Formal Evaluation and Subject Matter Expert Summary Report

CPT298

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

May 25, 2017

EMPORIA STATE
U N I V E R S I T Y
■ INFORMATION TECHNOLOGY

This review is based on the syllabus of the CPT298 course and the Course Materials Narrative.

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	**0**
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	**0**
1.9 Learners are asked to introduce themselves to the class.	1	**0**
Total		**7**

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, along with an overview of the full semester's structure and breakdown of time commitments necessary, which will be quite helpful for students to see at the beginning of the course.

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: No course or institutional policies are included to cover absences, academic dishonesty, late work, etc. Even as a capstone course, instructors should not assume that students have already learned this information from prior classes. A link to the CMCC Code of Conduct would also be helpful to include.

1.5: No technologies are listed as being required, because students are free to utilize technologies of their choosing in their independent projects.

1.6: One prerequisite course is listed by course number. "Networking" is also listed as a requirement, but it is unclear whether this refers to a specific networking course or the general competency.

1.7: The course description lists the tasks that students will complete, and it can be inferred that for a capstone course these are skills that students will have already mastered to some extent in previous courses.

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, although they will engage in group work for a portion of their activities.

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	**3**
2.3 All learning objectives and competencies are stated clearly and written from the learner's perspective.	3	**2**
2.4 The relationship between learning objectives or competencies and course activities is clearly stated.	3	**3**
2.5 The learning objectives or competencies are suited to the level of the course.	3	**3**
Total		**14**

Comments:

2.1: The course includes measurable objectives.

2.2: No unit-level objectives are included, which is appropriate for this course, as no discrete units are being taught throughout the semester.

2.3 : The first objective, "Gain direct exposure to IT workplace tasks," is written more from the teacher perspective than from the students'. The amount of exposure can be measured, but stating the hours worked or a similar data point doesn't address what students are doing and learning with their exposure. The other two objectives would clearly tell students what they are expected to achieve, and how.

2.4: The activities described in the syllabus and Course Materials Narrative are clearly related to the course outcomes.

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	**3**
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	**2**
3.5 The course provides learners with multiple opportunities to track their learning progress.	2	**2**
Total		**12**

Comments:
3.1: The course has one final assessment that adequately measures how well students have achieved various aspects of the course outcomes.
3.2: The overall course grading policy is clear and succinct, indicating the weighting of each component of the final evaluation.
3.3: The criteria within each grading topic are not clearly stated in the syllabus, but the descriptions imply that a set of criteria will be shared with students in other documents.
3.4: The components of the final grade are logically sequenced and suited to the nature of the student work.
3.5: The capstone project includes a strong group work aspect that allows students to receive frequent feedback from their peers, and multiple meetings with the instructor are listed in the course description.

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	**1**
Total		**13**

Comments:
4.1: The syllabus indicates that "Previous material in other courses and research" will be required for students, which is appropriate in a capstone course.
4.2: The purpose of materials is self-explanatory for the course.
4.3: N/A
4.4: Materials from prior courses would be current.
4.5: A variety of materials could be accessed by students in their own research, and a variety would have been used in previous courses.
4.6: No distinction necessary, as all are optional.

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	**3**
5.3 The instructor's plan for classroom response time and feedback on assignments is clearly stated.	3	**3**
5.4 The requirements for learner interaction are clearly stated.	2	**1**
Total		**10**

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 and in groups with peers.
5.3: The syllabus states that teacher feedback meetings with students are built into the semester's work.
5.4: Students grade each other's group participation regarding how they worked toward course objectives, but the nature of these groupings and guidelines for effective interactions among students are not provided.

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, software, and tools will be used to support the learning objectives.
6.2: Tools and activities promote a high level of engagement and active learning.
6.3: No technologies are strictly required, as students will work with technologies and materials that are readily obtainable to them.
6.4: Course technologies would be current, as they are based on a variety of preceding course competencies.
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. Students may need individual help in finding these resources, which may be part of their project documentation process.

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 could be used in the course, including video, but the syllabus does not address alternatives to specific course materials, such as a 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.

Course: CMCC: CPT298
Course Name: Capstone
Reviewed by: Joseph Kern
Date: May 25, 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 CPT298 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 Computer Technology or those completing a certificate program. It was also found by this reviewer that the skills mastered in CPT298 relate to specific job openings.
2. Current job openings list specific duties that relate the Capstone course, CPT298.
3. The current Advisory Board indicates that CPT298 contributes to the labor market data.

There are current entry-level job openings available for IT technicians (as of 5/25/17) 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 CPT298 course learning outcomes and objectives align with the program mission and goals. This reviewer found that the CPT298 course has listed measurable outcomes which can be stacked and latticed with other coursework. The industry sector for CPT298 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:
- Gain direct exposure to Information Technology workplace tasks.
- Communicate effectively while working in a group to effectively manage projects within the business scenario.
- Identify personal strengths and weaknesses in the area of Information Technology, group collaboration and soft skills.

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 - CPT298 has clear course outcomes that are linked to components of the capstone project.
A.2 –Prerequisite courses and skills required in the course are clearly stated.
A.3 - Course objectives are measurable.
A.4 - Learning objectives are appropriate for a culmination of the CPT program.
A.5 – Activities are connected to multiple courses, as they are combined in the capstone project.

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 computer service field and those listed by the Advisory Board.
B.3 - Activities and instruction described in the syllabus involve job-like simulations of computer building and service work.

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

C.1 – Students will choose their materials, so it can be assumed that they will choose beneficial materials, or will learn to analyze quality of materials chosen.
C.2   – The purpose of materials is clear.
C.3 – Materials will be varied, as they are selected by students to serve their needs.
C.4 – Materials that support independent projects would be appropriate for the course level.

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 – The assessment described in the syllabus is consistent with course activities.
D.3 – Grading "topics" are described, but specific grading criteria within the topics are not provided.
D.4 – The multiple topics of grading adequately address the various facets of the capstone project.