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Angela Berch, Copiah-Lincoln Community College
Jackie Martin, Copiah-Lincoln Community College
Wayne Eason, East Central Community College
Roger Whitlock, East Central Community College
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Rodney Hodges, Mississippi Community College Board
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Clyde Muse, Hinds Community College
Jesse Smith, Jones County Junior College
Mary Graham, Mississippi Gulf Coast Community College
William Lewis, Pearl River Community College
Billy Stewart, East Central Community College
Glenn Boyce, Holmes Community College
Scott Elliott, Meridian Community College
Johnny Allen, Northeast Mississippi Community College
Steve Bishop, Southwest Mississippi Community College
SECTION 1: OFFICE BACKGROUND

1.1 THE OFFICE OF CURRICULUM AND INSTRUCTION
The Office of Curriculum and Instruction (C&I) was founded in 2013 under the Division of Workforce, Career, and Technical Education at the Mississippi Community College Board (MCCB). The office is funded through a partnership with The Mississippi Department of Education (MDE), who serves as Mississippi’s fiscal agent for state and federal Career and Technical Education (CTE) Funds. The office is tasked with developing statewide CTE curriculum, programming, and professional development designed to meet the local and statewide economic demand.

1.2 MISSION
Our mission is to develop an innovative curriculum and professional training system that facilitates seamless educational delivery by well-trained professionals who are focused on preparing skilled workers in the 21st century economy.

1.3 GOALS
1. Produce research-based, high-quality curricula for MS Community Colleges where all programs are aligned to industry needs and national certifications.
2. Provide outcomes-based, professional development teaching, learning, and leadership strategies to accelerate instructor, staff, and administrator effectiveness.
3. Support the implementation of groundbreaking career pathways; innovative instructional design and delivery (i.e. online instruction, stackable credentials, block scheduling, hybrid courses); and infusion of technology in the classroom.
4. Be responsive to college needs and industry demands.
1.4 ORGANIZATIONAL CHART

Dr. Eric Clark
Executive Director MCCB

Dr. Debra West
Deputy Executive Director for Programs & Accountability

Dr. Shawn Mackey,
Associate Executive Director for Workforce, Career, and Technical Education

Casandra Ware
Administrative Assistant

Dexter Holloway,
Director of Workforce

Rodney Hodges,
Program Specialist

Angela Bryan,
Director of Curriculum & Instruction

Dr. Elmira Ratliff,
Curriculum Specialist

Dr. Rachel DeVaughan,
Curriculum Specialist

Betina Brandon,
Professional Development Specialist

TBA, Technical Curriculum Specialist

Valeria Williams,
Director of Career & Technical Education

Ed Roberson,
Program Specialist
1.5 Job Descriptions

1.5.1 Director of Curriculum and Instruction

The Director of the office of Curriculum and Instruction will be a full-time position located at the Mississippi Community College Board. The Office of Curriculum and Instruction will partner with constituents to develop innovative curricula designs, educational pathways, and creative professional development for Career and Technical staff, faculty, and administrators. The primary function of this professional administrative position is to provide innovative, visionary leadership and administrative direction for the Office of Curriculum and Instruction. The Director will be responsible for overseeing the research for curriculum design, pedagogical strategies and professional development. The Director will work closely with the community colleges, Research and Curriculum Unit at Mississippi State University, K-12, MCCB Office of Career and Technical Education, and business and industry to focus on technology developments, determine priorities and needs, and ensure that curriculums are designed to meet their needs. The Director will also be responsible for supervising staff. This position reports to the Associate Executive Director for Workforce, Career and Technical Education.

1.5.2 Curriculum Specialists

The Curriculum Specialist is a full-time position within the Office of Curriculum and Instruction. This position is responsible for collaborating with the MCCB’s Offices of Career and Technical Education and Workforce Education, the fifteen colleges, business and industry, the Mississippi Department of Education, and the Research and Curriculum Unit at Mississippi State University to develop innovative curricula with articulated career pathways and clearly defined outcomes, aligned with valid and reliable end of program assessments. The incumbent shall ensure that pedagogical strategies and curriculum design are research-based and responsive to the demands of the changing workplace and the modern learner. The incumbent must be self-motivated and must exercise sound, independent judgment in a dynamic environment with conflicting priorities requiring a high degree of teamwork, flexibility, discretion, diplomacy, and tact. Work is subject to review of the Director of Curriculum and Instruction, to whom the incumbent is responsible.

1.5.3 Training and Professional Development Specialists

The Training and Professional Development Specialist is a full-time position within the Office of Curriculum and Instruction. This position is responsible for developing and providing state-of-the-art training and professional development to community college Career and Technical Education (CTE) faculty, administrators, and staff. The incumbent will collaborate with the colleges to provide comprehensive service and support to the Community College CTE Divisions in developing strategies for improving student learning, retention, and completion, as well as the effective use of classroom, online, and other emerging technologies. The incumbent must be self-motivated and must exercise sound, independent judgment in a dynamic environment with conflicting priorities requiring a high degree of teamwork, flexibility, discretion, diplomacy, and tact. Work is subject to review of the Director of Curriculum and Instruction, to whom the incumbent is responsible.
1.5.4 **Technical Curriculum Specialist**

The Technical Curriculum Specialist is a full-time position within the Division of Workforce, Career, and Technical Education under the Office of Curriculum and Instruction (C&I). The Technical Specialist for Curriculum and Instruction will perform advanced technology work overseeing activities associated with the Office of Curriculum and Instruction. The incumbent is responsible for assisting with local area network or wide area network (LAN and WAN), web development, and application development. Work involves project planning for curriculum and professional training delivery, network maintenance and installation; and training of video conferencing equipment and system usage. The incumbent will assist with the analysis of existing hardware and software and evaluation of potential network enhancements. The incumbent must be self-motivated and must exercise sound, independent judgment in a dynamic environment with conflicting priorities requiring a high degree of teamwork, flexibility, discretion, diplomacy, and tact. Work is subject to review by the Director for Curriculum and Instruction, to whom the incumbent is responsible.
SECTION 2: CURRICULUM POLICIES

2.1 CURRICULUM DEVELOPMENT CYCLE
Each component of the cycle illustrated below will be explained throughout the manual.
2.2 **Review of Industry Certification/Accreditation Changes**

The Office of Curriculum and Instruction will conduct a bi-annual review of all national certification and accreditation standards. This will occur in January and May.

This data will be used when developing the annual plan of work for new curriculum development and revisions.

2.3 **Research-Based Design**

Curriculum will be developed to meet the needs of Mississippi’s current and emerging economy. The purpose for beginning the curriculum development process with a research-based design is to document the need for the CTE or Workforce programs as well as define and design technical, academic, and workplace skill/student outcomes consistent with national trends.

2.3.1 **Industry Need and Expectation**

*National Analysis of Related Programs*

Curriculum Specialists will conduct an analysis of programs to include:

- National trends of curriculum design and implementation practices in related programs
- National standards and/or accrediting agency student learning outcomes
- Related industry certifications and potential module design
- Determination of potential entry and exit points
- Determine online and blended learning opportunities

*Alignment to Industry Need and Expectation*

Program content will be aligned to local and state economic data. A summary of the following will be provided in the framework using the Mississippi State Workforce Investment Board’s eData Portal Data System\(^1\) and Occupational Outlook Handbook\(^2\):

- Current job demand and projection data by state-level and community college district
- Employer wage data by state-level and community college district

*Input from MS Industry*

Curriculum will not be written until business and industry representatives are identified and agree to participate in the curriculum development process. In an effort to ensure local demands are met through programmatic curricula, the MCCB will work with college Workforce Education Directors, Career and Technical Education Administrators, and Faculty Advisory Committees or Councils to solicit business and industry representatives to participate in curriculum development process. Specifically, the MCCB will solicit one-

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on-one or small group input and request that colleges bring one industry partner with them to the writing team meeting.

**Business and Industry Pre-Revision/Development Survey**
The purpose of this survey is to document curriculum changes and the quality of current curriculum. This survey can be shared with advisory committee members and other workforce contacts. When curricula are being revised, specific revision questions regarding national certifications, student and trainee exit points, and other related topics would be included. The survey will also include an employer satisfaction component.

**2.3.2 STUDENT AND TRAINEE SUCCESS**
Labor Market and Perkins data (ex. skills attainment, placement, job attainment, job sustainability, and wage data) will be analyzed.

**2.3.3 COLLEGE FACULTY, STAFF, AND ADMINISTRATOR PERSPECTIVES**
In coordination with the Workforce, Career, and Technical Education Summer Conference, the Office of Curriculum and Instruction will administer a statewide survey that will collect data from faculty, staff, and administrators for each curricula framework.
**Faculty Input**

During the Postsecondary Summer Conference, CTE and Workforce faculty will be asked to:

- Evaluate the curricula quality
- Share information regarding updated national standards
- Identify future training needs related to curricula content

*For programs that are being revised, a focus group meeting may be held at the Postsecondary Summer Conference to collect and organize faculty input.*

**Administrator Input**

During the Postsecondary Summer Conference, CTE and Workforce Administrators will be asked to:

- Discuss student completion, placement challenges, and best practices
- Identify changes needed for curricula that are about to be revised
- Identify professional development needs for faculty, staff, and administrators

2.3.4 **Subject Matter Experts**

When possible, the Office of Curriculum and Instruction will reach out to subject matter experts from state and national organizations. If a program is accredited, the accrediting agency will be asked to participate in the curriculum revision or development process.
SECTION 3: CURRICULUM DEVELOPMENT

3.1 CURRICULUM DEVELOPMENT LOGISTICS

3.3.1 MEETING FACILITATION

Participants

- **Faculty:** Each college that offers the program is invited and encouraged to participate. Any college considering offering the program in the future can participate at the colleges’ expense.
- **Administrators:** It is preferred that at least one administrator participate on each curriculum revision team. Administrators with related experience to the curriculum content will be solicited to participate.
- **Industry Representatives:** Curriculum development meetings will *not* occur until industry representatives have confirmed attendance or industry input has been collected. It is to the advantage of the colleges participating in this curriculum development or rewrite to include the industry representatives that hire their graduates. If no industry representation can be secured, curriculum development and/or rewrite will be postponed until such time as industry involvement can be assured and MCCB staff is able to reschedule all necessary meetings.

*Pre-Writing Team Meeting (Virtual Meeting)*

In preparation for the writing team meeting, a preliminary meeting will be held using video conferencing program or a conference call. Instructors, administrators, and industry members are invited and encouraged to participate. During this meeting, the team members will:

- Review and finalize the research-based component.
- Discuss industry-recognized credentials, certifications, and national standards.
- Discuss and draft the courses within the program of study for the career certificate, technical certificate, and AAS degree options.

*Writing Team Meeting (Face-to-face Meeting)*

Writing team meetings will be held in the Jackson area. The following will occur during this meeting:

- Agree upon courses within the program of study for the career certificate, technical certificate, and AAS degree options.
- Define and organize student-learning outcomes.
- Develop instructional and assessment samples.
- Finalize all other components of the curriculum document.

*Post-Writing Team Meeting (Virtual Meeting)*

After the curriculum is in a final draft format, an online, post-writing team meeting will be held. During this meeting:

- Writing team members and curriculum specialists will present an overview of major changes and updates to the program’s curriculum.
• Faculty, college administrators, and industry participants will have the opportunity to ask clarifying questions regarding the updates.
• After the online meeting, faculty, administrators, and industry personnel will be asked to complete the validation survey (section 4.1).

3.2 CURRICULUM COMPONENTS
The following curriculum components will be explained in detail during the “Forward” section of the Curriculum Document.

3.2.1 CURRICULUM IDENTIFICATION INFORMATION
• Curriculum Title: The title will be retrieved from the Statewide CIP Table.
• Program CIP: The CIP code will be the same CIP code from the state-wide CIP Table. If the program is a new program, the CIP code will be retrieved from the college's new program approval letter.
• Curriculum Board Approval Date: The month and year of MCCB Board Approval will be identified (example: February 2014).

3.2.2 CURRICULUM CONTACT INFORMATION
The following Information will be included:

Direct Inquiries to:
Director Name
Director of Curriculum and Instruction
Phone: 601-432-6155
Email: abryan@mccb.edu

Curriculum Specialist’s Name
Curriculum Specialists
Phone Number: insert phone number
Email: insert email address

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3825 Ridgewood Road
Jackson, MS 39211

3.2.3 ACKNOWLEDGEMENTS
Curriculum is driven by instructors at each local community college and based on input from local and state-wide business and industry members. The following list of acknowledgements will be listed in the curriculum:

• Faculty Writing Team Members: Name, College, and Campus Location
• Administrative Writing Team Members: Name, College, and Campus Location
• Business and Industry Writing Team Members: Name, Company, and Location

3.2.4 Research Abstract

• Program Summary: List the purpose and mission of the program.
• Major Dates of Program Development: The purpose of listing dates is to show the evolution of curriculum revisions. The reader should be able to see major stakeholder involvement and input into the curriculum framework. This should include, but is not limited to, the following:
  o Industry site visits and summary of recommendations
  o Advisory committee meetings and summary of recommendations
  o Survey deployment dates and summary of recommendations
  o Writing team meetings and summary of major actions
  o Administrative Procedures Act (APA) and summary of substantive comments
  o Final MCCB Board approval
• Summary of Major Trends in Industry: This data comes from the review of national and state trends/issues. Major trends and issues will be summarized and used as a guide in future professional training.

3.2.5 National Standards and Industry Certification

Student learning outcomes will be adopted from national standards and/or national certification expectations. The following will be included:

• Identification: Develop a summary and list contact information of national standard and/or industry certification.
• Industry Certification Matrix: Design a matrix showing where industry certification outcomes are included in the program curricula.
• Accreditation: Include contact information and an accreditation agency description when necessary.

3.2.6 Industry Job Projection Data

The following will be included to show alignment to industry demand:

• High Skill, High Wage, and High Demand Table: State and local economic data.
• Career Pathway Map: A map showing multiple entrance and exit points aligned to potential wage earnings.
3.2.7 **Modularization**
The curriculum will be designed in a stackable credential format and credit courses will be divided and aligned into non-credit modules (when appropriate).

- **Stackable Credentials:** Each curriculum will be designed into a career certificate (30 semester hours), technical certificate (45 semester hours), and an Associate of Applied Science Degree (60 semester hours) as applicable.
- **Multiple Exit Points:** When possible, each exit point will be aligned to potential wage earnings.

3.2.8 **Credit by Examination**
Credit by Examination procedures found in the MS Workforce Advantage document will be followed when developing curriculum. These procedures can be found at [http://www.mccb.edu/Pdfs/Wk/MWorkforceAdvantage.pdf](http://www.mccb.edu/Pdfs/Wk/MWorkforceAdvantage.pdf).

3.2.9 **Articulation**
The curriculum will include the following articulation elements:

- **Statewide Articulation with High Schools:** With the assistance of secondary instructors and/or administrators, each curriculum will list articulated credit with secondary CTE programs.
- **Dual Credit:** With the assistance of secondary instructors and/or administrators, each postsecondary framework will identify courses that can be taught for dual credit. Those courses will not only have a course code for postsecondary offerings, but will also include a secondary MSIS course code for easy secondary program delivery and transferability to postsecondary institutions.
- **Statewide Articulation with Institutions of Higher Learning:** When possible, curriculum will list courses that can be articulated to Mississippi 4-year institutions of higher learning.

3.2.10 **SACS General Education Core Courses**
To receive the Associate of Applied Science Degree, a student must complete all of the required coursework found in the Career Certificate option, Technical Certificate option and a minimum of 15 semester hours of General Education Core. The courses in the General Education Core may be spaced out over the entire length of the program so that students complete some academic and Career Technical courses each semester or provided primarily
within the last semester. Each community college will specify the actual courses that are required to meet the General Education Core Requirements for the Associate of Applied Science Degree at their college. The Southern Association of Colleges and Schools (SACS) Commission on Colleges Standard 2.7.3 from the Principles of Accreditation: Foundations for Quality Enhancement\(^3\) describes the general education core.

Section 2.7.3 In each undergraduate degree program, the institution requires the successful completion of a general education component at the collegiate level that (1) is substantial component of each undergraduate degree, (2) ensures breadth of knowledge, and (3) is based on a coherent rationale. For degree completion in associate programs, the component constitutes a minimum of 15 semester hours or the equivalent. These credit hours are to be drawn from and include at least one course from the following areas: humanities/fine arts, social/behavioral sciences, and natural science/mathematics. The courses do not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession.

Each AAS curriculum framework includes the pathway options listed below:

<table>
<thead>
<tr>
<th>Accelerated Pathway Credential</th>
<th>15 credits minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Certificate</td>
<td>30 credits minimum</td>
</tr>
<tr>
<td>Technical Certificate</td>
<td>Career Certificate Coursework + 15 credits minimum (total of 45 credits)</td>
</tr>
<tr>
<td>General Education Core Courses</td>
<td>Career Certificate Coursework + Technical Certificate Coursework + 15 academic general education credits minimum (total of 60 credits)</td>
</tr>
<tr>
<td>Total Semester Credit Hours for the Associate of Applied Science Degree</td>
<td>60 credits minimum hours earned as a compilation of Career, Technical, and Academic credit hours.</td>
</tr>
</tbody>
</table>

**Note:** Professional accreditation may require additional hours for the AAS pathway option. Programs of study will align and prepare students all professional accreditation standards, even if hours for AAS degree exceed the standard 60 credit hours.

---

3.2.11 **Online/Blended Learning**

Online and blended learning opportunities will be identified at the course level. During the curriculum revision process, curriculum specialists will assist in researching course template (i.e. course cartridge) availability through various textbook publishers. If available, this resource will be listed in the reference section of the curriculum resource manual.

In the event of significant revisions to a framework, curriculum update training may be offered to all instructors who will be teaching the revised curriculum. At this training, instructors will have the opportunity to learn how to integrate the common course template into their instruction.

MCCB staff will provide an opportunity for the instructors to work together to develop statewide online/blended learning modules or courses that support the revised curriculum. The office of eLearning at the MCCB will assist in this training and module/course access for instructors.

3.2.12 **Assessments**

College administrators and instructors will be asked to come to a consensus on a common national credential or certification that can be used as the technical skills attainment for performance reporting. If colleges are unable to come to a consensus, a MS-CPAS2 assessment will be developed. The MS-CPAS2 blueprint and assessment information will be identified and posted to the curriculum download website. College will continue to have the ability to implement national assessments that are listed as an approved alternative assessment document (http://www.mccb.edu/pdfs/ct/ApprovedAltAssessments.xls).

MS-CPAS2 Item Alignment and Development is extremely important to the curriculum revision process. MCCB staff, college administrators, and college faculty will participate with RCU staff in Item Alignment and Development meetings to be held in conjunction with the curriculum writing team meetings. As a prerequisite to MS-CPAS2 Item Alignment and Development meetings, college faculty must complete the assessment writing training module provided electronically through the RCU.

3.2.13 **Old-to-New Transition Table**

In an effort to allow colleges to adopt curriculum as quickly as possible, a table will be developed showing how students who entered a program of study in a current curriculum can complete graduation requirements under the revised curriculum. The table will only serve as a guide and resource for the colleges.

---

3.2.14  **Course Information**

The following information will be included in each course:

- Course Name
- Course Number
- Course Description
- Lab, Lecture, Clinical, and Contact Hours defined
- Pre-requisites and/or Co-requisites
- Dual Credit Course Number Identification
- Articulation Courses Identified
  - Secondary
  - IHL
- Workforce Modules Identified
  - Credit by Examination Assessments Identified
- Student Learning Outcomes
  - Adopted from industry standards
  - Blended/Online Learning Competencies Noted
- **Suggested** Instructional Materials
  - Textbooks, Web Sites/Web Resources
- **Suggested** Equipment List
3.3 Uniform Course Numbering

The system of identifying courses in all CTE curricula was adopted in 2005 to become implemented in the fifteen public community college districts during the 2006-2007 school years. The leadership and efforts provided by the Mississippi Community and Junior College Chief Career Technical Officers and Deans made this course numbering system possible.

A general revision of the numbering system is prepared each year. New courses are constantly reviewed by a screening committee of the Chief Career-Technical Officers & Deans Association referred to as the Uniform Course numbering (UCN) Committee.

When a new course is added or an existing course revised, the name of the course, a complete course description, the course number, and the SCH breakdown is provided and the Uniform Course Numbering (UCN) database updated.

3.3.1 Course Identifiers and Numbers

Each course in the numbering system has a three-letter prefix that identifies the subject field to which the course belongs. Examples: BOT identifies a Business Office Technology course; DDT identifies a Drafting and Design Technology course, etc.

First number designates year.
Example: 1000 level courses indicate first year’s work 2000 level courses indicate second year’s work

Second number designates grouping.
Grouping are consistent for each year but not from year one to year two

Third number designates sequence in a group.

Fourth number designates course credit hours.
Colleges have the flexibility to adjust the semester credit hours of a course up 1 hour or down 1 hour (after informing the Mississippi Community College Board [MCCB] of the change). Thus, credit may vary from course credit shown by varying this number up or down 1 credit hour.
Example: DDT 1213 and DDT 1214 with the same letter prefix indicate the same basic course, but with different credit due to more lecture or laboratory time.
3.3.2 Developing New Courses

Course developed as part of the statewide curriculum development/revision process will automatically be included in the Electronic Audit Reporting System (eARS) database.

All other career and technical education courses must be approved for inclusion and course reimbursement purposes. When a college wants to add a new course outside of the curriculum revision meetings, the following process should occur:

1. The requesting college obtains necessary institutional approval(s).
3. The requesting college submits the completed course request form to the Director of Curriculum and Instruction at the MCCB.
4. The Director will log the request and forward the form to the Chair of the Chief Career-Technical Officers and Deans’ uniform course numbering committee for committee consideration.
5. The committee chair shall notify the Director Curriculum and Instruction of the committee’s action on the request.
6. If approved, the Director will update the eARS database for reimbursement purposes and insert the course information in the related curriculum document. The course will be identified as a new course.
7. The Director of Curriculum and Instruction will send a notification that the new course has been approved via CCTODA listserv.

3.3.3 Curriculum Percentages

The content of the courses in this section reflects approximately 75% of the time allocated to each course. The remaining 25% of each course should be developed at the local district level and may reflect:

- Additional competencies and objectives within the course related to topics not found in the State curriculum framework, including activities related to specific needs of industries in the community college district.
- Activities that develop a higher level of mastery on the existing competencies and suggested objectives.
- Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed/revised.
- Activities which implement components of the including integration of academic and CTE skills and coursework, school-to-work transition activities, and articulation of secondary and postsecondary CTE programs.
- Individualized learning activities, including worksite learning activities, to better prepare individuals in the courses for their chosen occupational area.
3.3.4 Semester Credit Hour Definition

MS Community College Board Policy 9 indicates:

A semester credit hour is defined as a minimum student-teacher contact of 750 minutes for lecture and 1500 minutes for laboratory. (This does not include time for passing between classes, registration, nor final examinations.)

Semester credit hour(s) will align with United States Department of Education regulatory policy with regard to financial aid. This information can be found in the Federal Student Aid Handbook, chapter on School Eligibility and Operations, at [www.ifap.ed.gov](http://www.ifap.ed.gov).

Courses can be developed using lecture, laboratory, clinical, or contact hours. When developing curriculum content, use the following conversion table:

<table>
<thead>
<tr>
<th></th>
<th>Semester Credit Hour (SCH)</th>
<th>SCH Breakdown Equivalency</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Hour</td>
<td>1</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Laboratory Hours</td>
<td>1</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>Clinical Hours</td>
<td>1</td>
<td>3</td>
<td>45</td>
</tr>
</tbody>
</table>

When determining contact hours, use the following formula:

Step 1: Breakdown of lab/lecture/clinical hours x 15
Step 2: Add hours from lab/lecture/clinical together for total contact hours

Example:

Step 1

3 semester credit hours (2 lecture, 2 lab)
2 (lecture) x 15 = 30
2 (lab) x 15 = 30

Step 2

30 + 30 = 60 total contact hours

3.3.5 Curriculum Implementation Flexibility and Customization

Approved Career–Technical elective courses have been included to allow community colleges and students to customize programs to meet the needs of industries and employers in their area. In order to provide flexibility within the colleges, individual courses within a framework may be customized by doing the following:

- adding new student learning outcomes and suggested objectives to complement the existing student learning outcomes and suggested objectives in the program framework
- revising or extending the suggested objectives for individual student learning outcomes
- adjusting the semester credit hours of a course to be up 1 hour or down 1 hour (after informing the MCCB of the change)

In addition, the curriculum framework as a whole may be customized by doing the following:
• sequencing courses within the suggested course sequence to reflect the new assessment format
• developing and adding a new course that meets specific needs of industries and other clients in the community or junior college district (with MCCB approval)
• adding courses listed in the “Approved Career and Technical Electives List” as local certificate and degree completion requirements to meet specific needs of industries and other clients in the community (The “Approved Career and Technical Electives” are currently approved in the eARS database; therefore, MCCB approval is not required.)

3.3.6 **Curriculum Development for New Programs and New Program Options**

Colleges will follow the procedure for requesting a new program or new program option through the Director of Career and Technical Education’s office by completing the proper application form located at [http://www.mccb.edu/WkfEdu/CTDefault.aspx](http://www.mccb.edu/WkfEdu/CTDefault.aspx). Once the MCCB Board Members approve the new program or program option, college will implement program locally. During the first 2 years of implementation, the MCCB Office of Curriculum and Instruction will work with the college to develop a statewide curriculum framework and technical skills assessment. The following timeline will be followed for new programs and new program options:

**Year 1, Fall Semester**

1. Identify steering committee of business/industry, education, and government personnel. This may be the same committee that colleges identified on the new program application.
2. Conduct research to learn about other programs, certifications, standards, etc.
3. Identify the writing team (faculty from college applying for the program and those with related programs [if applicable])
4. Conduct a writing team meeting with writing team, administrators, and business/industry steering committee to draft curriculum for the Career and Technical Certificate and the A.A.S. degree option.

**Year 2, Spring Semester**

5. Hold a writing team meeting to review and finalize the Career and Technical Certificate and the A.A.S. degree option.
6. Begin MCCB Board Member Approval process that includes validation, presentation to members, APA, and final vote of approval.
7. Upload curriculum framework to the MCCB Curriculum Download Website and include program into the regular curriculum revision cycle.

8. Work with colleges to identify a national certification or coordinate efforts with RCU to develop the MS-CPAS2.

**Year 3, Spring Semester**

9. Administer appropriate end of year program exam (Licensure Exam, National Certification, MS-CPAS 2, or MCCB Approved Alternative Assessment) that will be used for Perkins Technical Skills Attainment reporting.

### 3.4 **Student Learning Outcomes**

Student Learning Outcomes will be adopted from national certification or credentialing standards. If a program does not have a related national certification or credentialing standard, the Student Learning Outcomes will be adopted from a related national standard (Example: Common Career Technical Core Knowledge and Skills Outcomes [http://www.careertech.org/career-technical-education/cctc/](http://www.careertech.org/career-technical-education/cctc/))
3.5 **CURRICULUM RESOURCE MANUAL**

A curriculum resource manual will be prepared as a companion piece for each curriculum framework. Faculty members will be asked to provide resources such as textbooks, software, websites, and equipment they currently use or believe will be useful with revised curriculum.

3.5.1 **FORMATIVE ASSESSMENTS**

*Formative Assessment* or diagnostic testing is a range of formal and informal assessment procedures employed by teachers during the learning process in order to modify teaching and learning activities to improve student attainment (example: unit or end of course assessments).

MCCB will provide materials useful to instructors when developing formative assessments through the curriculum resource manual and various online resources. The Teaching and Learning Institute will offer a module on assessment development.

3.5.2 **INSTRUCTIONAL PRACTICES**

MCCB will provide materials useful to instructors for developing instructional practices through the curriculum resource manual and various online resources. The Teaching and Learning Institute will offer a module on effective instructional practices and learning styles.
SECTION 4: VALIDATION OF CONTENT
Each newly developed or revised curriculum framework will be validated by college faculty/trainers, college administration, and business and industry prior to presenting the curriculum to the MS Community College Board for approval.

4.1 COLLEGE & INDUSTRY VALIDATION MEETING AND SURVEY
Deans, Directors, Faculty, Trainers, and Industry Members will be asked to review the curriculum and complete a validation survey. The following will take place:

- The writing team members and curriculum specialists will lead an online meeting to describe the input from industry and changes in the revised curriculum. This is the same online meeting identified in section 3.1.
- At the end of the meeting, information will be solicited from participants using an online survey.
- Meeting participants will give recommendations for curriculum specific professional development opportunities.
- Based on feedback, appropriate MCCB personnel will move the curriculum through the MCCB Board approval process.

SECTION 5: MCCB BOARD APPROVAL PROCESS
Curricula will be presented to the MCCB Board on a bi-annual basis or when approval is deemed necessary. The following will be included in the board packet:

1. Curricula CIP and name
2. Summary of major changes
3. Validation survey results

Upon approval, the curricula will be made public for comments via the Secretary of State Office for 30 days.

After the public comment period, the curricula will be presented to the board for final approval or, if comments warrant, go back into the revision process.

Upon final approval, the eARS database will be updated where needed.

SECTION 6: COMMUNITY COLLEGE IMPLEMENTATION OF CURRICULA
Once curricula has final board approval, the community colleges offering programs specified under a curricula framework have until the fall term of the following fiscal year to implement. For example, any curricula approved during the calendar year 2014 (January 1 – December 31, 2014) should be implemented in the fall term of 2015. Any deviation from this implementation schedule could affect student performance on MS-CPAS2 and corresponding Perkins indicators.
Section 7: New Curriculum Training Meetings

7.1 Planning
Data from the online validation meeting (section 4.1) will be used to plan professional development opportunities for curriculum changes. If necessary, a committee of instructors and administrators may be assembled to assist in the planning. A planning packet will be submitted to the Director of Curriculum and Instruction for approval prior to advertising the training event. The planning packet will include:

1. Training Objectives:
   Measurable objectives for training content will be included. Objectives should be written based on the Webb’s Depth of Knowledge Framework.5

2. Description of Participants:
   All full-time and adjunct instructors who teach the program will be eligible to participate in the training. Administrators are welcomed to attend the training.

3. Delivery Methods
   The method of delivery will depend on the program and instructors. Delivery methods will include distance learning opportunities using the state-wide video network system, online learning using the CANVAS course management system, and face-to-face learning opportunities. Training will occur when most instructors are on contract. Additionally, events such as the Postsecondary Summer Conference will be utilized whenever possible for new curriculum training.

4. Facilities
   Building and room information will be included.

5. Budget
   A training budget will be developed and submitted to the Director of Curriculum and Instruction.

6. Agenda
   The agenda will be developed based on the training objectives. Agenda will include:
   • Training logistical information (title of training, times, locations, date, etc.)
   • Training objectives

7. Presenters
   Presenters will be selected based on subject area expertise and their ability to present information in a meaningful way.

8. Registration Information
   Participants will register using an electronic system.

9. Evaluation Criteria and Surveys

7.2 CURRICULUM CONTENT PROFESSIONAL DEVELOPMENT CATALOG
An electronic training and professional development catalog will be published each semester on the Office of Curriculum and Instruction website. Information regarding the training will be housed in this catalog.

The catalog will be sent to the CCTODA listserv address from the Director of Curriculum and Instruction and will be posted to the MCCB Website.

Reminders about upcoming events will be included in the division electronic newsletter.

7.3 EVALUATION
The New Curriculum Training Meetings will be evaluated by using a rubric based on Learning Forward’s Standards for Professional Learning. 6

SECTION 8: IMPLEMENTATION & EVALUATION OF CURRICULUM EFFECTIVENESS

In an effort to reach goals, improve our results, become more competitive by aligning our plans, processes, decisions, people, actions, and results, the Office of Curriculum and Instruction will continuously examine our processes, products, and results.

8.1 STUDENT LEARNING AND PROGRESS
The following student learning and progress indicators will be examined:

1. Student enrollment
2. Perkins Data
3. Student employment retention and wage earnings in employment

8.2 INTERNAL AND EXTERNAL CUSTOMER FEEDBACK
An annual survey will be administered to the CCTODA members and Workforce Directors to evaluate the quality of work products and project management (ex. Communication, process, etc.).

### Section 9: Curriculum Revision/Development Plan

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<th>Activities</th>
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<td>Spring Curriculum Preliminary Work</td>
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<td>• Research-Based Design</td>
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<td>• Review of Student/Participant Data</td>
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<td><strong>February</strong></td>
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<td>• Business and Industry Pre-Revision Development Survey</td>
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<td>Curriculum Writing Team Meetings</td>
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<td>• Pre-writing Team Meeting (virtual)</td>
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<td>• Writing Team Meeting (face-to-face)</td>
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<td>• Post-writing Validation Team Meeting (virtual)</td>
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<td>• College and Industry Validation Survey</td>
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<td><strong>Annual State-wide Articulation Agreement Meeting</strong></td>
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<td><strong>Creating Futures Conference</strong></td>
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<td><strong>April</strong></td>
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<td><strong>Regional Collaboration Meetings</strong></td>
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<td>Curricula-based Professional Development</td>
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<td><strong>Presentation of Spring Curricula to Board for Public Comments</strong></td>
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| September | - Pre-writing Team Meeting (virtual)  
              - Writing Team Meeting (face-to-face)  
              - Post-writing Validation Team Meeting (virtual)  
              - College and Industry Validation Survey  
              - Collect Industry Data Continued  
              - Curriculum Writing Team Meetings Continued |
| October   | - Finalize Fall Documents  
              - Internal Evaluation  
              - Editing  
              - Board Material  
              - Planning for Curricula-based Professional Development to be offered in Spring Semester  
              - Regional Collaboration Meetings |
| November  | - Workforce Summit  
              - Presentation to Board  
              - Curriculum Out for APA  
              - National Certification and Accreditation Standards Review  
              - Presentation of Fall Curricula to Board for Public Comments |
| December  | - Perkins Data Review  
              - Final Board Approval  
              - Set Next Curricula to be Revised  
              - APA |