**Library Curriculum Assessment**
**Tomlinson Library**
**Colorado Mesa University**

The following form is a snapshot of the library's collection in support of new curriculum areas and/or course additions.

Date of assessment:    December 10, 2015_____

Collection under review: New Program: Cyber Security Professional Certificate

Program level:        **Certificate**    Associates      Bachelors      Masters      DNP

Delivery mode:        Lecture_____

Library Liaison:        Jay Ballenberger_____

1.  Current Collection Review

    a.  Reference Sources:

        **Dictionaries**
        *Dictionary of Computing* (2008) (online)
        *Dictionary of Computer Science, Engineering, and Technology* (2001)
        *The New Penguin Dictionary of Computing* (2001)
        *A Dictionary of Computing, Oxford Reference* (2014) (online)
        *A Dictionary of the Internet, Oxford Reference* (2013) (online)
        *The Relational Database Dictionary* (2008) (online)
        *The New Hacker's Dictionary- 3$^{rd}$ Edition* (1996) (online)

        **Encyclopedia**
        *Encyclopedia of Computer Science* (2000)
        *Encyclopedia of Genetics, Genomics, Proteomics, and Informatics* (2008) (online)
        *Encyclopedia of Emerging Industries* (2011) (online)
        *Science, Technology, and Society, Oxford Reference* (2006) (online)
        *Encyclopedia of Computer Science and Technology* (2009)
        *Encyclopedia of Cryptography and Security* (2011)
        *Encyclopedia of Database Systems* (2009) (online)

        **Handbooks/Manuals**
        *Milestones in Computer Science and Information Technology* (2003)
        *Tech Job Hunt Handbook Career Management for Technical Professionals*
                (2012) (online)

*Handbook on Modelling for Discrete Optimization* (2006) (online)
*Handbook on Data Centers* (2015) (online)
*The InfoSec Handbook: An Introduction to Information Security* (2014) (online)
*Handbook of Mobile Ad Hoc Networks for Mobility Models* (2011) (online)

**Analysis**: The reference collection provides strong support for the Cyber Security Professional Certificate.  Two thirds of the sources listed are in electronic format versus print.  The rapidly evolving landscape of this discipline will require frequent evaluation.  One recommendation will be to keep an eye out for the latest and best reviewed encyclopedia on the subject of Cyber Security.

b. Monographic Sources:

The following table represents the total number of monographs held by CMU, within the Prospector lending group, and E-books on that topic, followed by the number of recent items (published since 2010) in parenthesis.

| Subject or Keyword Search | CMU Monographs (since 2010) | eBooks (since 2010) | Prospector Holdings (since 2010) |
|---|---|---|---|
| "network security" | 16 (1) | 2,691 (1,987) | 5,246 (2,035) |
| "computer science" | 435 (26) | 31,271 (19,764) | 32,000 (20,956) |
| "application security" | 1 (1) | 3,274 (2,554) | 3,650 (1,697) |
| "wireless security" | 0 (0) | 745 (561) | 1,850 (908) |
| "database security" | 8 (1) | 45 (24) | 1,823 (746) |
| "cyber security" OR "computer security" | 71 (9) | 105 (81) | 746 (479) |
| Totals | 531 (38) | 38,131 (24,971) | 45,315 (36,821) |

CMU monographic holdings could be strengthened in the areas of **application security**, **wireless security**, and **database security**, especially with more recently published (since 2010) materials concerning these areas.

c. Periodicals (online and paper):

**ACM Computing Surveys** (Business Source Complete, 03/01/2004 to current, some print available)

**ACM Transactions on Database Systems** (Business Source Complete, 12/01/1996 to current)

**Acta Informatica (Academic Search Complete**, 10/01/1996 to 02/25/2014, 12 month embargo)

**EURASIP Journal on Information Security** (DOAJ, 01/01/2007 to current)

**International Journal of Cyber-Security and Digital Forensics** (DOAJ, 01/01/2012 to current)

**International Journal of Information and Network Security** (IJINS) (DOAJ, 01/01/2012 to current)

**International Journal of Information Security** (Academic Search Complete, 08/01/2001 to 10/28/2014, 12 month embargo)

**International Journal of Information Security Science** (Academic Search Complete, 03/01/2012 to current)

**International Journal of Network Security & Its Applications** (DOAJ, 01/01/2009 to current)

**International Journal of Security** (DOAJ, 01/01/2007 to current)

**Journal of Algorithms** (Science Direct, 01/01/1993 to current)

**Journal of Computer Security** (Academic Search Complete, 03/01/1996 to 01/28/2015, 9 month embargo)

**Journal of Information Systems Security** (Academic Search Complete, 01/01/1995 to 11/01/2007)

**Journal of Network and Computer Applications** (Science Direct, 01/01/1996 to current)

**Journal of Security Engineering** (DOAJ, 01/01/2005 to current)

**Linux Journal** (Wiley Online Library, 01/01/1991 to current)

**Science of Computer Programming** (ScienceDirect Open Access Journals, 01/01/1995 to 02/25/2011)

**Scientific Programming** (Academic Search Complete, 12/01/1997 to 05/25/2014, 9 month embargo)

**Software Practice & Experience** (Wiley Online Library, 01/01/1971 to current)

**Wireless Networks** (OMNI File, 01/01/2008 to 10/28/2014, 12 month embargo)

<u>**Analysis**</u>:  Because of the rapid change and growth within this discipline, guidance from teaching faculty is encouraged in order to provide avenues for the library to improve/focus periodical subscriptions to best support student learning.

Appropriate databases for this course can be located through the following steps: Library homepage >> Click search tab for Articles >> Click Browse Databases by Subject >> Use the dropdown list to select **Computer Science** or alternately **All/Multidisciplinary Subjects** (default: All Subjects).

Also**, Inter Library Loan** is a quick, efficient, and useful supplement to our collections, with an average turn-around time of just 11 hours for articles.  Such fast request-to-delivery times greatly aid students in their information needs being addressed and processed as close to the time of need as possible. As students

often work close to deadlines so must our services work as favorably with those deadlines as possible.

d. Electronic Resources:
The table below provides detailed full-text availability search results of keyword searches from three databases particularly useful for this area of study.

| | Academic Search Complete (since 2010) | Business Search Complete (since 2010) | Wiley Online Library (Since 2010) |
|---|---|---|---|
| "computer science" | 238,449 (115,089) | 125,700 (40,075) | 425,401 (114,542) |
| "network security" | 7,401 (1,819) | 13,963 (2,979) | 87,908 (39,184) |
| "application security" | 218 (49) | 362 (72) | 112,496 (39,679) |
| "wireless security" | 297 (50) | 644 (60) | 6,652 (3,501) |
| "database security" | 520 (89) | 999 (158) | 38,745 (18,880) |

**Analysis:** Of the three databases shown in the proceeding table, each brings a depth and breadth of relevant journal articles.

e. Media

The Library subscribes to *Films on Demand* – a streaming video service from Films Media Group. This service includes educational films, documentaries, and PBS publications. These films can be accessed through course content links added to D2L, if the faculty member chooses, for convenient access to the student(s) and/or can be streamed into the physical classroom as well.

*Films on Demand* streaming videos can be searched by keyword or, alternately, one can browse discipline specific collections. Three browseable collections that could be of use for this course are:

- *The Mathematics Collection*
- *The Engineering Collection*
- *The Technology and Society Collection*

**Analysis**: This collection has yet to offer a wide array of relevant films for the Cyber Security Professional Certificate. The collections within *Films on Demand* tend to better support broader fields of discipline, such as Mathematics, Biological Sciences, Engineering, etc. Fortunately, the nature of the field of cyber security lends itself well to retrieving many freely available open web resources.

The library liaison is happy to help compile further lists of such resources if faculty wish.

2. Recommendations for additions to the collection:

The reference collection and electronic resources collection strongly support the areas of study covered by this professional certificate. The library liaison will continue to seek the most up-to-date reference materials, especially encyclopedia on the subject of Cyber Security.

The collection could be strengthened by selecting materials in the areas of "application security", "wireless security", and "database security." The library liaison will work to acquire resources in these areas.

Additional materials in Prospector libraries are available for loan quickly and easily, substantially augmenting the Tomlinson Library's own collections. This is also true for the ability to access journal articles not subscribed to by the Tomlinson Library through InterLibrary Loan.

The selection of new materials in this area should be ongoing and can be funded through the existing department materials budget. The library liaison is confident that the thoughtful selection of library materials by faculty will continue.

3. Analysis of library's collection:
   ☒ Materials for this course can be purchased with existing funds
   ☐ Extra funding is required to sufficiently meet the informational needs of the program.
   ☐ No Library Assessment needed. No new content associated with this analysis.

Library Director: Sylvia Rael_____Date: 12/10/15_____

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**Library Curriculum Assessment**
**Tomlinson Library**
**Colorado Mesa University**

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The following form is a snapshot of the library's collection in support of new curriculum areas and/or course additions (if appropriate).

Date of assessment: 12/8/2015

Collection under review: Honors Seminar: THEA 490

Program level (circle):     Certificate     Associates     **Bachelors**     Masters

Delivery mode:          Lecture

Library Liaison:       Jamie Walker

1. Current Collection Review
   This assessment was prepared drawing selected subject matter from the course addition information provided by the department. The Subject Headings are based upon the Library of Congress Subject Headings (LCSH).

   a. Reference Sources: A subject search of the online catalog with the general term "Theater" retrieves 59 titles in the Reference collection, 4 of which were published since 2005. "Dance" retrieves 7 titles, none of which were published in 2005 or later.

   b. Monographic Sources: The Tomlinson Library Online Catalog (CMU) was searched for locally available books including e-books. Searches were done for materials produced from 2,005 on, and then repeated for all dates. The Prospector catalog was searched to determine what might be readily available from other libraries without regard to date.

| Subject Heading | CMU 2005- | CMU All | Prospector |
|---|---|---|---|
| Art | 3292 | 8159 | >10000 |
| Belief and doubt in literature | 2 | 7 | 76 |
| Metaphor | 21 | 52 | 1309 |
| Creation (Literary, artistic, etc.) | 30 | 85 | 1903 |
| Emotions | 172 | 308 | 5390 |
| Semiotics | 55 | 111 | 2488 |
| Theater audiences | 3 | 18 | 349 |
| Composition (Art) | 1 | 27 | 403 |
| Acting | 79 | 324 | 3122 |
| Dance | 196 | 677 | >10000 |

- Age Analysis of Monographic Collection: In the above chart note that for CMU materials about 40% of CMU's monographic collection is dated 2005 or newer.

c. Periodicals (online and paper): Academic Search Complete was searched for general journal publications (ASC). ASC has partial full-text coverage from current back as far as 1887, but coverage is primarily from the late 1980s onward. Also searched was OmniFile Select, a general all full-text journal database with coverage from the late 20th century onward. Finally, Humanities International Index was searched which indexes materials from the mid 20th century on. Although this is not a full-text database, many entries do have links to full-text available from other sources. The library also holds some print subscriptions, but most of our holdings relating to theater are online access. There is a substantial amount of material available in periodical resources with a significant amount available in full-text. Journal literature not available through Colorado Mesa University can be provided by the Interlibrary Loan Department. Article requests are provided through 2 programs, RapidILL and OCLC Resource Sharing. RapidILL gives access to 245 academic library journal collections. The average amount of time it takes to fill an article request is 12 hours. Most requests are filled through this program. Beyond that, OCLC Resource Sharing gives access to 72,000 library collections world-wide. Both of these programs also provide book chapters as scanned documents.

| Subject Heading | ASC | OmniFile | Humanities Int. Index |
|---|---|---|---|
| Art | 250326 | 90167 | 127197 |
| Belief and doubt in literature | 51 | 54 | 64 |
| Metaphor | 5307 | 1002 | 3518 |
| Creation (Literary, artistic, etc.) | 1430 | 635 | 1129 |
| Emotions | 38535 | 3913 | 4514 |
| Semiotics | 2753 | 552 | 1768 |
| Theater audiences | 723 | 210 | 599 |
| Composition (Art) | 2845 | 1070 | 1495 |
| Acting | 3525 | 850 | 1478 |
| Dance | 34074 | 8720 | 11706 |

d. Electronic Resources: E-Books were represented in all subject headings searched, though representation was minimal for some. CMU's e-book holdings have nearly all been published since 2001 and are expected to expand over time

| Subject Heading | E-Books LSCH |
|---|---|
| Art | 137 |
| Belief and doubt in literature | 1 |
| Metaphor | 4 |
| Creation (Literary, artistic, etc.) | 10 |
| Emotions | 42 |
| Semiotics | 33 |

| | |
|---|---:|
| Theater audiences | 15 |
| Composition (Art) | 1 |
| Acting | 0 |
| Dance | 83 |

2. Recommendations for additions to the collection: This course is expected to cover broad subject areas under the overall umbrella of theater. Overall, library resources are expected to be sufficient to support this course. However, it is expected that some areas will need bolstering, such as the subjects of "Belief and doubt in literature", "Theater audiences", and "Composition (Art)". Faculty are encouraged to request new library materials be purchased based upon course needs. Additional materials may be purchased from existing resources as needed. Interlibrary loan provides further resources.

3. Analysis of library's collection **(Library staff completes)**:

It is expected that the existing library resources will be sufficient for this course.

☒ This program requires no new library resources.
☐ Extra funding is required to adequately meet the informational needs of the program. Estimated resources needed $ _____
☐ No Library Assessment needed. No new content associated with this analysis.

Library Director: _Sylvia Rael_____ Date: _12/9/15_____

The following form is a snapshot of the library's collection in support of new curriculum areas and/or course additions (if appropriate).

Date of assessment: <u>12/8/2015</u>

Collection under review: <u>Honors Project/Thesis: THEA 498</u>

Program level (circle):     Certificate     Associates     **<u>Bachelors</u>**     Masters

Delivery mode:          <u>Lecture</u>

Library Liaison:          <u>Jamie Walker</u>

1.  Current Collection Review
    This assessment was prepared drawing selected subject matter from the course addition information provided by the department. The Subject Headings are based upon the Library of Congress Subject Headings (LCSH).

    a.  Reference Sources: A subject search of the online catalog with the general term "Theater" retrieves 59 titles in the Reference collection, 4 of which were published since 2005. "Dance" retrieves 7 titles, none of which were published in 2005 or later.

    b.  Monographic Sources: The Tomlinson Library Online Catalog (CMU) was searched for locally available books including e-books. Searches were done for materials produced from 2005 on, and then repeated for all dates. The Prospector catalog was searched to determine what might be readily available from other libraries without regard to date.

| Subject Heading | CMU 2005- | CMU All | Prospector |
|---|---|---|---|
| Theater | 295 | 1455 | >10000 |
| Dance | 196 | 677 | >10000 |

    •  Age Analysis of Monographic Collection: In the above chart note that for CMU materials nearly a quarter of CMU's monographic collection in the above subject areas is dated 2005 or newer.

    c.  Periodicals (online and paper): Academic Search Complete was searched for general journal publications (ASC). ASC has partial full-text coverage from current back as far as 1887, but coverage is primarily from the late 1980s

onward. Also searched was OmniFile Select, a general all full-text journal database with coverage from the late 20th century onward. Finally, Humanities International Index was searched which indexes materials from the mid 20th century on. Although this is not a full-text database, many entries do have links to full-text available from other sources. The library also holds some print subscriptions, but most of our holdings relating to theater are online access. There is a substantial amount of material available in periodical resources with a significant amount available in full-text. Journal literature not available through Colorado Mesa University can be provided by the Interlibrary Loan Department. Article requests are provided through 2 programs, RapidILL and OCLC Resource Sharing. RapidILL gives access to 245 academic library journal collections. The average amount of time it takes to fill an article request is 12 hours. Most requests are filled through this program. Beyond that, OCLC Resource Sharing gives access to 72,000 library collections world-wide. Both of these programs also provide book chapters as scanned documents.

| Subject Heading | ASC | OmniFile | Humanities Int. Index |
|---|---|---|---|
| Theater | 50796 | 14152 | 32555 |
| Dance | 34074 | 8720 | 11706 |

d. Electronic Resources: Some e-books are available for theater-related subjects. CMU's e-book holdings have nearly all been published since 2001 and are expected to expand over time

| Subject Heading | E-Books LSCH |
|---|---|
| Theater | 15 |
| Dance | 11 |

2. Recommendations for additions to the collection: This course is expected to cover such varied subjects under the overall umbrella of theater that detailed subject analysis is not possible. Overall, library resources are expected to be sufficient to support this course, particularly when supplemented by Prospector and interlibrary loan. Faculty are encouraged to request new library materials be purchased based upon course needs. Additional materials may be purchased from existing resources as needed. Interlibrary loan provides further resources.

3. Analysis of library's collection (**Library staff completes**):

It is expected that the existing library resources will be sufficient for this course.

☒ This program requires no new library resources.
☐ Extra funding is required to adequately meet the informational needs of the program.  Estimated resources needed $ _____
☐  No Library Assessment needed.  No new content associated with this analysis.

Library Director: Sylvia Rael_____ Date: __12/9/15____

**Library Curriculum Assessment**
**Tomlinson Library**
**Colorado Mesa University**

The following form is a snapshot of the library's collection in support of new curriculum areas and/or course additions.

Date of assessment:     __December 9, 2015____

Course Number:  __ENGR 353_____

Course Name:  Exploring Entrepreneur Opportunities

Catalog Description:  Introduction to innovation and opportunity recognition, including development of business ideas, business model validation and business feasibility analysis.

Program Level:        Certificate      Associates      **Bachelors**   Masters

Delivery mode:        Lecture

Library Liaison:        __Jamie Walker__ ____

1. **Recommendations for additions to the collection:**

2. **Library Research Support Statement:**
   The Library can offer research support for specific courses – through **instructional sessions** (how to access and use our research tools, how to evaluate information and sources, how to use information ethically, etc.) as well as / or an **"embedded librarian"** in the D2L areas CMU course sections. The Library can also create **research / course guides** for CMU course sections – tailoring links, tools, e-reserve access, and more to the students and the topic of that section.

   If desired, courses can make use of all of these options and the Library is interested in investigating customized possibilities with faculty.

3. **Analysis of library's collection:**
   ☐ **This program requires no new library resources.**
   ☐ Extra funding is required to sufficiently meet the informational needs of the program.  Estimated resources needed $ ___
   ☒ No Library Assessment needed.  No new content associated with this analysis. Same course as ENTR 343.

**Library Director:** Sylvia Rael_____        **Date:** _12/10/15___