

<b>Information Technology Applications I</b>	<b>Course Code 270501</b>				
<b>Course Description</b>					
<i>Students will explore emerging technologies as it applies to their success for high school, college, and career. The focus will be on the importance of digital citizenship, professional communication practices, advanced document processing, professional presentations, and intermediate spreadsheet and database applications used personally and professionally.</i>					
<b>Program of Study to which the course applies</b>					
<i>Information Technology Cluster</i>					
<i>Business Technology Applications Pathway</i>					
	<b>Course Content</b>	<b>Crosswalk to Common Core Academic Standards</b>	<b>Crosswalk to Nebraska Academic Standards</b>	<b>Crosswalk to Nebraska Career Readiness Standards</b>	<b>Crosswalk Clarification</b>
<b>Standard 1</b>	Students will demonstrate positive cyber citizenship by applying industry accepted ethical practices and behaviors.				
Benchmark 1.1	Examine and practice cultural, social, ethical, and legal issues associated with information technology.	ELA.WHST.11-12.8 ELA.SL.11-12.1.b ELA.SL.11-12.1.d	LA.12.3.3.b LA.12.4.1.b–d  SC.12.1.2.b	CR.8.C.3 CR.9.C.1-3	
Sample Performance Indicator 1.1.1	Discuss ethical use of software practices (e.g., open source, trademarks, freeware, cloud computing, emerging technologies, social networking).				
Sample Performance Indicator 1.1.2	Explore and examine ethical case studies (e.g., newspaper, magazine, Internet searches).				

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Benchmark 1.2	Formulate a critical stance by questioning the validity, accuracy, and appropriateness of information.	ELA.RST.11-12.8 ELA.SL.11-12.3 ELA.WHST.11-12.8	LA.12.1.6.a LA.12.4.1.e	CR.4.B.3 CR.9.A.2	
Sample Performance Indicator 1.2.1	Evaluate web resources.				
Sample Performance Indicator 1.2.2	Triangulate information (students using three websites to find parallel information).				
Benchmark 1.3	Demonstrate a variety of strategies for effective and efficient searches.	ELA.WHST.11-12.8	LA.12.4.1.a	CR.4.B.1 CR.6.B.1 CR.9.B.2	
Sample Performance Indicator 1.3.1	Compare and contrast Internet tools.				
Sample Performance Indicator 1.3.2	Apply Boolean operators to safe, effective, and efficient searching strategies.				
Benchmark 1.4	Evaluate safety and security measures for protecting information and developing digital footprints.	ELA.RST.11-12.3	LA.12.1.6.k LA.12.3.2	CR.1.A.4 CR.9.C.1-3	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11–12.3; NE: LA.12.1.6.k, LA.12.3.2).
Sample Performance Indicator 1.4.1	Explore one's digital footprint.				
Sample Performance Indicator 1.4.2	Discuss risks of sharing personal information.				
Sample Performance Indicator 1.4.3	Explore identity theft scenarios.				
<b>Standard 2</b>	Students will use document processing applications to prepare business communications.				
Benchmark 2.1	Create, edit, and format documents using effective techniques.	ELA.WHST.11-12.2.a ELA.WHST.11-12.5 ELA.WHST.11-12.6	LA.12.2.1.e LA.12.2.1.f	CR.6.A.1 CR.6.B.1 CR.9.B.2	
Sample Performance Indicator 2.1.1	Complete formatting activities (e.g., tables, report, letter, email, brochure, multi-page research).				

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Sample Performance Indicator 2.1.2	Discuss components of a digital message (e.g., email, text message, social media interaction).				
Sample Performance Indicator 2.1.3	Send a digital communication message.				
Sample Performance Indicator 2.1.4	Create a document using alternative input technologies (e.g., voice, pen, touch pad, mobile).				
Benchmark 2.2	Prepare and troubleshoot merged documents (e.g., envelopes, mailings, labels).	ELA.RST.11-12.3	LA.12.1.6.k LA.12.3.2	CR.1.A.4 CR.4.A.1-2 CR.9.B.2	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11–12.3; NE: LA.12.1.6.k, LA.12.3.2).
Sample Performance Indicator 2.2.1	Complete mail merge activity (e.g., holiday letter, sports camp, alumni communication, graduation labels).				
Sample Performance Indicator 2.2.2	Problem solve during mail merge process.				
Benchmark 2.3	Apply digital design strategies to design professional documents (e.g., graphic design, layout, typography, font face, font style).	ELA.WHST.11-12.2.a ELA.WHST.11-12.6	LA.12.2.1.f	CR.1.A.4 CR.6.A.1 CR.9.B.1-2	
Sample Performance indicator 2.3.1	Create and publish a newsletter.				
Sample Performance Indicator 2.3.2	Create documents with a professional appeal (e.g., flyer, brochure, invitation).				
<b>Standard 3</b>	Students will demonstrate effective professional communication skills and practices.				

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Benchmark 3.1	Prepare and develop professional presentations.	ELA.SL.11–12.4-6	LA.12.3.1	CR.2.C.1-3 CR.9.A.2 CR.9.B.2	
Sample Performance Indicator 3.1.1	Complete an interactive presentation project using a web tool.				
Sample Performance Indicator 3.1.2	Utilize advanced techniques (e.g., timings, animations, master slides, templates).				
Sample Performance Indicator 3.1.3	Demonstrate web production and publication, advanced drawing tools, action buttons, media clips, and media incorporated into a presentation.				
	Explore various creation tools (e.g., desktop tool, web tool).				
Benchmark 3.2	Describe Internet concepts and Internet communication etiquette (e.g., concept of Internet Protocol (IP) addresses, Domain Name System (DNS)).	ELA.WHST.11-12.2.b ELA.SL.11-12.4	LA.12.2.1.b LA.12.3.1.a	CR.2.B.1 CR.2.C.1 CR.2.D.1-2	When students describe information or ideas, they communicate their knowledge through either speaking or writing. To demonstrate full knowledge on the topic, students' written or oral presentations must include all the main ideas and relevant details on the subject (CC: ELA.WHST.11–12.2.b, ELA.SL.11–12.4; NE: CR.2.B.1, CR.2.C.1, LA.12 2.1.b, LA.12.3.1.a).
Sample Performance Indicator 3.2.1	Present a topic on etiquette using web tools.				
Sample Performance Indicator 3.2.2	Compare and contrast personal vs. professional Internet etiquette.				

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Benchmark 3.3	Utilize electronic communication applications to communicate within a workplace.	ELA.RST.11-12.3	LA.12.1.6.k LA.12.3.2 LA.12.3.3	CR.2.B.2 CR.2.C.3 CR.9.B.1-2	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11-12.3; NE: LA.12.1.6.k, LA.12.3.2).
Sample Performance Indicator 3.3.1	Create a presentation on professional web production and publication.				
Sample Performance Indicator 3.3.2	Use and understand email to share files and documents.				
<b>Standard 4</b>	Students will employ spreadsheet applications to organize and manipulate data.				
Benchmark 4.1	Enter, modify worksheet data, structure, format data, and problem solve in a worksheet.	ELA.RST.11-12.3 ELA.WHST.11-12.9 ELA.SL.11-12.2	LA.12.1.6.k LA.12.3.2 LA.12.1.6.d LA.12.4.1.a	CR.1.A.4 CR.9.A.3 CR.9.B.2	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11-12.3; NE: LA.12.1.6.k, LA.12.3.2).
Sample Performance Indicator 4.1.1	Create a family budget.				
Sample Performance Indicator 4.1.2	Create a gradebook.				
Sample Performance Indicator 4.1.3	Modify individualized gradebook.				
Sample Performance Indicator 4.1.4	Preview printing and correct potential errors (e.g., page orientation, files larger than paper size, printing formulas, gridlines, fit to page, print selection).				

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Benchmark 4.2	Sort data, manipulate data using formulas and functions, and create charts.	ELA.SL.11-12.2 ELA.WHST.11-12.2.a	LA.12.2.2.a	CR.1.A.4 CR.9.A.3 CR.9.B.2	
Sample Performance Indicator 4.2.1	Utilize gradebook spreadsheet to sort grades high to low.				
Sample Performance Indicator 4.2.2	Create a formula to calculate average grades.				
Sample Performance Indicator 4.2.3	Create a variety of appropriate charts representing grades.				
Sample Performance Indicator 4.2.4	Use the RATE function to calculate the interest rate for a loan.				
<b>Standard 5</b>	Students will identify and understand career paths in the Information Technology Career cluster.				
Benchmark 5.1	Examine resources to develop understanding in the Arts/AV Technology, and Communications Cluster.	ELA.WHST.11-12.7-9	LA.12.1.6.j LA.12.4.1.a-c	CR.5.B.1 CR.9.A.2	The depth of students' investigations, and thus the research standards that apply, will be determined by the nature of the task (CC: ELA.WHST.11–12.7–9; NE: CR.5.B.1, CR.9.A.2, LA.12.4.1.a-c, LA.12.1.6.j).

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Sample Performance Indicator 5.1.1	Participate in extended-learning opportunities (e.g., field trips, guest speakers, job shadowing).				
Sample Performance Indicator 5.1.2	Create career presentations.				
Benchmark 5.2	Examine resources to develop an understanding of information technology careers.	ELA.WHST.11-12.7-9	LA.12.1.6.j LA.12.4.1.a-c  SS.12.2.6.d	CR.5.B.1 CR.9.A.2 CR.10.A.1 CR.10.D.2	The depth of students' investigations, and thus the research standards that apply, will be determined by the nature of the task (CC: ELA.WHST.11–12.7–9; NE: CR.5.B.1, CR.9.A.2, LA.12.4.1.a-c, LA.12.1.6.j).
Sample Performance Indicator 5.2.1	Participate in extended learning opportunities (e.g., field trips, guest speakers, job shadowing).				
Sample Performance Indicator 5.2.2	Create career presentations.				
Benchmark 5.3	Examine resources to develop an understanding of the Business Technology Applications Pathway.	ELA.WHST.11-12.7-9	LA.12.1.6.j LA.12.4.1.a-c  SS.12.2.6.d	CR.5.B.1 CR.9.A.2 CR.10.A.1 CR.10.D.2	The depth of students' investigations, and thus the research standards that apply, will be determined by the nature of the task (CC: ELA.WHST.11–12.7–9; NE: CR.5.B.1, CR.9.A.2, LA.12.4.1.a-c, LA.12.1.6.j).
Sample Performance Indicator 5.3.1	Participate in extended learning opportunities (e.g., field trips, guest speakers, job shadowing).				
Sample Performance Indicator 5.3.2	Create career presentations.				

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Benchmark 5.3	Identify the benefits of industry certifications and higher education pathways for various information technology fields.	N/A	SS.12.2.6.b–c	CR.1.B.1	
Sample Performance Indicator 5.3.1	Utilize certification practice exams and/or study guides where available.				
Sample Performance Indicator 5.3.2	Compare and contrast industry certification exams.				
<b>Standard 6</b>	Students will describe trends in emerging and evolving technologies and their influence in information technology.				
Benchmark 6.1	Investigate and understand emerging trends in technology and the impact on society.	ELA.WHST.11-12.7-9	LA.12.1.6.j LA.12.4.1.a-c  SC.12.1.2.b  SS.12.3.5.e	CR.5.B.1 CR.5.A.4 CR.8.C.2 CR.9.A.1-2	The depth of students' investigations, and thus the research standards that apply, will be determined by the nature of the task (CC: ELA.WHST.11–12.7–9; NE: CR.5.B.1, CR.9.A.2, LA.12.4.1.a-c, LA.12.1.6.j).
Sample Performance Indicator 6.1.1	Compare and contrast emerging technologies (e.g., mobile device vs. laptop computer).				
Sample Performance Indicator 6.1.2	Predict the impact of a current emerging technology on society and/or the next emerging technology.				
Benchmark 6.2	Interact with new and emerging technologies.	N/A	N/A	CR.9.B.1-2	
Sample Performance Indicator 6.2.1	Create a project using an interactive web tool.				

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Sample Performance Indicator 6.2.2	Explore specific new interactive technology devices.				
Benchmark 6.3	Utilize emerging technologies to create and evaluate forms of communication.	ELA.SL.11-12.2 ELA.WHST.11-12.6	LA.12.4.1.a LA.12.4.1.f LA.12.4.1.g	CR.5.A.1 CR.9.B.1-2	
Sample Performance Indicator 6.3.1	Complete activities (e.g., website, blog, podcast, slideshow, movies).				
Sample Performance Indicator 6.3.2	Compare and contrast six websites to determine their effectiveness to the user.				
<b>Standard 7</b>	Students will synthesize database management concepts to manage, evaluate, and organize information in an effective manner.				
Benchmark 7.1	Compare and contrast methods for storing, organizing, and retrieving data.	ELA.RST.11-12.4  MTH.S.ID.6	LA.12.1.5	CR.5.A.1 CR.9.A.3	
Sample Performance Indicator 7.1.1	Define database terminology (e.g., tables, fields, records, keys, field types, views).				
Sample Performance Indicator 7.1.2	Explain the components of the database.				
Sample Performance Indicator 7.1.3	Analyze and draw conclusions about trends and relationships in data.				

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Benchmark 7.2	Create and format a database.	ELA.RST.11-12.3 ELA.WHST.11-12.6	LA.12.1.6.k LA.12.3.2	CR.1.A.4 CR.9.A.3 CR.9.B.2	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11–12.3; NE: LA.12.1.6.k, LA.12.3.2).
Sample Performance Indicator 7.2.1	Create and design a database to inventory a collection of personal items.				
Sample Performance Indicator 7.2.2	Create a database that will manage inventory (e.g., business, home, classroom, sports equipment).				
Benchmark 7.3	Create database objects (e.g., tables, forms, queries).	ELA.RST.11-12.3 ELA.WHST.11-12.6	LA.12.1.6.k LA.12.2.1.f LA.12.3.2	CR.1.A.4 CR.9.B.2	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11–12.3; NE: LA.12.1.6.k, LA.12.3.2).
Sample Performance Indicator 7.3.1	Inventory a second collection of items using an existing database.				
Sample Performance Indicator 7.3.2	Query and filter desired information from the statistical database created.				
Benchmark 7.4	Modify or enter records, create reports, and/or sort data.	ELA.RST.11-12.3 ELA.WHST.11-12.6	LA.12.1.6.k LA.12.2.2 LA.12.3.2	CR.1.A.4 CR.9.A.3 CR.9.B.2	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11–12.3; NE: LA.12.1.6.k, LA.12.3.2).
Sample Performance Indicator 7.4.1	Create a report from previously established data.				
Sample Performance Indicator 7.4.2	Modify, enter, and/or sort previously established data.				

## Reference Sheet

<b>Key Code</b>	<b>Source</b>
AASL	American Association of School Librarians
CC	Nebraska Dual Credit IT Applications 1 and 2 Course 2009
CCTE	National Career Common Technical Core
IC3	Certiport
KS	National Career Cluster Knowledge and Skills Statements
NBEA	National Business Education Association Standards (2007)
NDE	Nebraska Department of Education Virginia
VA	Information Technology (IT) Fundamentals 2012-2013
CSM	Common Sense Media
ITE	IT Essentials (Indiana Standards)
NCE	Nebraska Career Education <a href="http://www.cteresource.org/verso/categories/information-technology">http://www.cteresource.org/verso/categories/information-technology</a>

## Additional Resources for Educators

### Suggestions for innovative teaching and learning strategies

Common Sense Media  
<http://zapatopi.net/treeoctopus/>  
 Certiport

Nebraska Standards for Career Ready Practice

### Related Assessments

Certiport (MOS, IC3)  
 Brainbench

### Extended Learning Opportunities

FBLA  
 Career Ready Practice  
 Internships and job shadows

### Professional Development Opportunities

Common Sense Media - Educator online training  
 Industry certification providers  
 Conferences (e.g., NCE Conference, NBEA)  
 Professional Associations (e.g., NSBEA, NETA, ACTE)

### Community Links/Resources available

Local FBI and/or Law Enforcement - Identify Theft  
 Nebraska Attorney General's Office - Digital Citizenship Resources

Webtools for Communication and Presentation  
 A Collection of 1,800+ Apps for Education  
 Online Tools and Applications for Web I Education App Review  
 Bonnie Sibert Online Resources  
 Tony Vincent's Learning in Hand  
 Kathy Schrock's Website of Everything

Prezi, Animoto, Poll Everywhere, Google Tools, Glogster-Edu., Wallwisher, Info Graphics  
<http://www.appitic.com/> ]<http://www.appitic.com/>  
<http://go2web20.net/> ]<http://go2web20.net/>  
<http://www.lear.org/> ]<http://www.lear.org/>  
<http://www.education.ne.gov/BMIT/onlineresources.html>  
<http://learninginhand.com/> ]<http://learninginhand.com/>  
<http://www.schrockguide.net/> ]<http://www.schrockguide.net/>

### Additional Resources for Educators

Business Education Lesson Plans by Tonya  
Skinner  
Tech Chef 4 U  
Partnership for 21st Century Skills  
Nebraska Career Connections

<http://lessonplans.btskinner.com/>

<http://www.techchef4u.com/> ]<http://www.techchef4u.com/>

<http://www.p21.org/home> ]<http://www.p21.org/home>

<http://www.nebraskacareerconnections.org/>

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