

Formal Evaluation and Subject Matter Expert Summary Report



Maine is IT!
INFORMATION TECHNOLOGY
A CONSORTIUM OF MAINE'S SEVEN COMMUNITY COLLEGES

CPT126

*Submitted to Maine is IT in fulfillment of the
TAACCCT grant requirements*

*By
Emporia State University*

EMPORIA STATE
UNIVERSITY
■ INFORMATION TECHNOLOGY

March 2017

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Developed by Anna J. Catterson, Ph.D., Emporia State University.

Course Review for: Maine is IT
Course: KVCC-CPT126 – Introduction to Digital Literacy
Reviewed by: Anna J. Catterson, Ph.D.
Date: March 21, 2017

Part 1: Course Review

A. Course Review & Introduction (16 points total)		
1.1 Instructions made clear how to get started and where to find various course components.	3	1
1.2 Learners are introduced to the purpose and structure of the course.	3	3
1.3 Etiquette expectations (sometimes called “netiquette”) for online discussions, email, and other forms of communication are clearly stated.	2	0
1.4 Course and or institutional policies with which the learner is expected to comply are clearly stated, or a link to current policies is provided.	2	2
1.5 Minimum technology requirements are clearly stated and instructions for use provided.	2	2
1.6 Prerequisite knowledge in the discipline and/or any required competencies are clearly stated.	1	1
1.7 Minimum technical skills expected of the learner are clearly stated.	1	1
1.8 The self-introduction by the instructor is appropriate and is available online.	1	1
1.9 Learners are asked to introduce themselves to the class.	1	0
Total		11
Comments:		
<p>1.1: There is mention in the course syllabus that various online supplements will be used during the progression of class and provided via a Blackboard page. Please provide the link to the Blackboard course where supplemental information is kept.</p> <p>1.2: Course description and purpose is well documented in the syllabus. The course description does a good job at explaining the course topics.</p> <p>1.3: Etiquette expectations (sometimes called “netiquette”) for online discussions, email, and other forms of communication should be covered. Reviewer didn’t find any mention of etiquette for sending email, texts or any other type of electronic communication. Reviewer highly recommends adding what the expectations are for sending email, texts, discussion or other electronic communication AND when a return response can be expected.</p> <p>1.4: Course and institutional policies that students must follow are included. These include policies on absences, academic dishonesty, and grading. Links provided, Reviewer pleased to see the active links and that all work. Under students with disabilities section, please provide the Dean of Students email address and phone number. Currently it is stated [insert phone] [insert email] – please update. Also, please update the Course Requirements under item 4; [insert contact information] – keep current and updated. Reviewer noted that throughout the course, many of the documents refer to ‘blanks’ and this information should be completed and filled in. (office location, instructor name, etc.)</p> <p>1.5: Specific equipment required not listed; if none please indicate that.</p> <p>1.6: Prerequisites are listed; none.</p> <p>1.7: Minimal skills for students entering the course are not listed. However, skills are implied in the</p>		

listed prerequisite courses. Consider listing the specific requisite skills.

1.8: The instructor bio is a CV; lists courses taught and degrees held however no photo or personalization. There is also no office location, phone or email listed. Please update to students can begin to build a sense of community with the instructor. Also consider adding the instructor biography in the discussion forum so all students can reply with their own introduction. A video is also a nice addition and students appreciate seeing their instructors face and hearing their instructors voice. Video can enhance an instructor's biography.

1.9: Nothing in the syllabus indicates explicitly that students are asked to introduce themselves. See note from 1.8; introductions help build a sense of community in the online environment and even in a F2F environment. Students often will refer back to the discussion board introduction when they need help or use it as a place to ask questions after introducing themselves.

B. Learning Objectives & Competencies (15 points total)

2.1 The course learning objectives, or course/program competencies, describe outcomes that are measurable	3	2
2.2 The module/unit learning objectives or competencies describe outcomes that are measurable and consistent with the course-level objectives or competencies.	3	2
2.3 All learning objectives and competencies are stated clearly and written from the learner's perspective.	3	3
2.4 The relationship between learning objectives or competencies and course activities is clearly stated.	3	2
2.5 The learning objectives or competencies are suited to the level of the course.	3	3
Total		12

Comments:

2.1: The reviewer noted the 29 course objectives. This is a large amount of course objectives and would suggest making these outcomes or deliverables. The Course Content section describes each of the topics that will be covered. It may be best practice re-write these as the main course objectives and then list the 29 activities under each of the headings. Measuring 40 course objectives is doable but may be cumbersome to correctly identify if students are mastering each. Furthermore, after careful review, the Reviewer was able to group the objectives together from the list of 29. Here is an example:

1. **Describe and illustrate how technology is impacting the world.**
 - a. Explain how technology is used within modern society.
2. **Identify the parts of a computer.**
 - a. Identify common digital components.
 - b. Describe the methods computers use to process information.
 - c. Compare and Contrast input and output devices.
 - d. Explain how computer memory stores information
 - e. Identify computer storage options.
3. **Describe the history of the Internet and the wide variety of resources on the Web.**
 - a. Illustrate the origin of the Internet.
 - b. Explain and describe how communication occurs on the Web. (Assignment 3)
 - c. Identify ways a business can use the internet to conduct its work/sales online.
 - d. Share and present on tools and techniques to efficiently search for information online.
4. **Describe various business software applications.**
 - a. Identify available business software application programs.
 - b. Demonstrate techniques to manage software within an organization.
5. **Identify system software including the operating system, utility programs and file management features.**
 - a. Describe the functions of an operating system.
 - b. Compare and Contrast three popular operating systems: Windows, OSX, and Linux.
 - c. Identify utility programs that support business operations.

This is just an example, but each of the course content headings become the major course competency and the activities listed underneath are the student learning outcomes. For assessment purposes, you would only be tracking the major course outcome and not the 29 listed activities. Again, reviewer is only suggesting this approach to better suit the assessment process. There isn't anything wrong with having 29 outcomes, it is just a lot of work to assess and measure each when several of them are identical and have similar deliverables. Taking this to another level...the reviewer suggests then adding, in parenthesis, at the end of each of the activities what assessment, project, graded assignment is demonstrated in each. This will provide a clear picture to students as to what is being assessed AND What is being measured and expected. Reviewer added

some parenthesis just to demonstrate an example (above).

2.2: All 29 learning outcomes are measurable; there seems to be only one verb used: “Describe/Explain”. The reviewer didn’t see any assessments for describing and explaining in a discussion forum. The assessments consisted of exams, written assignments (answering questions) and the final business software presentation. It may be better suited to use other action verbs for some of these outcomes other than describe or explain. Offering variety will help students keep interest and keep them motivated to learn (John Keller’s ARCS model). I would also revisit the wording of some of these specific outcomes; reviewer has written several as an example to demonstrate. The outcomes should be concise, short and clear.

2.3 : Course-level learning objectives and competencies are clearly stated from a student perspective.

2.4: Activities listed align with the course-level objectives; this could be mapped in a matrix or just simply placed in parentheses at the end of each outcome.

2.5: Objectives are designed to align with outcomes.

C. Assessment & Measurement (13 points total)

3.1 The assessments measure the stated learning objectives or competencies.	3	2
3.2 The course grading policy is stated clearly.	3	3
3.3 Specific and descriptive criteria are provided for the evaluation of learners' work and are tied to the course grading policy.	3	2
3.4 The assessment instruments selected are sequenced, varied, and suited to the learner work being assessed.	2	1
3.5 The course provides learners with multiple opportunities to track their learning progress.	2	2
Total		10

Comments:

3.1: There does appear to be some variety in the coursework, however little variety under each category. For the Graded assignments, all of the submissions are paper submissions. Reviewer suggests having a video submission, group project or other submission type for the questions that students are answering.

3.2: Course grading policy is clear. The pie chart is a nice visual, nice! The breakdown in the categories of grading is almost equal and seems reasonable. The narrative that describes how the grading scale is calculated is also appreciated and reviewer pleased to see this. The additional explanations of the course requirements is extremely beneficial to students. Perhaps linking those to the electronic version found in Blackboard may strengthen it even more.

3.3: The assessments are listed in the syllabus and the grading weights are explained.

3.4: The assessment instruments are varied, including assignments, final project and exams.

3.5: Each unit has multiple assessments for tracking progress. *Adding a statement about how learners will receive feedback is ideal.*

D. Instructional Materials (13 points total)

4.1 The instructional materials contribute to the achievement of the stated course and module/unit learning objectives or competencies.	3	3
4.2 Both the purpose of instructional materials and how the materials are to be used for learning activities are clearly explained.	3	3
4.3 All instructional materials used in the course are appropriately cited.	2	2
4.4 The instructional materials are current.	2	2
4.5 A variety of instructional materials is used in the course.	2	2
4.6 The distinction between required and optional materials is clearly explained.	1	0
Total		12

Comments:

4.1: The reviewer noted the Blackboard course and the activities, assignments posted. The assignments that were posted all posed a series of questions to the student. Some of the questions posed were very detailed and listed over a dozen and other questions were not as detailed. However, the same type of response was required for all assignments. Reviewer suggests having students explain these concepts in another format other than text. Written feedback in a formal paper is good, but can be redundant and not allow for critical thinking or the opportunity to collaborate with other peers. These are only suggestions based on student motivation and John Keller's ARCS model, encourage variety and an opportunity to explore these topics in other formats. Also, no information pertaining to citations (APA/MLA) and if those are required for written assignments.

The class outlines are a helpful tool to keep students focused on what's on the agenda for each day. Multimedia could be used to adopt this same routine. For the outlines, it may be beneficial to label "Class 1" with "Module 1: Date" – replacing the date with the date of the course. Reviewer found the detailed class outlines beneficial and suggests making them interactive where students can click to get to the item reviewed. If the outlines were interactive, this would be an additional bonus.

4.2: Materials and purposes for learning are explained. Reviewer noted the great detail in the assignment directions, nice job. Reviewer suggests including a **grading rubric** for all projects and assignments. The grading rubric should be posted in Blackboard for each assessment, assignment and project.

4.3: The textbook/online resource is cited in the syllabus.

4.4: Yes

4.5: A variety of materials is listed for the course.

4.6: No mention is made of optional, or extra credit, assignments or activities.

E. Course Activities and Learner Interaction (11 points total)		
5.1 The learning activities promote the achievement of the stated learning objectives or competencies.	3	2
5.2 Learning activities provide opportunities for interaction that support active learning.	3	1
5.3 The instructor's plan for classroom response time and feedback on assignments is clearly stated.	3	0
5.4 The requirements for learner interaction are clearly stated.	2	0
Total		3
Comments: 5.1: Several learning activities that are somewhat varied, but it was not evident how learners are collaborating with other students and with the instructor. 5.2: It is not evident that learners are interacting with other students. Adding some collaborative activities will help with this process; there very well may be some however, reviewer cannot determine from the course syllabus. There are some great assignments and activities in this course that would pair well with a collaborative effort. 5.3: No plan is provided for classroom response time or assignment feedback. 5.4: No requirements are listed for learner interaction.		

F. Course Technology (10 points total)

6.1 The tools used in the course support the learning objectives and competencies.	3	3
6.2 Course tools promote learner engagement and active learning.	3	2
6.3 Technologies required in the course are readily obtainable.	2	2
6.4 The course technologies are current.	1	1
6.5 Links are provided to privacy policies for all external tools required in the course.	1	0
Total		8

Comments:

6.1: The tools/equipment used support the learning objectives.

6.2: The tools can be used to support active learning. Consider addressing group work or collaborative activities as suggested by the Dynamic Skills Audit. Communication and collaboration were ranked a top skill; consider including these in the syllabus.

6.3: Yes.

6.4: The technology is current, up-to-date.

6.5: No links are provided. Consider adding links. This would be for all software and tools used. For the final business project, please have students locate the privacy policy for the software they choose. This should be incorporated into the grading rubric, as well.

G. Learner Support (9 points total)

7.1 The course instructions articulate or link to a clear description of the technical support offered and how to obtain it.	3	0
7.2 Course instructions articulate or link to the institution's accessibility policies and services.	3	3
7.3 Course instructions articulate or link to an explanation of how the institution's academic support services and resources can help learners succeed in the course and how learners can obtain them.	2	0
7.4 Course instructions articulate or link to an explanation of how the institution's student support services and resources can help learners succeed in the course and how learners can obtain them.	1	0
Total		3

Comments:

7.1: No technical support information is provided in the syllabus. It is recommended that multiple channels of tech support communication be listed in the syllabus to ensure that no student is put behind due to technical difficulties.

7.2: A general ADA compliance statement is made, along with a statement directing any student with special needs to contact the correct KVCC office, with the contact information provided. A link is provided to the KVCC ADA Policy.

7.3: No academic resources are listed. If tutoring, advising, or other student services are available to support academic success, these should be listed along with links or contact information.

7.4: Other than contact information to report and address discrimination, no student support services or resources are listed. If there are services to support student life resources, such as counseling or student wellness, these should be listed along with links or contact information.

H. Accessibility and Usability (12 points total)

8.1 Course navigation facilitates ease of use.	3	3
8.2 Information is provided about the accessibility of all technologies required in the course.	3	2
8.3 The course provides alternative means of access to course materials in formats that meet the needs of diverse learners.	2	2
8.4 The course design facilitates readability.	2	2
8.5 Course multimedia facilitate ease of use.	2	n/a
Total		9

Comments:

8.1: Course navigation is ideal; the Blackboard course appears to be used as a file repository and not an interactive space for students to interact or build a sense of community. Reviewer encourages discussions boards and/or links to collaborative group projects which allow students an opportunity to practice active learning.

8.2: Information regarding the accessibility of technology used is not included. This would include instructions on how to obtain and install any programs used. Links to appropriate business software would be helpful or at least a guide on how to locate business software for the final project would be beneficial.

8.3: The Americans with Disabilities Act requires institutions to make accommodations for student who identify as having a disability. Work closely with your institution's office for disability services to identify resources to assist in making your course ADA compliant. For videos, a transcript or videos that are captioned are required as an effective means of communication.

8.4: Pay special attention to fonts, text color, and background color. Most learning management systems have a default appearance that is ADA compliant. Also, be aware that screen reader software will not recognize bold or italicized fonts. Check with your office of disability services before changing the appearance of your course.

8.5: When possible, embedding multimedia within the course LMS ensures ease of access and limits student issues that may arise when leaving the LMS to access outside resources. There were no outside links in Blackboard other than to .pdf files.

Part II: Employment Data**Stakeholder Involvement and Employment Opportunities**

Items Reviewed include:

- Internships, Job Shadowing Opportunities that exist with the outcomes and objectives with this course.
- Employment opportunities for these skills.
- Outcomes/Objectives are current and relate to job market.

- See Subject Matter Expert review for specific feedback.

Part III: Creative Commons

Items Reviewed include:	
<ul style="list-style-type: none">• All course materials presented in Creative Commons?• Creative Common license (including graphic) is represented on course materials.	
Findings include:	
The syllabus includes Creative Commons license information and the corresponding CC graphic.	

Part IV: Subject Matter Expert (SME) Findings & Review

Course: CPT126
Course Name: Introduction to Digital Literacy
Reviewed by: Anna J. Catterson, Ph.D.
Date: March 21, 2017

Background

Funded by a \$13 million grant from the U.S. Department of Labor, *Maine is IT!* is building new educational and career pathways in information technology at all seven of Maine's community colleges. The programs funded by the grant are designed to support Maine workers eligible for the Trade Adjustment Assistance (TAA) program, un/underemployed adults, and workforce needs in Maine's growing IT sector. They have been built to serve individuals with a range of experience, from those interested in gaining basic IT skills to IT professionals looking to advance their careers through new industry certifications.

Overall Remarks and Reviewer Summary

In reviewing CPT126 several processes and data collections tools were noted and identified. This reviewer took in account the Dynamic Skills Audit conducted in 2014-2015. Both qualitative and quantitative data was identified in the report that provides the key elements:

1. Career opportunities do exist within 50 miles of KVCC for graduates from an AAS in Information Technology or those completing the certificate programs.
2. Current job openings list specific duties that relate to CPT126. (Referenced below)

The Dynamic Skills Audit outlined the following process, which this reviewer took into consideration when compiling this the formal SME report:

1. Local industry needs were assessed through the program Advisory Board. Minutes from those Advisory Board meetings were reviewed and suggestions from the partnerships were adopted into this summary.
2. Burning Glass data was reviewed to identify themes and trends in the current job market. The Burning Glass report helped identify skills demanded by employers to curriculum outcomes and learning objectives.

A formal SME was conducted with the above reports and compiled in the next section of this report.

A. Program and Course Overview and Objectives

Items Reviewed include:

- Dynamic Skills Audit Summary Report (Academic Years 2014-2015)
- Burning Glass Labor Market Data reports (Compilation)
- Advisory Board Minutes

Findings include:

The CPT126 course learning outcomes and objectives align with the program mission and goals. This reviewer found that the CPT126 course has listed measurable outcomes which can be stacked and latticed with other coursework. The industry sector for CPT126 has been categorized as: *15-1151 Computer User Support Specialists*. Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, or via telephone or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems. Excludes "Network and Computer Systems Administrators" (15-1142).

<https://www.bls.gov/soc/2010/soc151151.htm>

The NCES CIP (Classification of Instructional Programs) is referenced as: *11.01: Computer and Information Sciences, General*. (See: <https://nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cipid=88082>)

This course was designed for 1st-year community college students or equivalent. This is an introduction course that leads into several program pathways. Employment opportunities were not explored as this is an introduction level course that is general and helps students determine a pathway upon completion.

Table: Standard Reviewed Standards for Course Outcomes

Standard Reviewed	N/A	Satisfactory	Not Satisfactory
A.1 The learning outcomes are clearly stated and mapped to specific objectives and/or assignments.		X	
A.2 Prerequisites and/or any required competencies are clearly stated.		X	
A.3 Learning objectives for each course describe outcomes that are measurable.		X	
A.4 Learning objectives are appropriately designed for the level of each of the course.		X	
A.5 Instruction, activities, and assignments in courses are scaffolded from course to course, and throughout the program.		X	

A.1 – CPT126 articulates specific learning outcomes for the course, Reviewer suggests adding a direct map to the assessments and the course objectives. Reviewer made a few recommendations to narrow down the course objectives and group related activities under each, accordingly.

A.2 – Previous skills and knowledge are not stated, it is recommended that this be stated more clearly in the syllabus.

A.3 - Course objectives are measurable. The same verb (Describe, Explain) was used for almost every outcome. Reviewer recommends expanding and offering alternative metrics of measurement that are consistent with the Dynamic Skills Audit and recommendations from the Advisory board. Pay close attention to the soft skills highlighted.

A.4 - Learning objectives are appropriate for an introductory course.

A.5 – Activities appear to be scaffolded through the course, building pieces of a project each week, although this is only inferred by the reviewer and not explicitly stated. The skills mastered in this course serve as prerequisites to other computer science courses offered in the program. The course's objectives fill an industry need within the program.

B. Relevancy

Items Reviewed include:

- Dynamic Skills Audit Summary Report (Academic Years 2014-2015)
- Burning Glass Labor Market Data reports (Compilation)
- Advisory Board Minutes

Findings include:

Course competencies are relevant to students, industry, and employers. Strong evidence was found in the Dynamic Skills Audit Summary Report. Direct ties were found through interviews with stakeholders and in Advisory Board minutes.

The table that follows is a clear matrix of how the course outcomes are relevant to students, industry, and employers:

Table: Matrix of evidence-based skills mapped to students, industry, and employers

Standard Reviewed	N/A	Satisfactory	Not Satisfactory
B.1 Course competencies represent industry's expectation of the overarching knowledge, skills, and abilities that 1 st year college students should possess.		X	
B.2 Core course competencies are relevant to industry and employers .		X	
B.3 Instruction, activities, and assignment in individual courses are relevant and engaging to students .		X	

B.1- Course objectives align with industry expectations at the appropriate skill level. Reviewer specifically linked the assessments to systems analysis and systems design to varying comments in the advisory board; these skills are a direct impact to industry.

B.2- Core competencies are relevant to industry and employers, as verified using the Burning Glass labor market data (<http://burning-glass.com/research/coding-skills/>) and the Dynamic Skills Audit Summary.

B.3 Activities and instruction defined in the course outline offer real-world application. **Reviewer encourages more collaborative, active learning experiences for students.**

C. Resources & Materials

Items Reviewed include:

- Dynamic Skills Audit Summary Report (Academic Years 2014-2015)
- Burning Glass Labor Market Data reports (Compilation)
- Advisory Board Minutes

Findings include:

Table: Instructional materials and their direct link to course outcomes

Standard Reviewed	N/A	Satisfactory	Not Satisfactory
C.1 The instructional materials contribute to the achievement of the stated course learning objectives.		X	
C.2 The purpose of the instructional materials is clearly explained.		X	
C.3 The instructional materials present a variety of perspectives and approaches on the course		X	
C.4 The instructional materials are appropriately designed for the level of the course.		X	

C.1 – The topics covered with the course materials clearly align with course learning objectives and align with industry standards.

C.2 – A curriculum map would best suit this course (Similar to ETC240).

C.3 – The reviewer encourages more variety to classroom activities. Reviewer does suggest incorporating more communication, particularly writing, into the course as suggested by the Advisory Board and Dynamic Skills audit.

C.4 – Because the materials align with appropriate course outcomes, they are a good fit for the level of course.

D. Assessment & Measurement

Items Reviewed include:

- Dynamic Skills Audit Summary Report (Academic Years 2014-2015)
- Burning Glass Labor Market Data reports (Compilation)
- Advisory Board Minutes

Findings include:

The reviewer appreciates the variety of grading categories; all seem to be somewhat equal and balanced.

Table: Measurement of effective learning

Standard Reviewed	N/A	Satisfactory	Not Satisfactory
D.1 The course evaluation/criteria/course grading policy is stated clearly on each syllabus.		X	
D.2 Course-level assessments (those that can be delivered) measure the stated learning objectives and are consistent with course activities and resources.		X	
D.3 Specific and descriptive criteria are provided for the evaluation of students' work and participation and are tied to the course grading policy.		X	
D.4 The assessment instruments (that can be delivered) are sequenced, varied, and appropriate to the content being assessed.		X	

D.1 – The grading policy is clearly stated. Excellent work with Grading policies, the pie chart offers a nice visual.

D.2 – Yes

D.3 – No criteria or guidance is given to let students know how their work throughout the course would be evaluated to provide feedback on their progress. How quickly will assessments be graded and feedback given? Please document.

D.4 – The sequence of the assignments is clear, as they follow the progression of the course to build toward its outcomes.

