
- Integrating with other applications

Assessment through Microsoft Office User Specialist Exam.

Leadership Alignment:

Utilizing problem-solving and reasoning skills, students will identify patterns and sequence through understanding information systems and the effective use of technology in creating and manipulating data in database software.

Standards and Competencies

Access

Managing the Access Environment
- Create and manage a database.
- Configure the Navigation Pane.
- Apply Application Parts.

Building Tables
- Create tables.
- Create and modify fields.
- Sort and filter records.
- Set relationships.
- Import data from a single data file.

Building Forms
- Create forms.
- Apply Form Design Tab options.
- Apply Form Arrange Tab options.
- Apply Form Format Tab options.

Creating and Managing Queries
- Construct queries.
- Manage source tables and relationships.
- Manipulate fields.
- Calculate totals.
- Generate calculated fields.

Designing Reports
- Create reports.
- Apply Report Design Tab options.
- Apply Report Arrange Tab options.
- Apply Report Format Tab options.

- Apply Report Page Setup Tab options.
- Sort and filter records for reporting.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Functions (F)

Building Functions (F-BF)

1 - Write a function that describes a relationship between two quantities.*

1b - Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.

CC: Mathematical Practices (MP)

4 - Model with mathematics.

5 - Use appropriate tools strategically.

Reading

CC: Reading for Literacy in Science and Technical Subjects

Key Ideas and Details (9-10)

3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks attending to special cases or exceptions defined in the text.

Craft and Structure (9-10)

4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

Integration of Knowledge and Ideas (9-10)

7 - Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

Science
Social Studies
Writing

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- ☐ Think Creatively
- ☐ Work Creatively with Others
- ☐ Implement Innovations

Creative Thinking and Problem Solving
- ☑ Reason Effectively
- ☐ Use Systems Thinking
- ☑ Make Judgements and Decisions
- ☑ Solve Problems

Communication and Collaboration
- ☐ Communicate Clearly
- ☐ Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- ☑ Access and Evaluate Information
- ☑ Use and Manage Information

Media Literacy
- ☐ Analyze Media
- ☐ Create Media Products

Information, Communications, and Technology (ICT Literacy)
- ☑ Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- ☐ Adapt to Change
- ☐ Be Flexible

Initiative and Self-Direction
- ☐ Mange Goals and Time
- ☑ Work Independently
- ☐ Be Self-Directed Learners

Social and Cross-Cultural
- ☐ Interact Effectively with Others
- ☐ Work Effectively in Diverse Teams

Productivity and Accountability
- ☑ Manage Projects
- ☑ Produce Results

Leadership and Responsibility
- ☐ Guide and Lead Others
- ☐ Be Responsible to Others