

Formal Evaluation and Subject Matter Expert Summary Report



Maine is IT!

INFORMATION TECHNOLOGY
A CONSORTIUM OF MAINE'S SEVEN COMMUNITY COLLEGES

CPT239

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

*By
Emporia State University*

EMPORIA STATE
UNIVERSITY
■ INFORMATION TECHNOLOGY

May 2017

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

Course Review for: Maine is IT
Course: CPT239- Advanced Networking Concepts
Reviewed by: Anna J. Catterson, Ph.D.
Date: May 23, 2017

50% of course impacted by grant. Face-to-Face course.

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	3
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	1
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	1
1.9 Learners are asked to introduce themselves to the class.	1	1
	Total	12

Comments:

1.1: This is a face-to-face course only; reviewer could not locate any supplemental LMS course shell. Reviewer recommends including supplemental course materials in a course shell for students to access. It would be helpful to include the clinic/lab hours as discussed on the top of page 2. Any additional information that you could provide to help students get started and locate textbook resources or online resources, would be beneficial.

1.2: The course description adequately describes the course in detail.

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 just 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.

It's important to include etiquette instructions and expectations for ALL types of courses, including F2F. This could include communication via email, discussion in class or even communication between peers.

1.4: Course and institutional policies were covered in the syllabus.

1.5: Reviewer noted that the technology requirements were NOT mentioned. This is important information for students to know prior to taking a course.

1.6: Prerequisites described as CPT147/CPT239 OR two or more years experience.

1.7: Reviewer noted that the technology requirements were NOT mentioned. This is important information for students to know prior to taking a course.

1.8: Yes

1.9: Yes

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	3
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
<i>Total</i>		15
Comments:		
<p>2.1: Yes; Reviewer found that the six learning outcomes tie to the two course objectives.</p> <p>2.2: The learning objectives are measurable and consistent with employment opportunities.</p> <p>2.3: Yes</p> <p>2.4: Yes</p> <p>2.5: Yes</p>		

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	3
3.4 The assessment instruments selected are sequenced, varied, and suited to the learner work being assessed.	3	3
3.5 The course provides learners with multiple opportunities to track their learning progress.	2	0
Total		12

Comments:

3.1: All assessments specifically tie to learning objectives; nicely done.

3.2: The grading policy is stated and it is clear. Reviewer agrees with the breakdown of categories.

3.3: Yes, very good.

3.4: Yes, all the labs reviewed offer a wide variety of learning models and methodologies. Reviewer appreciates the open-ended questions, lab reports and hands-on activities.

3.5: How will students receive feedback? While assignments are submitted electronically, how and when will students receive feedback? Reviewer suggests including this in the syllabus.

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: Yes; the textbook is a direct correlation.

4.2: Yes, great resources and relate directly the activities being learned. No mention of the CCNA examination, will this be a required certification at course-end?

4.3: Yes

4.4: Yes

4.5: Yes, good variety.

4.6: Optional materials are not part of this course.

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	1
5.4 The requirements for learner interaction are clearly stated.	2	1
Total		8

Comments:

5.1: Yes, the learning activities have specific outcomes that align with the course learning objectives.

5.2: The labs provide an opportunity to collaborate, Reviewer would like to see this area expanded upon.

5.3: When and how will students receive feedback? This is not clear.

5.4: This section is vague; please expand.

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	1
Total		10

Comments:

6.1: Yes, please explain in detail what types of technology students may be using.

6.2: Yes

6.3: Yes

6.4: Yes

6.5: Certain policies (eg, ADA, Codes of Conduct, etc.) are provided via extracted policy wording. However, the Reviewer was unable to locate links to privacy policies (eg, HIPAA, FERPA, etc.) Consider including that language in the course syllabus.

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	1
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	2
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	1
Total		7

Comments:

7.1: Providing students access to technology support is very important. Don't assume that students know how to obtain support from the institution. Provide instructions/links for students to access the technology help services available to them. Links to the textbook supplements would also be helpful.

7.2: The syllabus contains an excerpt and a link to the institution website pertaining to accessibility. The Reviewer applauds this information.

7.3: Access to the institutional academic support services is critical, good work adding this information.

7.4: Please include student support services on the syllabus.

H. Accessibility and Usability (12 points total)

8.1 Course navigation facilitates ease of use.	n/a	n/a
8.2 Information is provided about the accessibility of all technologies required in the course.	3	3
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	2
Total		9

Comments:

8.1: This is a face-to-face course; navigation was not reviewed and not applicable.

8.2: If there are technologies that are used, please include a link to the accessibility statements (usually found on the vendor's website).

8.3: Implied. 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. Alternative course documents may need to be converted or metatags added to imagery.

8.4: Yes

8.5: Please ensure that all instructional materials relating to videos have transcripts OR captioning.

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.

Findings include:

- See Subject Matter Expert review for specific feedback relative to this finding.

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:

- This material is licensed under the Creative Commons Attribution 4.0 International License.
- Creative Commons graphic is included on the footer.

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

Course: CPT239
Course Name: Advanced Networking Concepts
Date: May 23, 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 CPT239 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 for CMCC 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 CPT239 relate to specific job openings within a 50-mile radius of Auburn, ME.
2. Current job openings list specific duties that relate to CPT239.
3. The current Advisory Board indicates CPT239 contributes to the labor market data.

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 CPT239 course learning outcomes and objectives align with the program mission and goals. This reviewer found that the CPT239 course has listed measurable outcomes which can be stacked and latticed. The NCES CIP (Classification of Instructional Programs) is referenced as: *11.1001* (See: <https://nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cipid=87261>). A program that prepares individuals to manage the computer operations and control the system configurations emanating from a specific site or network hub. Includes instruction in computer hardware and software and applications; local area (LAN) and wide area (WAN) networking; principles of information systems security; disk space and traffic load monitoring; data backup; resource allocation; and setup and takedown procedures.

US Census Bureau recognizes this field as 541512, Computer Systems Design Services. This U.S. industry comprises establishments primarily engaged in planning and designing computer systems that integrate computer hardware, software, and communication technologies. The hardware and software components of the system may be provided by this establishment or company as part of integrated services or may be provided by third parties or vendors. These establishments often install the system and train and support users of the system. (<https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=541512&search=2017%20NAICS%20Search>)

Illustrative Examples:

Computer systems integration design consulting services. Local area network (LAN) computer systems integration design services. Information management computer systems integration design services. Office automation computer systems integration design services

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 – Yes, good work on mapping the six second-level outcomes to the first-level outcomes.

A.2 - The course prerequisites are indicated.

A.3 – Yes

A.4 - Learning objectives do align with industry standards; especially the lab projects.

A.5 – Each topic is scaffolded and appears to build on one another.

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 –Yes; evidence found in job descriptions.

B.2 – Yes, evidence found relating to current job market, see attachments below.

B.3 – Yes. Activities and instruction defined in the course outline offer real-world application in design and modeling that are required of any person seeking employment in this field.

Job Summary

CSC is looking for a Telecom Engineer to support our Bath Iron Works account.

Essential Job Functions

- Performs analyses of voice/data network needs and contributes to the architectural designs, integration and installations to ensure effective customer network architectures.
- Assists in evaluating, testing, and documenting current network technology baselines for both hardware and software to determine networking needs.
- Assists in developing technical standards and interface applications. Evaluates new products to create and maintain optimal network solutions. Investigates and resolves matters of significance.
- Serves as a technical resource across functional teams to ensure consistent knowledge of basic network architectures.
- Reports and monitors system utilization and associated costs to guide short term information technology investment decisions as related to voice/data network solutions.

Basic Qualifications

- Must be US Citizen due to US Government requirements.
- Bachelor's degree or equivalent combination of education and experience
- Two or more years of experience in voice or data networks
- *DEL*Voice/VoIP Knowledge
- Private Branch Exchange (PBX), VoIP - Automatic Call Distributor (ACD), VoIP - Interactive Voice Response (IVR), VoIP - Routing, VoIP - Troubleshooting & Problem Resolution
- Experience working with network systems and networking principles and practices
- Experience working with networking software and hardware
- Experience working with proprietary software and hardware

Other Qualifications

- Analytical and problem solving skills
- Interpersonal skills to interact with customers and team members
- Organizational skills to balance and prioritize work

- Ability to work independently and as part of a team

CSC/DXC Technology is an Equal Opportunity/Affirmative Action employer. All qualified candidates will receive consideration for employment without regard to disability, protected veteran status, race, color, religious creed, national origin, citizenship, marital status, sex, sexual orientation/gender identity, age (40 or over), or genetic information. DXC's commitment to diversity and inclusive selection practices includes ensuring qualified long-term unemployed job seekers receive equal consideration for employment.

Job Description for IT Support Specialist

A-COPI Imaging Systems is a locally owned company that specializes in the sale and service of office technology solutions. A-COPI is headquartered in Gardiner, Maine and has additional locations in Bangor and Portland, Maine. A-COPI Imaging Systems is currently seeking qualified candidates in its Information Technology Department for the position of IT Support Specialist

Key responsibilities of the IT Support Specialist include:

- Networking and configuring copiers, printers, scanners, faxes
- Installing print/scan/fax drivers and related software
- Troubleshooting issues related to copy, print, scan, fax
- Provide remote support to customers via GoToAssist
- Travel within the state of Maine to install new equipment and assist customers with networking and troubleshooting needs

Preferred candidates will have knowledge and experience in the following areas:

- Coping, printing, scanning, faxing
- Wired and wireless ethernet TCP/IP networking
- File sharing and email protocols (SMB, SMTP, etc.)
- Windows client and server administration
- Mac administration (preferred)
- Linux administration (bonus)
- Technical writing
- A pleasurable discourse with customers in a team environment

Successful candidates will have strong organizational skills, attention to detail, strong communication and interpersonal skills, and a professional presentation.

A-COPI will offer a competitive compensation package that is commensurate with experience. Also included are

health benefits, paid vacation, paid holidays, sick time, eligible for bonus and company contribution to a SIMPLE IRA retirement savings plan. The IT support specialist will be reimbursed for all business related travel.

Maine Community Bancorp

Growing. Stronger. Together

Biddeford Savings & Mechanics Savings

Job Description

Position Summary:

This position is located at our Biddeford Savings Bank division of Maine Community Bancorp, 254 Main Street, Biddeford, Me

This position's primary responsibility is responsible for providing system and network related solutions for the organization's information technology assets. Assist with the WAN and LAN administration, installation and support, troubleshoot problems, and use their experience in the IT and networking fields to develop new strategies to optimize network operations.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

1. Provide second level support to the Systems Administrator and Help Desk personnel for resolving complex problems.
2. Install, maintain, upgrade, and troubleshoot routers, gateways, firewalls, SANS, and other networking infrastructure for local area and wide area networks (LAN/WAN), including Internet connectivity.
3. Use Active Directory GPO's to streamline network maintenance and security.
4. Support and troubleshoot SharePoint composite applications that include lists, libraries, workflows, and limited custom add-ins.
5. Create, maintain, and follow documentation and best practices for the financial regulatory world.
6. Work on multiple projects concurrently in support of internal staff.
7. Participate in audits and exams to ensure compliance with regulations.
8. Work closely with the Information Security Officer (ISO) to develop and execute on security initiatives and risk management.
9. Participate in a team approach to monitoring, upgrading, and troubleshooting the network to provide a great experience for our staff and customers.

DESIRED QUALIFICATIONS:

- A minimum of 5+ years of network engineering experience
- Experience administrating and troubleshooting Microsoft SharePoint
- 10+ years of experience supporting Microsoft Active Directory server infrastructure preferred
- Experience in supporting technology in the banking industry
- Bachelor's degree in computer science, information technology, or equivalent work experience
- CCNA and/or additional Cisco Certifications
- Experience with Cisco IP phone systems
- Ability to analyze business needs and architect a technology solution that may include writing Microsoft SharePoint workflows

- Additional industry certifications in VMWare, or Microsoft technologies
- Experience with the FISERV Premier core banking system
- Experience with Microsoft SCOM
- Experience with the Splunk SIEM
- Excellent verbal and written skills
- Excellent interpersonal and communication skills.
- Good organizational skills.

NON-ESSENTIAL DUTIES AND RESPONSIBILITIES:

1. Sales Support - Enhance and build upon the customer relationship created by the Sales Staff by providing a superior level of customer service that promotes the service culture of the bank. Take individual responsibility to support Sales Staff in order to understand and service the needs of the customer
2. Perform other duties as assigned.

GENERAL EXPECTATIONS:

1. Be committed to the Bank's Vision: *To be the "bank of choice" that deepens relationships with our customers, employees, and communities.*
2. Demonstrated ability to work as part of a team.
3. Be punctual for scheduled work and use time appropriately.
4. Perform duties in a conscientious, cooperative manner.
5. Perform required amount of work in a timely fashion with a minimum of errors.
6. Be neat and maintain a professional appearance.
7. Possess a valid Driver's license.
8. Comply with all Bank policies and procedures, including BSA policies.
9. Maintain confidentiality and protect the Bank by keeping information concerning Bank operations and customer information confidential.
10. Able to consistently treat others with respect; keeps commitments; inspires the trust of others; works ethically and with integrity; upholds organizational values; accepts responsibility for own actions.
11. Strong commitment to achieving personal and team growth and success through an understanding and commitment to the Bank's sales culture goals.

PHYSICAL REQUIREMENTS:

The physical requirements described here are representative of those that must be met by the Incumbent to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit and talk or hear. The employee is frequently required to stand, walk and use hands to operate a standard computer keyboard. The employee may occasionally lift and/or move up to 40 pounds. Specific vision abilities required by the job include close vision, distance vision, and the ability to adjust focus.

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:

Instructional materials being delivered achieve stated course objectives and learning outcomes. Copyrighted material could not be reviewed.

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

C.1 – C.4 –The types of assessments provided were varied and allowed for collaboration, especially the lab projects. Please consider applying a grading rubric to each of the assessments; this will help students understand the expectations of the assessments. Lab 1 would be a good opportunity for team collaboration.

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

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 – Yes, clear and reviewer agrees with category breakdowns.

D.2 – Yes

D. 3 – Yes; would like to see additional rubrics.

D.4 – Yes, Reviewer applauds the variety.