Formal Evaluation and Subject Matter Expert Summary Report

CPT147

Submitted to Maine is IT in fulfillment of the TAACCCT grant requirements
By
Emporia State University

EMPORIA STATE UNIVERSITY
INFORMATION TECHNOLOGY

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Course Review for: Maine is IT
Course: CMCC: CPT147 - Intro to PC Repair
Reviewed by: Joseph Kern
Date: 5/24/17

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This review is based on the syllabus of the CPT147 course and the Course Materials Narrative. No other course materials were made available.

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	**0**
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	**1**
1.6 Prerequisite knowledge in the discipline and/or any required competencies are clearly stated.	1	**0**
1.7 Minimum technical skills expected of the learner are clearly stated.	1	**0**
1.8 The self-introduction by the instructor is appropriate and is available online.	1	**0**
1.9 Learners are asked to introduce themselves to the class.	1	**0**
Total	**6**	

Comments:

1.1: No link to the LMS or instructions are given to help students access the course or its contents. Consider adding a direct course link.

1.2: The purpose of the course is clearly stated. The outline of hours of coursework involved clearly explain the course structure.

1.3: Etiquette expectations (sometimes called "netiquette") for online discussions, email, and other forms of communication should be covered. *Examples include:*

- Be sensitive to the fact that there will be cultural and linguistic backgrounds, as well as different political and religious beliefs, plus other differences in general.
- Use good taste when composing your responses in Discussion Forums. Swearing and profanity is also part of being sensitive to your classmates and should be avoided. Also consider that slang can be misunderstood or misinterpreted.
- Don't use all capital letters when composing your responses as this is considered "shouting" on the Internet and is regarded as impolite or aggressive. It can also be stressful on the eye when trying to read your message.
- Be respectful of your others' views and opinions. Avoid "flaming" (publicly attacking or insulting) them as this can cause hurt feelings and decrease the chances of getting all different types of points of view.
- Be careful when using acronyms. If you use an acronym it is best to spell out its meaning first, then put the acronym in parentheses afterward, for example: Frequently Asked Questions (FAQs). After that you can use the acronym freely throughout your message.

- Use good grammar and spelling, and avoid using text messaging shortcuts.

1.4: Course and institutional policies adequately cover absences, academic dishonesty, late work, etc. A link to the CMCC Code of Conduct would be helpful to include.

1.5: The syllabus lists required materials, including a USB drive and a computer toolkit. The actual computer technology involved in the course is not listed or described.

1.6: No knowledge vital to the success of incoming students is listed.

1.7: Minimal skills for students entering the course are not listed. Even for introductory courses, the level of expected knowledge or experience in the field would be helpful for students to see.

1.8: No introduction for the instructor or link to an online introduction is given.

1.9: Nothing in the syllabus indicates explicitly that students are asked to introduce themselves.

B. Learning Objectives & Competencies (15 points total)

2.1 The course learning objectives, or course/program competencies, describe outcomes that are measurable	3	**3**
2.2 The module/unit learning objectives or competencies describe outcomes that are measurable and consistent with the course-level objectives or competencies.	3	**0**
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	**11**	

Comments:

2.1: The syllabus includes general objectives and more measurable learning outcomes.

2.2: No unit-level objectives are included. The syllabus outlines which textbook chapters will be covered each week. Adding specific outcomes with each of these topics and listing a connection to the course objectives would make a clear alignment between each week's activities and the course as a whole.

2.3 : Objectives are written from student perspectives.

2.4: The general activities described in the syllabus and Course Materials Narrative are clearly related to the course outcomes. Including more specific weekly objectives would strengthen this relationship.

2.5: Objectives are appropriate for the course level.

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	**0**
3.4 The assessment instruments selected are sequenced, varied, and suited to the learner work being assessed.	2	**2**
3.5 The course provides learners with multiple opportunities to track their learning progress.	2	**2**
Total	**9**	

Comments:

3.1: The assessments described in the Course Materials Narrative would adequately measure most of the learning objectives/outcomes. The syllabus also lists exams, which account for most of the grade. These are not provided for review, so it is unclear how well they assess the objectives.

3.2: The overall course grading policy is clear and succinct.

3.3: No clear criteria are given for the evaluation of student work.

3.4: It can be assumed that the assignments following the chapter progression of the textbook are appropriately sequenced. The course materials describe an adequate variety of assessment tools that are suited to the course outcomes.

3.5: Although the feedback available to students from each assignment is not described, the active learning should adequately allow students to gauge their progress.

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	**2**
4.3 All instructional materials used in the course are appropriately cited.	2	**1**
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	**1**
Total	**11**	

Comments:

4.1: The required textbook is written to prepare students for the CompTIA A+ exam, which is an outcome of this course and a subsequent course. Its activities will help students meet the course objectives.

4.2: The purpose of materials could be more strongly explained. It is stated that students must read assigned sections, but the application of the material and how it will be used is not clear.

4.3: Materials are listed by name and edition, with the author's name listed with the lab manual. Adding an ISBN number and/or URL for purchasing the book will ensure that students can access it.

4.4: The textbook is current, publishing in 2016.

4.5: The course includes video content in addition to the textbook, printed materials, and classroom interactions.

4.6: No distinction is made between required and optional materials, but it can be inferred that all materials listed in the syllabus are required and will be utilized.

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	**3**
5.2 Learning activities provide opportunities for interaction that support active learning.	3	**2**
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	**1**
Total	**6**	

Comments:
5.1: Activities apply a hands-on approach to achieve the objectives.
5.2: Students interact actively with content in a hands-on manner, but nothing in the reviewed materials indicates that students will interact significantly with their peers, which is a way to support active learning.
5.3: No plan is provided for classroom response time or assignment feedback.
5.4: Requirements for class participation are listed, but these do not include guidelines for effective interactions.

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	**3**
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	**9**	

Comments:

6.1: Computer hardware and tools will be used to support the learning objectives.

6.2: Tools used in labs promote active learning.

6.3: Technologies used were not listed in detail in the shared course materials. It can be assumed that this introductory-level course would include readily available hardware and software, although descriptions of these, and URLs to examples or product sites would ensure that students are prepared for the course.

6.4: Course technologies are assumed to be as current as the textbook and the CompTIA A+ certification test require.

6.5: No links are provided in the syllabus. A review of the agreement for each application required in the course will insure that student data required for the use of the software is secure. Linking to the agreements will allow students to easily access the policies.

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. Even for a course preparing students to *be* technical support.

7.2: The initial step for students with disabilities is included in the syllabus. Contact information for the appropriate office is provided, although a link to their page or college policy would be helpful.

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 regarding affirmative action, 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	**0**
8.2 Information is provided about the accessibility of all technologies required in the course.	3	**0**
8.3 The course provides alternative means of access to course materials in formats that meet the needs of diverse learners.	2	**0**
8.4 The course design facilitates readability.	2	**0**
8.5 Course multimedia facilitate ease of use.	2	**0**
Total	**0**	

Comments:

8.1: Unable to review this item. Course navigation should be designed to minimize the number of clicks necessary to access information.
8.2: Information regarding the accessibility of technology used is not included in the syllabus. This would include instructions on how to obtain and install any programs used.
8.3: A variety of media is used in the course, including video, but the syllabus does not address alternatives to specific course materials, such as the textbook. 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: Unable to review this item. 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: Unable to review this item. 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.

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: • All course materials presented in Creative Commons? • Creative Common license (including graphic) is represented on course materials.
Findings include: The shared materials indicate that they are shared under Creative Commons Attribution 4.0 licensing.

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

Course: CMCC: CPT147
Course Name: Intro to PC Repair
Reviewed by: Joseph Kern
Date: May 24, 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 CPT147 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 30 miles of CMCC for graduates from an AAS in Information Technology or those completing a certificate program. It was also found by this reviewer that the skills mastered in CPT147 relate to specific job openings.
2. Current job openings list specific duties that relate the Intro to PC Repair course, CPT147.
3. The current Advisory Board indicates that CPT147 contributes to the labor market data.

There are current entry-level job openings available for IT technicians (as of 5/24/17) within a 30-mile radius of CMCC. A Desktop Support Technician is currently being sought at DXC Technology, in Bath, ME. The job description involves troubleshooting basic computer system problems to diagnose and resolve them.

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 CPT147 course learning outcomes and objectives align with the program mission and goals. This reviewer found that the CPT147 course has listed measurable outcomes which can be stacked and latticed with other coursework. The industry sector for CPT147 has been categorized as: *541519 Other computer related services*. (See: https://www.census.gov/svsd/www/services/sas/sas_summary/54summary.htm#sectordescription) The reviewer finds that this classification is correct.

Those completing this course would enter the Bureau of Labor Statistics occupation classification of *SOC:17-1150 Computer Support Specialists.* (See: https://www.bls.gov/soc/2010/soc151150.htm)

The NCES CIP (Classification of Instructional Programs) is referenced as: *11: Computer and Information Science and Support Services*. (See: https://nces.ed.gov/pubs2002/cip2000/ciplist.asp?CIP2=11)
This is also an accurate classification.

This course was designed for 1st-year community college students or equivalent.

Listed course objectives include:

- Explain the function of each system component of the computer.
- Discuss the relationship of each component to the other.
- Troubleshoot a simple hardware problem using problem analysis.
- Document a problem and its solution.
- Install and remove software.
- Complete a simple computer installation.
- Identify an induced fault in a unit or a replaceable component other than chips.

The content of these course objectives aligns with the topics listed in the course syllabus. This alignment also correlates to items found within the Dynamic Skills Audit and Burning Glass baseline skills as listed in the labor market data.

Specific review standards are listed in the table referenced below:

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- CPT147 articulates specific learning outcomes for the course. Some are self-explanatory regarding the activities involved, but there is not clear link between specific course activities and the course objectives they are designed to meet.
A.2 –Required previous skills and knowledge are not stated.
A.3 - Course objectives are measurable.
A.4 - Learning objectives are appropriate for a 1st-year course.
A.5 – Activities appear to be scaffolded through the course, building in complexity throughout the course. 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 2nd year college students should possess.		X	
B.2 Core course competencies are relevant to **industry and employer**s.		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, as they correspond to entry-level job requirements.
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. Student learning objectives align with the competencies expected of new hires in the web development field and those listed by the Advisory Board.
B.3 - Activities and instruction defined in the course outline offer real-world application in computer building, using and repairing, which are beneficial to students seeking employment in this field.

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:

No course materials were made available for review, although a link in the syllabus led to online materials, most of which were for purchase.

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 content.		X	
C.4 The instructional materials are appropriately designed for the level of the course.		X	

C.1 – The topics covered in the textbook align with course learning objectives.
C.2 – The syllabus states that the textbook will be used for readings, and that other materials like video will be used to demonstrate learning.
C.3 – Without seeing the course materials, this reviewer is unable to determine their variety regarding perspective and approach. The technology content varies throughout the course, which would lead to a variety of activities.
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:

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.
D.2 – Assessments were not available for review, but the use of in-class labs covering each topic suggest that the learning objective would be sufficiently assessed.
D.3 – No criteria are provided to guide students in their work and to demonstrate that assessments will be measured in a way that addresses student learning.
D.4 – While the sequence of class activities related to their topics is not stated, but progression of course topics listed in the objectives would provide adequate sequence, and variety to lab assessments.