

PROGRAM REVIEW COVER PAGE	
<i>COLLEGE</i>	John Wood Community College
<i>DISTRICT NUMBER</i>	539
<i>CONTACT PERSON (NAME, TITLE, CONTACT INFORMATION)</i>	Josh Welker, Dean of Business Services & Institutional Effectiveness, 217.641.4200
<i>FISCAL YEAR REVIEWED:</i>	2019
DIRECTORY OF REVIEWS SUBMITTED	
<i>AREA BEING REVIEWED</i>	<i>PAGE NUMBERS</i>
<i>CAREER AND TECHNICAL EDUCATION</i>	2 – 37
<i>ACADEMIC DISCIPLINES</i>	38 – 57
<i>CROSS-DISCIPLINARY INSTRUCTION</i>	58 – 63
<i>STUDENT AND ACADEMIC SUPPORT SERVICES</i>	64 – 68
<i>PRIOR REVIEW SUPPLEMENTAL INFORMATION</i>	NA
<i>OTHER ATTACHMENTS AS NECESSARY</i>	NA

Career & Technical Education

COLLEGE NAME: John Wood Community College

FISCAL YEAR IN REVIEW: 2019

PROGRAM IDENTIFICATION INFORMATION

<i>PROGRAM TITLE</i>	<i>DEGREE OR CERT</i>	<i>TOTAL CREDIT HOURS</i>	<i>6-DIGIT CIP CODE</i>	<i>LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE</i>
Precision Machining (CNC) Machinist	Cert	34	480503	Certified Production Technician Certificate

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives

What are the overarching objectives/goals of the program?

Goal 1: Students will be able to read and understand a blue print.
1.1: Students will know what diminution lines are.
1.2: Students will be able to know where to find what materials to make part from.
1.3: Students will be able to read and use a calipers and micrometer.
1.4: Students will understand what a blue print tolerance is.
1.5: Students will understand what different GD&T symbols are.

Goal 2: Students will be able to square up a part on a lathe.
2.1: Students will be able to start up a manual lathe safely.
2.2: Students will know what RPM they are using on a lathe.
2.3: Students will be able to check part with micrometers.
2.4: Students will be able put parts back on machine and hold tolerance.

Goal 3: Students will be able to drill a hole in the center of a piece of bar stock.

3.1: Students will be able to chuck up a drill safely.
3.2: Students will know how to read dials to make sure there depth is correct.
3.3: Students will be able to know the feed rate to use and speed for spindle.

Goal 4: Students will learn how to start up and flatten out a part and hold .002 tolerance.


4.1: Students will be able to measure, cut piece to work on.
4.2: Students will be able to pick the correct tool for facing part.
4.3: Students will be able to clap part correctly.
4.4: Students will be able to know what the Surface Feet Per Minute is for what materials they are using.

Goal 5: Students should be able to pass the MSSC safety test.
5.1: Students will cover what safety in manufacturing is.

	<p>5.2: Students have knowledge of how OSHA works for everyone in manufacturing.</p> <p>5.3: Students will know what SDS sheet are and where they should be found.</p> <p>5.4: Students will know what an evacuation form looks like</p> <p>5.5: Students will cover what type of fire extinguishers there are.</p>
To what extent are these objectives being achieved?	Students are successfully completing the certificates and gaining employment at manufacturing facilities.
Past Program Review Action What action was reported last time the program was reviewed?	NA

CTE PROGRAM REVIEW ANALYSIS	
Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.	
List all pre-requisites for this program (courses, placement scores, etc.).	No pre-requisites are required for this program.
Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	CAD 101 Intro to Dft & Blueprint Reading for CAD CAD 230 Intro to Mfg Processes FYE 101 Blazing Your Trail MAT 100 Technical Math MFG 103 Intro to Manufacturing Maintenance MFG 104 Quality/Continuous Improvement MFG 113 Intro to Manu/Industrial Safety MFG 135 Precision Machining I MFG 235 Precision Machining II MFG 250 Physical Metallurgy MFG 106 CNC Turning MFG 111 CNC Milling
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	N/A
INDICATOR 1: NEED	RESPONSE
1.1 How strong is the occupational demand for the program?	Per ONet, in Illinois the outlook will increase 4% between 2016 and 2026, with 3630 annual openings. In Missouri, the outlook will increase 3% between 2016 and 2026, with 690 annual openings.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	See ONet data above.
1.3 What is the district and/or regional need?	Demand has increased due to the expansion of local employers as well as employee retirements.

1.4 How are students recruited for this program?	Students are recruited through High school visits, area career fairs, media and social media advertising, and inviting all area high schools to visit our Workforce Development Center during the community MakerFest event.
1.5 Where are students recruited from?	Students are recruited from all district high schools as well as out of district high schools and veteran groups. Recruitment continues when students visit the local Illinois One Stop and career fairs.
1.6 Did the review of program need result in actions or modifications? Please explain.	After review, minor changes are being made. Students will receive some lab hands on training during the 1 st semester by moving Precision Machining 1 from the 2 nd semester to the 1 st semester. This will impact student success as ‘hands-on’ experiences take the knowledge gained and applying it.
INDICATOR 2: COST EFFECTIVENESS	RESPONSE
2.1 What are the costs associated with this program?	This program is part of the Manufacturing Department (10311). Total Manufacturing Department costs for FY2018 were \$218.92 per credit hour with net revenue of \$13.96 per credit hour.
2.2 How do costs compare to other programs on campus?	The total cost per credit hour is above the College average of \$189.50 for CTE programs, and the net revenue per credit hour is below the College average of \$28.97 for CTE programs.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The College utilized \$10,019 of grant funding which accounted for 9% of total department expenditures in FY2018.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Grant expenditures in this department have been declining in the last few years as expected. Increased enrollment and revenue in the program are expected to offset this loss.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	No
INDICATOR 3: QUALITY	RESPONSE
3.1 What are the program’s strengths?	Our program strength is meeting the needs of our local employers. Students can take the MSSC – Safety, Quality, Manufacturing Processes, and Maintenance assessment which is part of the MSSC CPT National credential. Students also earn an OSHA 10 card. During the 2 nd semester, a NIMS (National Institute of Metalworking Society) project is included.
3.2 What are the identified or potential weaknesses of the program?	There was no lab section in the 1 st semester. All classes were on-line or Blended. Change was made, as mentioned earlier in this review.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Delivery methods include a combination of traditional, on-line, and hybrid delivery methods.
3.4 How does this program fit into a career pathway?	The Precision Machining (CNC) Machinist stacks/ladders into the Manufacturing AAS degree.

<p>3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?</p>	<p>The MSSC CPT credentials and NIMS project have been included in this program.</p>
<p>3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.</p>	<p>Dual credit options are available for some courses which include Technical Math, MAT 100 and Introduction to manufacturing Safety, MFG 113. Currently only Western High School is offering the dual credit. Mendon High School previously offered courses in 2017.</p>
<p>3.7 What work-based learning opportunities are available and integrated into the curriculum?</p>	<p>Internships are available, but not a requirement for the program.</p>
<p>3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).</p>	<p>No</p>
<p>3.9 Are industry-recognized credentials offered? If so, please list.</p>	<p>The following industry-recognized credentials are offered: MSSC – CPT NIMS OSHA 10</p>
<p>3.10 Is this an apprenticeship program? If so, please elaborate.</p>	<p>No</p>
<p>3.11 If applicable, please list the licensure examination pass rate.</p>	<p>N/A</p>
<p>3.12 What current articulation or cooperative agreements/initiatives are in place for this program?</p>	<p>If the student continues to earn an AAS in Manufacturing, we have the following articulation agreements</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Career and Technical Degrees Accepted at</p>  </div>

3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	This is the first JWCC program review for PPM. Established employer partnerships include Watlow, Port Industries, and CMW.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	The average class size for courses in the Manufacturing Department is 4.67.
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Adjunct and full-time faculty are encouraged to obtain MSSC Instructor training, Fanuc Robotics training, Mastercam CAD training, and HAAS machine training. JWCC Faculty Senate offers other professional development opportunities for all faculty.
3.16 What is the status of the current technology and equipment used for this program?	All machines and tools are current in this program.
3.17 What assessment methods are used to ensure student success?	Skills checklists are used to ensure students are acquiring the necessary skills.
3.18 How satisfied are students with their preparation for employment?	Per the survey results and student feedback, students are satisfied with the preparation and employment results. Some students are gaining employment prior to completion of the program.
3.19 How is student satisfaction information collected?	Student satisfaction information is collected through a survey which is sent to all JWCC graduates each year as well as feedback from instructors and the JWCC career Services department.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers are included on our Advisory Committee where we review curriculum as well as the goals and outcomes of the program. Employers participate in classroom presentations, placement events, and offer student internship opportunities.
3.21 How often does the program advisory committee meet?	The Program Advisory committee meets two times per year.
3.22 How satisfied are employers in the preparation of the program's graduates?	During the last advisory meeting many positive remarks were offered about our program graduate's knowledge and skills.
3.23 How is employer satisfaction information collected?	Information is gained through feedback during advisory meetings and employer feedback to our career service department and business and industry department.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Our review informed moving Precision Machining 1 from the 2 nd semester to the 1 st semester to provide some lab hands on training during the 1 st semester. In reviewing MAT100 student success rates, it was determined a Math Tutor is needed for those who take MAT 100 on-line.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.					
<i>CTE PROGRAM</i>	PMM 100				
<i>CIP CODE</i>	480503				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	0	8	2	2	2
<i>NUMBER OF COMPLETERS</i>	0	0	5	2	2
<i>OTHER (PLEASE IDENTIFY)</i>					
How does the data support the program goals?	Program data reports which include enrollment broken down by several demographic factors including race, disadvantaged status, average ACT, gender, age, and residence for the last five years were reviewed. These reports also contain persistence and course success rates.				
Elaborate. What disaggregated data was reviewed?	Low enrollment data is a result of many students who take the classes in this program are signing up for the Manufacturing AAS degree, not the certificate.				
Were there gaps in the data? Please explain.	No				
What is the college doing to overcome any identifiable gaps?					
Are the students served in this program representative of the total student population? Please explain.	Yes, we have a good representation of age, race and gender included in the program.				
Are the students served in this program representative of the district population? Please explain.	Yes, we have a good representation of age, race and gender included in the program.				
REVIEW RESULTS					
Action	<input checked="" type="checkbox"/> Continued with Minor Improvements <input type="checkbox"/> Significantly Modified <input type="checkbox"/> Placed on Inactive Status <input type="checkbox"/> Discontinued/Eliminated <input type="checkbox"/> Other (please specify)				
Summary Rationale Please provide a brief rationale for the chosen action.	The overall review of the program indicated the program has been very successful. The only feedback was to look at how we could include some hands on during the 1 st semester.				

Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	To address the feedback concern, the Precision Machining 1 course was moved from the 2 nd semester to the 1 st semester, starting Fall 2019. A Math tutor was available for MAT 100 online students starting in spring 2019.
--	---

Career & Technical Education

COLLEGE NAME: John Wood Community College

FISCAL YEAR IN REVIEW: 2019

PROGRAM IDENTIFICATION INFORMATION

<i>PROGRAM TITLE</i>	<i>DEGREE OR CERT</i>	<i>TOTAL CREDIT HOURS</i>	<i>6-DIGIT CIP CODE</i>	<i>LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE</i>
Basic Welding Certificate	Cert	17	480508	
Industrial Welding Certificate	Cert	29	480508	Basic Welding Cert
Welding	Cert	17	480508	Obsolete

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives

What are the overarching objectives/goals of the program?

Objectives Basic Welding Certificate

Objective 1: Demonstrate manufacturing and quality welding processes, procedures and equipment.

Objective 2: Demonstrate ability to apply minor maintenance, trouble shooting and safety procedures that are used in industry.

Objective 3: Demonstrate technical skills and knowledge required for fabrication of precision weldments from ideas, drawings, and blueprints.

Objective 4: Demonstrate Math skills necessary to compute the required measurements required for accurate fabrication or production of required parts.

Objectives Industrial Welding Certificate

Objective 1: Demonstrate manufacturing and quality welding processes, procedures and equipment.

Objective 2: Demonstrate ability to apply minor maintenance, trouble shooting and safety procedures that are used in industry.

Objective 3: Demonstrate technical skills and knowledge required for fabrication of precision weldments from ideas, drawings, and blueprints.

Objective 4: Demonstrate technical skills and knowledge required for fabrication of precision weldments from ideas, drawings, and blueprints.

Objective 5: Apply gained knowledge and skills of industrial welding certificate

To what extent are these objectives being achieved?

Students are successfully completing the certificates and gaining employment at manufacturing facilities.

<p>Past Program Review Action What action was reported last time the program was reviewed?</p>	Continue with minor improvements
---	----------------------------------

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	No pre-requisites are required for this program.
---	--

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	<p>Basic Welding Certificate 17 Credit Hours REQUIRED COURSES MAT 100 Technical Math 3 MFG 113 Intro to Manu/Indu Safety 3 WLD 122 Flux Core Inner Shield 1 WLD 123 Flux Core Dual Shield Welding 1 WLD 124 Welding Spray Transfer 1 WLD 125 Stick Welding I 3 WLD 161 Interpreting Welding Prints 3 WLD 180 Thermal Cutting Processes 2 Total 17</p> <p>Industrial Welding Certificate 29 Credit Hours REQUIRED COURSES FIRST SEMESTER MAT 100 Technical Math 3 MFG 113 Intro to Manu/Indu Safety 3 WLD 122 Flux Core Inner Shield 1 WLD 123 Flux Core Dual Shield Welding 1 WLD 124 Welding Spray Transfer 1 WLD 125 Stick Welding I 3 WLD 161 Interpreting Welding Prints 3 WLD 180 Thermal Cutting Processes 2 Total 17 SECOND SEMESTER WLD 121 MIG Welding Short Circuit 3 WLD 126 Stick Welding II 3 WLD 127 TIG Welding Carbon Steel 2 WLD 128 TIG Welding Aluminum 1 WLD 129 TIG Welding Stainless Steel 1 WLD 130 Welding Inspection & Testing 1 WLD 194 Capstone Project OR WLD 195 Welding Internship 1-2 Total 12-13</p>
---	--

Provide a rationale for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	N/A
--	-----

<i>INDICATOR 1: NEED</i>	<i>RESPONSE</i>
---------------------------------	------------------------

1.1 How strong is the occupational demand for the program?	Per ONet, in Illinois the outlook will increase 5% between 2016 and 2026, with 1540 annual openings. In Missouri, the outlook will increase 5% between 2016 and 2026, with 980 annual openings.
--	---

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Demand has increased due to the expansion of two major employers.
1.3 What is the district and/or regional need?	Demand is high in our area. At our last welding advisory meeting, every employer stated they were hiring welders.
1.4 How are students recruited for this program?	Students are recruited by making connections during High school visits and area career fairs. Arrangements were made with all area high schools to visit our Workforce Development Center during the community MakerFest event. Also, media and social media advertising of the program is used to recruit.
1.5 Where are students recruited from?	Students are recruited from all district high schools as well as out of district high schools, and veteran groups. Opportunities for recruitment also occur during student visits to the local Illinois One Stop and career fairs.
1.6 Did the review of program need result in actions or modifications? Please explain.	Review supported making minor changes. Based on this review as well as feedback from our Advisory Committee, we will be incorporating more soft skill training and moving the Technical Math class to the 2 nd semester since our WLD 161 Interpreting Welding Prints cover all the math components in Objective 4.
<i>INDICATOR 2: COST EFFECTIVENESS</i>	<i>RESPONSE</i>
2.1 What are the costs associated with this program?	This program is part of the Welding Department (10310). Total Welding Department costs for FY2018 were \$343.09 per credit hour with net revenue of (\$96.91) per credit hour.
2.2 How do costs compare to other programs on campus?	The total cost per credit hour is above the College average of \$189.50 for CTE programs, and the net revenue per credit hour is below the College average of \$28.97 for CTE programs.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The College utilized \$9,622.78 of grant funding which accounted for 6% of total department expenditures in FY2018.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Increased enrollment and revenue in the program is expected to offset this loss.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	None
<i>INDICATOR 3: QUALITY</i>	<i>RESPONSE</i>
3.1 What are the program's strengths?	One program strength is meeting the needs of our local employers. Both the Basic Welding certificate and the Industrial Welding certificate includes the educational material for student to take the MSSC – Safety assessment. The courses in the Industrial Welding certificate aligns with the AWS SENSE 1 guidelines.
3.2 What are the identified or potential weaknesses of the program?	The Advisory Committee stated that our program needs to continue to reinforce the necessary soft skills required for employment.

3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	We use a combination of traditional, on-line, and hybrid delivery methods for courses in this program.
3.4 How does this program fit into a career pathway?	Both the Basic Welding certificate and the Industrial Welding certificate can stack/ladder into our AAS in Manufacturing.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	A Capstone class has been included at the end of the 2 nd semester. This provides students with the opportunity to practically use the skills and knowledge gained during this program.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	All classes in the Basic Welding certificate are offered as dual credit. Only Western High School is doing dual credit currently.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	An optional 2 credit hour internship is included in the Industrial Welding certificate.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	none
3.9 Are industry-recognized credentials offered? If so, please list.	The industry-recognized credentials offered are: MSSC – CPT Safety American Welding Society (AWS)
3.10 Is this an apprenticeship program? If so, please elaborate.	None included in the program at this time.
3.11 If applicable, please list the licensure examination pass rate.	N/A

<p>3.12 What current articulation or cooperative agreements/initiatives are in place for this program?</p>	<p>If the student continues to earn an AAS in Manufacturing, we have the following articulation agreements</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Career and Technical Degrees Accepted at</p>  </div>
<p>3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?</p>	<p>Yes, additional employer partnerships include Watlow, Port Industries, and CMW.</p>
<p>3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.</p>	<p>The average class size for courses in the Welding Department is 7.09.</p>
<p>3.15 What professional development or training is offered to adjunct and full-time faculty that may increase the quality of this program?</p>	<p>Adjuncts and full-time faculty are encouraged to acquire AWS CWI and CWE certifications. JWCC Faculty Senate offers professional development opportunities for all faculty.</p>
<p>3.16 What is the status of the current technology and equipment used for this program?</p>	<p>All technology and equipment are current.</p>
<p>3.17 What assessment methods are used to ensure student success?</p>	<p>Skills checklists are used for each welding class to ensure students are acquiring the necessary skills.</p>
<p>3.18 How satisfied are students with their preparation for employment?</p>	<p>Per the survey results and student feedback, students are satisfied with the preparation and employment results. Some students are gaining employment prior to completion of the program.</p>
<p>3.19 How is student satisfaction information collected?</p>	<p>Student satisfaction information is collected through a survey which is sent to all JWCC graduates each year.</p>

3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers are included on our Advisory Committee where we review curriculum as well as the goals and outcomes of the program. Employers participant in classroom presentations, placement events, and offer students internship opportunities.
3.21 How often does the program advisory committee meet?	Our Advisory committee meets two times per year.
3.22 How satisfied are employers in the preparation of the program's graduates?	All positive remarks were stated at the last advisory meeting.
3.23 How is employer satisfaction information collected?	JWCC gains feedback during the advisory meetings and through documented results from Internship placement. Also, employers provide feedback to our career service department and business and industry department.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Yes. Students were struggling with completing MAT100, so they now can work with a Math Tutor. A welding instructor will be available to tutor students taking WLD 161 on-line. To address the need for soft skills, the FYE 101 class has been added to the program which reinforces the necessary soft skills required by employers.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

<i>CTE PROGRAM</i>	WLD 100				
<i>CIP CODE</i>	480508				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	0	0	0	0	13
<i>NUMBER OF COMPLETERS</i>	0	0	0	0	13
<i>OTHER (PLEASE IDENTIFY)</i>					
<i>CTE PROGRAM</i>	WLD 200				
<i>CIP CODE</i>	480508				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	0	0	0	0	18
<i>NUMBER OF COMPLETERS</i>	0	0	0	0	4

<i>OTHER (PLEASE IDENTIFY)</i>					
<i>CTE PROGRAM</i>	WLD 300				
<i>CIP CODE</i>	480508				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	22	25	26	28	0
<i>NUMBER OF COMPLETERS</i>	37	28	21	21	0
<i>OTHER (PLEASE IDENTIFY)</i>					
How does the data support the program goals? Elaborate.	Program data reports which include enrollment broken down by several demographic factors including race, disadvantaged status, average ACT, gender, age, and residence for the last five years were reviewed. These reports also contain persistence and course success rates.				
What disaggregated data was reviewed?					
Were there gaps in the data? Please explain.	No				
What is the college doing to overcome any identifiable gaps?					
Are the students served in this program representative of the total student population? Please explain.	Yes, we have a good representation of age, race and gender included in the welding program.				
Are the students served in this program representative of the district population? Please explain.	Yes, we have a good representation of age, race and gender included in the welding program.				
REVIEW RESULTS					
Action	<input checked="" type="checkbox"/> Continued with Minor Improvements <input type="checkbox"/> Significantly Modified <input type="checkbox"/> Placed on Inactive Status <input type="checkbox"/> Discontinued/Eliminated <input type="checkbox"/> Other (please specify)				
Summary Rationale Please provide a brief rationale for the chosen action.	Based on review of our last advisory committee meeting, minor modifications were suggested to continue improvement in student success.				
Intended Action Steps What are the action steps resulting from this review?	The changes shown below were submitted to the January 2019 Curriculum Committee which were approved and then sent to the Board of Trustees for approval in February 2019. The ICCB approved the changes and we are offering the updated program, fall 2019.				

Please detail a timeline and/or dates for each step.

Basic Welding Certificate

~~17~~ 16 Semester Hours

MAT 100 Technical Math	3
MFG 113 Intro to Manu/Indu Safety	3
WLD 122 Flux Core Inner Shield	1
WLD 123 Flux Core Dual Shield Welding 1	1
WLD 124 Welding Spray Transfer	1
WLD 125 Stick Welding I	3
WLD 161 Interpreting Welding Prints	3
WLD 180 Thermal Cutting Processes	2
WLD 130 Welding Inspection and Testing 1	1
FYE 101 Blazing your Trail	<u>1</u>
	17
	16

Industrial Welding Certificate

~~29~~ 30 Semester Hours

FIRST SEMESTER

MFG 113 Intro to Manu/Indu Safety	3
WLD 122 Flux Core Inner Shield 1	1
WLD 123 Flux Core Dual Shield Welding 1	1
WLD 124 Welding Spray Transfer	1
WLD 125 Stick Welding I	3
WLD 161 Interpreting Welding Prints	3
WLD 180 Thermal Cutting Processes	2
WLD 130 Welding Inspection and Testing 1	1
FYE 101 Blazing your Trail	<u>1</u>
	17 -16

SECOND SEMESTER

MAT 100 Technical Math	3
WLD 121 MIG Welding Short Circuit	3
WLD 126 Stick Welding II	3
WLD 127 TIG Welding Carbon Steel	2
WLD 128 TIG Welding Aluminum	1
WLD 129 TIG Welding Stainless Steel	1
WLD 194 Capstone Project OR	1-2
WLD 195 Welding Internship	1-2
	12-13 14-15

Career & Technical Education

COLLEGE NAME: John Wood Community College

FISCAL YEAR IN REVIEW: 2019

PROGRAM IDENTIFICATION INFORMATION

<i>PROGRAM TITLE</i>	<i>DEGREE OR CERT</i>	<i>TOTAL CREDIT HOURS</i>	<i>6-DIGIT CIP CODE</i>	<i>LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE</i>
Graphic Design	AAS	64	500409	Desktop Publishing certificate Web Page Design Certificate

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives

What are the overarching objectives/goals of the program?

Program Objectives / Outcomes

1. Understand the fundamentals of design and composition.
 - 1.1 Use typography
 - 1.2 Use color.
 - 1.3 Develop layout skills.
2. Understand basic computer use and terminology.
 - 2.1 Use common software productivity tools.
 - 2.1.1. Use word processing software
 - 2.1.2 Use spreadsheet software
 - 2.1.3 Use presentation graphics software
 - 2.1.4 Use desktop information management software
 - 2.1.5 Use Internet browser software
 - 2.2 Use common system software
3. Understand the skills/tools needed for effective visual communication.
 - 3.1 Create/manipulate portable files.
 - 3.2 Create/manipulate computer illustrations (vector graphics).
 - 3.3 Create/manipulate photographs/graphics (raster graphics).
4. Understand the use of technology as a tool in the management and production of text and graphics in electronic communication.
 - 4.1 Create/design Web pages/Web site.

	<p>4.2 Create/design multimedia presentations.</p> <p>5. Understand the use of technology as a tool in the management and production of text and graphics in print communication.</p> <p>5.1 Use industry-standard page layout software tools.</p> <p>5.2 Create effective business publications.</p> <p>5.3 Manipulate images.</p>
To what extent are these objectives being achieved?	Annual assessments of goals/outcomes show that we are meeting the goals, with minor adjustments.
<p>Past Program Review Action</p> <p>What action was reported last time the program was reviewed?</p>	Continue with minor improvements

<p><i>CTE PROGRAM REVIEW ANALYSIS</i></p> <p>Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.</p>	
List all pre-requisites for this program (courses, placement scores, etc.).	There are no pre-requisites for this program.

<p>Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).</p>	<table border="0"> <thead> <tr> <th style="text-align: left;">COURSE</th> <th style="text-align: right;">CR</th> </tr> </thead> <tbody> <tr> <td colspan="2">FIRST SEMESTER</td> </tr> <tr> <td>ART 100 Drawing I-Fundamentals</td> <td style="text-align: right;">3</td> </tr> <tr> <td>ART 126 2D Design & Color</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 106 Intro to Computers</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 141 Intro to Internet</td> <td style="text-align: right;">1</td> </tr> <tr> <td>CSC 143 Intro to Desktop Infor Mgmt</td> <td style="text-align: right;">1</td> </tr> <tr> <td>ENG 101 Rhet & Comp I</td> <td style="text-align: right;">3</td> </tr> <tr> <td>FYE 101 Blazing Your Trail</td> <td style="text-align: right;">1</td> </tr> <tr> <td colspan="2">SECOND SEMESTER</td> </tr> <tr> <td>ART 136 Graphic Design I</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CMN 101 Intro to Speech I OR</td> <td></td> </tr> <tr> <td>CMN 104 Interpersonal Comm</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 186 Desktop Pub with InDesign</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 190 Portable Document Format</td> <td style="text-align: right;">1</td> </tr> <tr> <td>CSC 220 Graphic & Photo Manip</td> <td style="text-align: right;">3</td> </tr> <tr> <td>MAT 103 Business Computations I</td> <td style="text-align: right;">3</td> </tr> <tr> <td colspan="2">THIRD SEMESTER</td> </tr> <tr> <td>ART 137 Graphic Design II</td> <td style="text-align: right;">3</td> </tr> <tr> <td>BUS 131 Prin of Marketing</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 146 Intro to Web Page Design</td> <td style="text-align: right;">2</td> </tr> <tr> <td>CSC 247 Web Graphics & Interactivity</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 248 Computerized Illustration</td> <td style="text-align: right;">3</td> </tr> <tr> <td>PSY 101 Intro to Psych OR</td> <td></td> </tr> <tr> <td>SOC 101 Intro to Sociology</td> <td style="text-align: right;">3</td> </tr> <tr> <td colspan="2">FOURTH SEMESTER</td> </tr> <tr> <td>ART 226 Graphic Design III</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 246 Advanced Web Page Design</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CSC 249 Adv Graphic Applications</td> <td style="text-align: right;">3</td> </tr> <tr> <td>ENG 191 Business Writing</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Approved Electives</td> <td style="text-align: right;">4</td> </tr> </tbody> </table>	COURSE	CR	FIRST SEMESTER		ART 100 Drawing I-Fundamentals	3	ART 126 2D Design & Color	3	CSC 106 Intro to Computers	3	CSC 141 Intro to Internet	1	CSC 143 Intro to Desktop Infor Mgmt	1	ENG 101 Rhet & Comp I	3	FYE 101 Blazing Your Trail	1	SECOND SEMESTER		ART 136 Graphic Design I	3	CMN 101 Intro to Speech I OR		CMN 104 Interpersonal Comm	3	CSC 186 Desktop Pub with InDesign	3	CSC 190 Portable Document Format	1	CSC 220 Graphic & Photo Manip	3	MAT 103 Business Computations I	3	THIRD SEMESTER		ART 137 Graphic Design II	3	BUS 131 Prin of Marketing	3	CSC 146 Intro to Web Page Design	2	CSC 247 Web Graphics & Interactivity	3	CSC 248 Computerized Illustration	3	PSY 101 Intro to Psych OR		SOC 101 Intro to Sociology	3	FOURTH SEMESTER		ART 226 Graphic Design III	3	CSC 246 Advanced Web Page Design	3	CSC 249 Adv Graphic Applications	3	ENG 191 Business Writing	3	Approved Electives	4
COURSE	CR																																																														
FIRST SEMESTER																																																															
ART 100 Drawing I-Fundamentals	3																																																														
ART 126 2D Design & Color	3																																																														
CSC 106 Intro to Computers	3																																																														
CSC 141 Intro to Internet	1																																																														
CSC 143 Intro to Desktop Infor Mgmt	1																																																														
ENG 101 Rhet & Comp I	3																																																														
FYE 101 Blazing Your Trail	1																																																														
SECOND SEMESTER																																																															
ART 136 Graphic Design I	3																																																														
CMN 101 Intro to Speech I OR																																																															
CMN 104 Interpersonal Comm	3																																																														
CSC 186 Desktop Pub with InDesign	3																																																														
CSC 190 Portable Document Format	1																																																														
CSC 220 Graphic & Photo Manip	3																																																														
MAT 103 Business Computations I	3																																																														
THIRD SEMESTER																																																															
ART 137 Graphic Design II	3																																																														
BUS 131 Prin of Marketing	3																																																														
CSC 146 Intro to Web Page Design	2																																																														
CSC 247 Web Graphics & Interactivity	3																																																														
CSC 248 Computerized Illustration	3																																																														
PSY 101 Intro to Psych OR																																																															
SOC 101 Intro to Sociology	3																																																														
FOURTH SEMESTER																																																															
ART 226 Graphic Design III	3																																																														
CSC 246 Advanced Web Page Design	3																																																														
CSC 249 Adv Graphic Applications	3																																																														
ENG 191 Business Writing	3																																																														
Approved Electives	4																																																														
<p>Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.</p>	<p>The program includes all the general education requirements plus the courses that provide the necessary skills recommended by the program Advisory Council.</p>																																																														
<p><i>INDICATOR 1: NEED</i></p>	<p><i>RESPONSE</i></p>																																																														
<p>1.1 How strong is the occupational demand for the program?</p>	<p>Occupations included in this degree program are graphic designer, multimedia artist and animator, web designer, art director. According to the Bureau of Labor Statistics the projected demand for these occupations are as follows:</p> <ul style="list-style-type: none"> • Graphic designer – 4% increase • Multimedia artist and animator – 8% increase • Web designer – 15% increase • Desktop publisher – 14% decline • Art director – 5% increase 																																																														

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	According to the Bureau of Labor Statistics Occupational Outlook Handbook, demand has shown steady increase in all related occupations except for Desktop Publishing. This trend is predicted to continue into the next five years.
1.3 What is the district and/or regional need?	The regional need mirrors the state-wide statistics.
1.4 How are students recruited for this program?	Advertising, high school visits, job fairs, etc.
1.5 Where are students recruited from?	High schools, area work force, and general population in the region.
1.6 Did the review of program need result in actions or modifications? Please explain.	We need to look at our recruitment procedures and find new and creative ways to target and recruit potential students.
<i>INDICATOR 2: COST EFFECTIVENESS</i>	<i>RESPONSE</i>
2.1 What are the costs associated with this program?	This program is part of the Computer Science Department (10304). Total Computer Science Department costs for FY2018 were \$106.84 per credit hour with net revenue of \$85.38 per credit hour.
2.2 How do costs compare to other programs on campus?	The total cost per credit hour is below the College average of \$189.50 for CTE programs, and the net revenue per credit hour is above the College average of \$28.97 for CTE programs.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	No grant funds were used for this program or department. The program is funded entirely from tuition and fee revenue.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	NA
2.5 Did the review of program cost result in any actions or modifications? Please explain.	Costs are in line with expectations and below the College average. Revenue is acceptable.
<i>INDICATOR 3: QUALITY</i>	<i>RESPONSE</i>
3.1 What are the program's strengths?	Students are prepared for entry into the job market. Soft skills exposure and training is being incorporated into the curriculum based on request of area employers.
3.2 What are the identified or potential weaknesses of the program?	This program has experienced low enrollment which is the reason we are addressing our recruitment strategies going forward.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Traditional classroom, Open Learning, Online, Hybrid.

3.4 How does this program fit into a career pathway?	The program includes a foundation in general education courses, training in basic design and composition, technical training in the highest standard of industry-based software and equipment, understanding of the design process from start to finish, and understanding of the role design plays in the business world. Students are prepared for several careers in Graphic Design
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	None currently.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Some of the required general education courses include dual credit options. None are available for discipline-specific courses.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	None are required for the program, but some internship opportunities are available upon student request.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	No
3.9 Are industry-recognized credentials offered? If so, please list.	None
3.10 Is this an apprenticeship program? If so, please elaborate.	No
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Currently there are none, but efforts are underway with area high schools to implement an articulation agreement.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	A partnership has been formed with Quincy Area Vocational and Technical Center which will increase the ability to take courses at that center and articulate the courses to JWCC. Also, our Advisory Council made up of industry leaders meets annually to review the program and make recommendations.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	The average class size for courses in the Computer Science Department is 14.89.

3.15 What professional development or training is offered to adjunct and full-time faculty that may increase the quality of this program?	Many professional development opportunities are available to adjunct and full-time faculty through the Center for Excellence in Teaching and Learning program sponsored by the College's Faculty Senate Committee on Professional Development.
3.16 What is the status of the current technology and equipment used for this program?	Computer equipment in the computer labs are updated and replaced as needed to ensure that program needs are met. Software is updated to reflect the educational needs of the region. For example, in the summer of 2017, the computers in the computer labs were upgraded to Windows 10 and Office 2016. In the summer of 2018 the computers in the Mac Lab were upgraded to Adobe Creative Suite 2018.
3.17 What assessment methods are used to ensure student success?	Assessments are conducted and documented on an annual basis, such that all goals are assessed in a five-year period. Assessments include scoring classroom artifacts, evaluating projects, concept exams and hands-on activities.
3.18 How satisfied are students with their preparation for employment?	N/A. Low student response to surveys.
3.19 How is student satisfaction information collected?	Student satisfaction information is collected through a survey which is sent to all JWCC graduates each year.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Primarily through program Advisory Council.
3.21 How often does the program advisory committee meet?	Annually or more often if needed.
3.22 How satisfied are employers in the preparation of the program's graduates?	N/A
3.23 How is employer satisfaction information collected?	N/A
3.24 Did the review of program quality result in any actions or modifications? Please explain.	A review of the program quality revealed that the program provides the training required by employers in the region.
<i>DATA ANALYSIS FOR CTE PROGRAM REVIEW</i>	
Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.	

<i>CTE PROGRAM</i>	GPDS 501				
<i>CIP CODE</i>	500409				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	12	15	23	16	16
<i>NUMBER OF COMPLETERS</i>	3	2	6	2	4
<i>OTHER (PLEASE IDENTIFY)</i>					
How does the data support the program goals? Elaborate.	Program assessments are conducted annually. Assessments indicate that students are performing at or above the acceptable range. Minor adjustments have been made to improve student performance.				
What disaggregated data was reviewed?	Program data reports which include enrollment broken down by several demographic factors including race, disadvantaged status, average ACT, gender, age, and residence for the last five years were reviewed. These reports also contain persistence and course success rates.				
Were there gaps in the data? Please explain.	No gaps were seen.				
What is the college doing to overcome any identifiable gaps?	No gaps uncovered.				
Are the students served in this program representative of the total student population? Please explain.	There is not enough enrollment to statistically evaluate whether students served in this program are representative of the student population.				
Are the students served in this program representative of the district population? Please explain.	There is not enough enrollment to statistically evaluate whether students served in this program are representative of the district population.				
REVIEW RESULTS					
Action	<input checked="" type="checkbox"/> Continued with Minor Improvements <input type="checkbox"/> Significantly Modified <input type="checkbox"/> Placed on Inactive Status <input type="checkbox"/> Discontinued/Eliminated <input type="checkbox"/> Other (please specify)				
Summary Rationale Please provide a brief rationale for the chosen action.	The program is financially and academically stable. The program remains relevant to the needs of the region.				
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	Continue to monitor the needs of the community to address changes in technology and software. Continue to update software. Continue to integrate soft skills training into curriculum.				

	Continue to pursue recruitment initiatives such as articulation with area high schools.
--	---

Career & Technical Education

COLLEGE NAME: John Wood Community College

FISCAL YEAR IN REVIEW: 2019

PROGRAM IDENTIFICATION INFORMATION

<i>PROGRAM TITLE</i>	<i>DEGREE OR CERT</i>	<i>TOTAL CREDIT HOURS</i>	<i>6-DIGIT CIP CODE</i>	<i>LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE</i>
Medical Laboratory Technician	AAS	64	511004	

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives

What are the overarching objectives/goals of the program?

The goals of the School of Medical Laboratory Technicians are to:

1. Provide students with a superior education in the field of Medical Laboratory Science.
2. Prepare competent entry-level medical laboratory technicians in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
3. Prepare students with the skills and abilities to:
 - a. perform laboratory tests competently.
 - b. problem solve and think critically.
 - c. communicate with patients and colleagues effectively and professionally.
4. Prepare graduates to model professional behavior and ethics.
5. Prepare graduates who demonstrate an awareness and understanding of cultural diversity among patients and peers.
6. Promote the value and need for lifelong learning.

To what extent are these objectives being achieved?

Based on the most recent annual review of outcome measures, all benchmarks are currently being met.

Past Program Review Action

What action was reported last time the program was reviewed?

Continue with minor improvements

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

<p>List all pre-requisites for this program (courses, placement scores, etc.).</p>	<table border="0"> <tr><td>BIO 275</td><td>Human Anatomy & Physiology I</td><td>4 cr. hrs</td></tr> <tr><td>BIO 276</td><td>Human Anatomy & Physiology II</td><td>4 cr. hrs</td></tr> <tr><td>BIO 293</td><td>Microbiology</td><td>4 cr. hrs</td></tr> <tr><td>CHM100</td><td>General Chemistry</td><td>4 cr. hrs</td></tr> <tr><td>MAT 113</td><td>College Algebra</td><td>3 cr. hrs</td></tr> <tr><td>OR</td><td></td><td></td></tr> <tr><td>MAT 109</td><td>Elementary Statistics</td><td>3 cr. hrs</td></tr> <tr><td>ENG 101</td><td>Rhetoric & Composition I</td><td>3 cr. hrs</td></tr> <tr><td>ENG 102</td><td>Rhetoric & Composition II</td><td>3 cr. hrs</td></tr> <tr><td>CMN 101</td><td>Introduction to Speech</td><td>3 cr. hrs</td></tr> <tr><td>OR</td><td></td><td></td></tr> <tr><td>CMN 104</td><td>Interpersonal Communications</td><td>3 cr. hrs</td></tr> <tr><td>PSY 101</td><td>Introduction to Psychology</td><td>3 cr. hrs</td></tr> <tr><td>PHL 121</td><td>Ethics</td><td>3 cr. Hrs</td></tr> <tr><td>FYE 101</td><td>Blazing your Trail</td><td>1 cr. hr</td></tr> <tr><td>CSC 100</td><td>Computer Literacy</td><td>1 cr. hr.</td></tr> </table>	BIO 275	Human Anatomy & Physiology I	4 cr. hrs	BIO 276	Human Anatomy & Physiology II	4 cr. hrs	BIO 293	Microbiology	4 cr. hrs	CHM100	General Chemistry	4 cr. hrs	MAT 113	College Algebra	3 cr. hrs	OR			MAT 109	Elementary Statistics	3 cr. hrs	ENG 101	Rhetoric & Composition I	3 cr. hrs	ENG 102	Rhetoric & Composition II	3 cr. hrs	CMN 101	Introduction to Speech	3 cr. hrs	OR			CMN 104	Interpersonal Communications	3 cr. hrs	PSY 101	Introduction to Psychology	3 cr. hrs	PHL 121	Ethics	3 cr. Hrs	FYE 101	Blazing your Trail	1 cr. hr	CSC 100	Computer Literacy	1 cr. hr.
BIO 275	Human Anatomy & Physiology I	4 cr. hrs																																															
BIO 276	Human Anatomy & Physiology II	4 cr. hrs																																															
BIO 293	Microbiology	4 cr. hrs																																															
CHM100	General Chemistry	4 cr. hrs																																															
MAT 113	College Algebra	3 cr. hrs																																															
OR																																																	
MAT 109	Elementary Statistics	3 cr. hrs																																															
ENG 101	Rhetoric & Composition I	3 cr. hrs																																															
ENG 102	Rhetoric & Composition II	3 cr. hrs																																															
CMN 101	Introduction to Speech	3 cr. hrs																																															
OR																																																	
CMN 104	Interpersonal Communications	3 cr. hrs																																															
PSY 101	Introduction to Psychology	3 cr. hrs																																															
PHL 121	Ethics	3 cr. Hrs																																															
FYE 101	Blazing your Trail	1 cr. hr																																															
CSC 100	Computer Literacy	1 cr. hr.																																															
<p>Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).</p>	<table border="0"> <tr><td>MLT 100</td><td>Phlebotomy Principles</td><td>3 cr. hrs.</td></tr> <tr><td>MLT 101</td><td>Intro. to Clinical Laboratory</td><td>3 cr. hrs.</td></tr> <tr><td>MLT 102</td><td>Clinical Microscopy</td><td>3 cr. hrs</td></tr> <tr><td>MLT 204</td><td>Immunology/Serology</td><td>2 cr. hrs</td></tr> <tr><td>MLT 205</td><td>Fundamentals of Clinical Chemistry</td><td>3 cr. hrs</td></tr> <tr><td>MLT 206</td><td>Hematology</td><td>4 cr. hrs</td></tr> <tr><td>MLT 207</td><td>Medical Microbiology</td><td>4 cr. hrs</td></tr> <tr><td>MLT 208</td><td>Immunoematology</td><td>3 cr. hrs</td></tr> <tr><td>MLT 121</td><td>Concepts of Clinical Lab</td><td>2 cr. Hrs</td></tr> <tr><td>MLT 224A</td><td>Clinical Practicum I</td><td>3 cr. Hrs</td></tr> <tr><td>MLT 224B</td><td>Clinical Practicum II</td><td>3 cr. Hrs</td></tr> </table>	MLT 100	Phlebotomy Principles	3 cr. hrs.	MLT 101	Intro. to Clinical Laboratory	3 cr. hrs.	MLT 102	Clinical Microscopy	3 cr. hrs	MLT 204	Immunology/Serology	2 cr. hrs	MLT 205	Fundamentals of Clinical Chemistry	3 cr. hrs	MLT 206	Hematology	4 cr. hrs	MLT 207	Medical Microbiology	4 cr. hrs	MLT 208	Immunoematology	3 cr. hrs	MLT 121	Concepts of Clinical Lab	2 cr. Hrs	MLT 224A	Clinical Practicum I	3 cr. Hrs	MLT 224B	Clinical Practicum II	3 cr. Hrs															
MLT 100	Phlebotomy Principles	3 cr. hrs.																																															
MLT 101	Intro. to Clinical Laboratory	3 cr. hrs.																																															
MLT 102	Clinical Microscopy	3 cr. hrs																																															
MLT 204	Immunology/Serology	2 cr. hrs																																															
MLT 205	Fundamentals of Clinical Chemistry	3 cr. hrs																																															
MLT 206	Hematology	4 cr. hrs																																															
MLT 207	Medical Microbiology	4 cr. hrs																																															
MLT 208	Immunoematology	3 cr. hrs																																															
MLT 121	Concepts of Clinical Lab	2 cr. Hrs																																															
MLT 224A	Clinical Practicum I	3 cr. Hrs																																															
MLT 224B	Clinical Practicum II	3 cr. Hrs																																															
<p>Provide a rationale for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.</p>	<p>Total Credit hours are 66, chosen to meet recommendations by the National Accrediting Agency for Clinical Laboratory Sciences to prepare students to sit for the American Society of Clinical Pathologists Board of Certification exam.</p>																																																
<p><i>INDICATOR 1: NEED</i></p>	<p><i>RESPONSE</i></p>																																																
<p>1.1 How strong is the occupational demand for the program?</p>	<p>In the past five years, 100% of graduates have been employed directly out of the program.</p>																																																
<p>1.2 How has demand changed in the past five years and what is the outlook for the next five years?</p>	<p>Jobs have been and continue to be readily available as health care facilities continue to grow and expand in the local market area.</p>																																																
<p>1.3 What is the district and/or regional need?</p>	<p>District and regional needs are like national trends of growth.</p>																																																
<p>1.4 How are students recruited for this program?</p>	<p>Students are actively recruited during their clinical experiences and practicums.</p>																																																
<p>1.5 Where are students recruited from?</p>	<p>Students are actively recruited during their clinical experiences and practicums.</p>																																																

1.6 Did the review of program need result in actions or modifications? Please explain.	No
INDICATOR 2: COST EFFECTIVENESS	RESPONSE
2.1 What are the costs associated with this program?	This program is part of the Nursing Programs Department (10401). Total Nursing Programs Department costs for FY2018 were \$378.83 per credit hour with net revenue of (\$36.87) per credit hour.
2.2 How do costs compare to other programs on campus?	The total cost per credit hour is above the College average of \$189.50 for CTE programs, and the net revenue per credit hour is below the College average of \$28.97 for CTE programs.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	The College utilized \$9,401.42 of grant funding which accounted for 2% of total department expenditures in FY2018.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	Increased enrollment and revenue in the program is expected to offset this loss.
2.5 Did the review of program cost result in any actions or modifications? Please explain.	No.
INDICATOR 3: QUALITY	RESPONSE
3.1 What are the program's strengths?	Program strengths lie in its connection with the Blessing Health System, one of the top employers in the region, as well as the top employer in health-related careers. The connection with Blessing Health System allows students access to the most current materials and equipment being used in the medical laboratory sciences.
3.2 What are the identified or potential weaknesses of the program?	Student enrollment is typically low, with classes ranging from 4-6 over the past five years. Low enrollment makes it difficult to offset costs.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	There are a variety of delivery methods for this program, with traditional and online formats in the general ed courses and traditional format for the MLT courses.
3.4 How does this program fit into a career pathway?	National certification as an MLT requires a minimum of an associate degree. This program fulfills that need for those wishing to enter the clinical laboratory.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	No recent changes.

3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	For general education courses only.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Students are given clinical practice opportunities in MLT 120, Phlebotomy Principles and MLT 224A & 224B, which are both clinical practicums.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	The MLT program is accredited by the National Accrediting Agency for Clinical Laboratory Science.
3.9 Are industry-recognized credentials offered? If so, please list.	Graduates are eligible to take the Academy of Clinical Pathologists Board of Certification Test.
3.10 Is this an apprenticeship program? If so, please elaborate.	There is no apprenticeship, but instead clinical practicums.
3.11 If applicable, please list the licensure examination pass rate.	100% of graduates have passed licensure exams for the past five years.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	The MLT program is a joint degree program with the Blessing Hospital School of Laboratory Technicians.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	No
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	The average class size for courses in the Health Sciences Department is 11.81.
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Professional development is offered at multiple points throughout the year through both JWCC and Blessing Health System. Programs are focused both on efficacy in instruction as well as in professional areas of expertise.
3.16 What is the status of the current technology and equipment used for this program?	With its ties to Blessing Hospital and the Blessing Health System, this program can use the most current technology and equipment available.
3.17 What assessment methods are used to ensure student success?	Student assessment is completed at multiple points throughout the courses and program. Assessment is completed in areas of knowledge, skills, and attitude.

3.18 How satisfied are students with their preparation for employment?	All students felt adequate or superior in all applicable departments. They also rated themselves as adequately or well prepared in: operating equipment, trouble-shooting equipment, QC/QA, recognizing abnormal results, resolving problems, LIS, completing procedures within TAT and priority setting
3.19 How is student satisfaction information collected?	Student satisfaction information is collected through a survey which is sent to all JWCC graduates each year.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	The MLT program has an Advisory Council that meets twice yearly.
3.21 How often does the program advisory committee meet?	The MLT program has an Advisory Council that meets twice yearly.
3.22 How satisfied are employers in the preparation of the program's graduates?	All employers rated grads as performs adequately or superior in all applicable departments and that they would seek another graduate for employment from our school.
3.23 How is employer satisfaction information collected?	Employers complete 1-year post surveys on graduates of the MLT program and add in suggestions and feedback on graduates' job abilities.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Not currently.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

<i>CTE PROGRAM</i>	MLT 501				
<i>CIP CODE</i>	511004				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	6	8	6	8	7
<i>NUMBER OF COMPLETERS</i>	5	2	2	2	1
<i>OTHER (PLEASE IDENTIFY)</i>					
How does the data support the program goals? Elaborate.	Students are designated based on declaring a major of Medical Laboratory Technology. While these students are MLT students, not all enter or are eligible for entry into the Blessing Hospital School of Medical Laboratory Technicians. This same trend has been observed in multiple selective				

	admissions programs and is part of internal conversations regarding how to best classify pre-career program students. Students that are successful in entering the BH School of MLT are consistently successful in the program.
What disaggregated data was reviewed?	Program data reports which include enrollment broken down by several demographic factors including race, disadvantaged status, average ACT, gender, age, and residence for the last five years were reviewed. These reports also contain persistence and course success rates.
Were there gaps in the data? Please explain.	Students are designated based on declaring a major of Medical Laboratory Technology. While these students are considered MLT students, not all enter or are eligible for entry into the Blessing Hospital School of Medical Laboratory Technicians. This same trend has been observed in multiple selective admissions programs and is part of internal conversations regarding how to best classify pre-career program students. Students that are successful in entering the BH School of MLT are consistently successful in the program.
What is the college doing to overcome any identifiable gaps?	Students are designated based on declaring a major of Medical Laboratory Technology. While these students are considered to be MLT students, not all enter or are eligible for entry into the Blessing Hospital School of Medical Laboratory Technicians. This same trend has been observed in multiple selective admissions programs and is part of internal conversations regarding how to best classify pre-career program students. Students that are successful in entering the BH School of MLT are consistently successful in the program.
Are the students served in this program representative of the total student population? Please explain.	Yes
Are the students served in this program representative of the district population? Please explain.	Yes
<i>REVIEW RESULTS</i>	
Action	<input checked="" type="checkbox"/> Continued with Minor Improvements <input type="checkbox"/> Significantly Modified <input type="checkbox"/> Placed on Inactive Status <input type="checkbox"/> Discontinued/Eliminated <input type="checkbox"/> Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	The MLT program, while small, is an asset to the health care community in the JWCC district. The collaboration between the Blessing Hospital School of Medical Laboratory Technologists and John Wood Community College continues to be successful, evidenced by continued success in meeting program and student outcomes.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	The program will undergo continuous quality improvement with adjustments and alterations made as needs are identified.

Career & Technical Education

COLLEGE NAME: John Wood Community College

FISCAL YEAR IN REVIEW: 2019

PROGRAM IDENTIFICATION INFORMATION

<i>PROGRAM TITLE</i>	<i>DEGREE OR CERT</i>	<i>TOTAL CREDIT HOURS</i>	<i>6-DIGIT CIP CODE</i>	<i>LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE</i>
<i>ACCOUNTING</i>	<i>CERT</i>	<i>29</i>	<i>520301</i>	
Accounting	AAS	64	520301	

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives

What are the overarching objectives/goals of the program?

1. Understand Basic Accounting
2. Understand Basic Economics
3. Understand Basic Management Principles
4. Understand Managerial Accounting

To what extent are these objectives being achieved?

Assessment of these objectives has been completed in accounting, economics, and introduction to business courses. The assessment results indicate that students are successfully mastering these objectives.
Assessment of these objectives are ongoing.

Past Program Review Action

What action was reported last time the program was reviewed?

Continue with minor improvements

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).

Mat 010 is a prerequisite for Accounting 101.
Accounting 101 is a prerequisite for other accounting courses in the program.

<p>Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).</p>	<p>Acc 101 Prin of Accounting I CSC 104 Spreadsheets – Core Level CSC 106 Intro to Computers ECO 101 Prin of Economics 1 FYE 101 Blazing Your Trail MAT 109 Elementary Statistics ACC 102 Prin of Accounting II ACC 200 Managerial Accounting CMN 101 Intro to Speech CSC 143 Intro to Desktop Infor Mgmt ECO 102 Prin of Economics II Written Communication Requirement ACC 114 Payroll Accounting ACC 125 Computerized Accounting ACC 221 Inter Accounting I BUS 101 Intro to Business Business Elective CSC 107 Word Processing-Core Level ACC 222 Inter Accounting II ACC 240 Tax Accounting BUS 121 Prin of Org & Mgmt BUS 161 Business Law CSC 116 Database – Core Level PSY 101 Intro to Psychology</p>
<p>Provide a rationale for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.</p>	<p>The Accounting AAS degree is comprised of 64 credit hours which is in alignment with the board policies of JWCC.</p>
<p>INDICATOR 1: NEED</p>	<p>RESPONSE</p>
<p>1.1 How strong is the occupational demand for the program?</p>	<p>The Advisory Council indicated there is a need for the Accounting certificate and AAS degree.</p>
<p>1.2 How has demand changed in the past five years and what is the outlook for the next five years?</p>	<p>Demand has remained steady for this AAS degree. The Advisory Council indicated there is a need for the Accounting degree and want to see it continue.</p>
<p>1.3 What is the district and/or regional need?</p>	<p>The Standard Occupational Classification report for our district was reviewed for employment projections for the Accounting AAS degree. The overall need in our district indicates growth through 2024.</p>
<p>1.4 How are students recruited for this program?</p>	<p>JWCC markets through advertising on local TV, newspaper, and radio throughout the district. JWCC hosts job fairs. Pamphlets describing the program are available to potential students.</p>
<p>1.5 Where are students recruited from?</p>	<p>Students are recruited from the John Wood Community College district and nearby Missouri counties.</p>
<p>1.6 Did the review of program need result in actions or modifications? Please explain.</p>	<p>No additional actions or modifications were noted.</p>

<i>INDICATOR 2: COST EFFECTIVENESS</i>	<i>RESPONSE</i>
2.1 What are the costs associated with this program?	This program is part of the Business Department (10202). Total Business Department costs for FY2018 were \$126.00 per credit hour with net revenue of \$82.13 per credit hour.
2.2 How do costs compare to other programs on campus?	The total cost per credit hour is below the College average of \$189.50 for CTE programs, and the net revenue per credit hour is above the College average of \$28.97 for CTE programs.
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	No grant funds were used for this program or department. The program is funded entirely from tuition and fee revenue.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	NA
2.5 Did the review of program cost result in any actions or modifications? Please explain.	No additional actions or modifications were noted.
<i>INDICATOR 3: QUALITY</i>	<i>RESPONSE</i>
3.1 What are the program's strengths?	One program strength is that tenured faculty with several years' experience working in the field of accounting and business are teaching program courses. Another strength is the Accounting AAS degree has included a significant number of courses that will also transfer to an Accounting AA degree to allow students the opportunity to continue their education with limited additional course requirements.
3.2 What are the identified or potential weaknesses of the program?	The potential loss of long-term faculty through retirement within a few years could hinder the sustainability of quality programs.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Traditional, online, and Open Learning Center.
3.4 How does this program fit into a career pathway?	The Accounting Certificate courses are all included in the Accounting AAS degree. Students can continue their education from the Certificate to the AAS degree by only taking the additional courses required by the AAS degree. The Accounting AAS degree contains a significant amount of transfer level courses. Students that continue their education for an Accounting AA degree will have completed several required courses in the Accounting AAS degree.

<p>3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?</p>	<p>Most of the Accounting courses are using an online based system for student assignments. This online system provides video presentations of the chapter material, provides flashcards for student retention of the material, and enables students to complete assignments, quizzes and exams on the online system. The Principles of Accounting I and II courses are using a “flipped class” design which allows the students to complete the assignments in the classroom with the instructor. The Managerial Accounting class uses a modified “flipped class” design which also allows students to complete assignments in the classroom with the instructor. These classes use laptops in the classroom and the assignments are completed using the online delivery method.</p>
<p>3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.</p>	<p>No.</p>
<p>3.7 What work-based learning opportunities are available and integrated into the curriculum?</p>	<p>Internships are available in accounting.</p>
<p>3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).</p>	<p>N/A</p>
<p>3.9 Are industry-recognized credentials offered? If so, please list.</p>	<p>N/A</p>
<p>3.10 Is this an apprenticeship program? If so, please elaborate.</p>	<p>No</p>
<p>3.11 If applicable, please list the licensure examination pass rate.</p>	<p>N/A</p>
<p>3.12 What current articulation or cooperative agreements/initiatives are in place for this program?</p>	<p>None.</p>
<p>3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?</p>	<p>Partnerships for internships with DOT Foods and Home Bank have been formed since the last review.</p>
<p>3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.</p>	<p>The average class size for courses in the Business Department is 15.44.</p>

3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Center for Excellence in Teaching & Learning is available at JWCC. Brown Bag discussions and the Reading group are held monthly which provide professional opportunities that are not discipline specific.
3.16 What is the status of the current technology and equipment used for this program?	JWCC has available interactive classrooms with smart podiums and an interactive projector. Laptops are used in the flipped accounting classes and are currently available.
3.17 What assessment methods are used to ensure student success?	Assessment of program goals occur each year.
3.18 How satisfied are students with their preparation for employment?	Students have not indicated a dissatisfaction with the program. The Advisory Council is satisfied with student preparation.
3.19 How is student satisfaction information collected?	Student satisfaction information is collected through a survey which is sent to all JWCC graduates each year.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Advisory Council members and Internships are two ways employers are engaged in helping inform this program.
3.21 How often does the program advisory committee meet?	The Advisory Council meets 1 -2 times per year.
3.22 How satisfied are employers in the preparation of the program's graduates?	Satisfied
3.23 How is employer satisfaction information collected?	Feedback is obtained through the Advisory Council.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	No.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

<i>CTE PROGRAM</i>	ACG 333C				
<i>CIP CODE</i>	520301				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>

<i>NUMBER OF STUDENTS ENROLLED</i>	5	5	8	1	2
<i>NUMBER OF COMPLETERS</i>	0	2	1	1	0
<i>OTHER (PLEASE IDENTIFY)</i>					
<i>CTE PROGRAM</i>	ACG 333				
<i>CIP CODE</i>	520301				
	<i>FY2014</i>	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	11	11	11	14	13
<i>NUMBER OF COMPLETERS</i>	1	4	2	1	4
<i>OTHER (PLEASE IDENTIFY)</i>					
How does the data support the program goals? Elaborate.					
What disaggregated data was reviewed?	Program data reports which include enrollment broken down by several demographic factors including race, disadvantaged status, average ACT, gender, age, and residence for the last five years were reviewed. These reports also contain persistence and course success rates.				
Were there gaps in the data? Please explain.	None				
What is the college doing to overcome any identifiable gaps?	N/A				
Are the students served in this program representative of the total student population? Please explain.	There is not enough enrollment to statistically evaluate whether students served in this program are representative of the student population.				
Are the students served in this program representative of the district population? Please explain.	There is not enough enrollment to statistically evaluate whether students served in this program are representative of the district population.				
REVIEW RESULTS					
Action	<input checked="" type="checkbox"/> Continued with Minor Improvements <input type="checkbox"/> Significantly Modified <input type="checkbox"/> Placed on Inactive Status <input type="checkbox"/> Discontinued/Eliminated <input type="checkbox"/> Other (please specify)				

<p>Summary Rationale Please provide a brief rationale for the chosen action.</p>	<p>The Accounting AAS degree was significantly modified several years ago and continues to be a quality program with innovative approaches in student learning.</p>
<p>Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.</p>	<p>CSC 104 is a corequisite for the Accounting 101 course. This course is no longer required for Acc 101. CSC 104 is a required course in the Accounting AAS degree and Certificate. Removing it as a corequisite would not remove it from the program, however business transfer students would not be required to take CSC 104.</p>

<i>Academic Disciplines</i>	
<i>COLLEGE NAME:</i>	John Wood Community College
<i>FISCAL YEAR IN REVIEW:</i>	2019
<i>DISCIPLINE AREA:</i>	Natural Sciences
<i>REVIEW SUMMARY</i>	
Complete this section to review the Academic Discipline as a whole. Use the Course Specific Review portion of this template for each course reviewed in the Discipline.	
Program Objectives What are the objectives/goals of the discipline?	This area of study will train the student to comprehend and apply the basic principles of science and methods of scientific inquiry. <ol style="list-style-type: none"> 1. Demonstrate a practical understanding of scientific concepts. 2. Develop a scientific process for solving problems. 3. Research the literature on questions of scientific interest. 4. Design and perform experiments to test scientific theories, models, and hypotheses. 5. Communicate results from research or experiments in a presentable format.
To what extent are these objectives being achieved?	All courses within the Natural Sciences Program address scientific concepts and reasoning. Lab courses address the experimental objectives. Many courses require literature research and presentation in either written or oral form.
How does this discipline contribute to other fields and the mission of the college?	Students completing courses in the Natural Sciences program successfully matriculate into certificate and degree programs in the health sciences including the fields of nursing, surgical technology, radiologic technology, pharmacy, and medical lab technology. Other students successfully transfer to baccalaureate institutions and complete programs in a wide range of STEM fields including engineering, biomedicine, environmental sciences, and biotechnology. The Natural Sciences program supports the mission of the College by preparing students to be lifelong learners as they attain the knowledge and skills to ultimately gain employment in their chosen professions.

<p>Prior Review Update Describe any quality improvements or modifications made since the last review period.</p>	<p>Since the last review, the department has identified and purchased all equipment and instructional supplies to fully stock an entire laboratory facility at the brand-new Southeast Education center (SEC) in Pittsfield, Illinois, which began offering courses in Fall, 2017. Thus far, the following Natural Sciences have been offered at SEC: BIO 101 General Biology, BIO 275 and 276 Human Anatomy & Physiology I and II, and BIO 293 Microbiology. An entirely online SCI 100 Environmental Geology course was developed and offered in summer, 2018 to provide SEC students with an additional physical science option, although the course is open to any JWCC student.</p> <p>Additional equipment for physics and engineering courses such as a Vernier strength and materials tester, a 3-D printer, and newer body systems models for anatomy & physiology courses have been purchased and incorporated into laboratory activities. Blended sections for SCI 100 Environmental Geology and BIO 293 Microbiology were developed and offered in response to student need. BIO 105 Human Biology moved to a completely online format for all sections as student demand for the structured format for this course waned, but demand for an online non-laboratory life science option continued to increase. A BIO 295 Advanced Special Topics course in Autoimmune Disease Research was offered in Spring, 2018, to provide advanced students with more opportunities to research, discuss, and write about the primary scientific literature, to conduct basic experiments, and present the results of their research in both oral and written formats.</p>
---	--

REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

Indicator 1: Need	Response
<p>1.1 What mechanisms are in place to determine programmatic needs/changes for AA, AS, AFA, and AES academic programs? How are programmatic needs/changes evaluated by the curriculum review committee and campus academic leadership?</p>	<p>Faculty and administration stay abreast of needs and changes in academic programs at the state level and of changes in requirements of ICCB, IAI, and transfer institutions. When a needed curriculum change is identified, a proposal is usually drafted by a faculty member or the department chair and approved by administration. The proposed changes then continue through the College's curriculum approval protocol that requires approval by the curriculum committee, faculty senate, and board of trustees.</p>

<p>1.2 How are students informed or recruited for this program?</p>	<p>The College's Admissions and Advising departments conduct several recruitment days and programs throughout the year to target both traditional and non-traditional students. Faculty in Natural Sciences have participated in several of these recruitment days over the years. In addition, many students attest that they were recruited by word-of-mouth from former students who recommended that they take their Natural Sciences general education courses or other Natural Sciences prerequisite courses at JWCC. Natural Sciences faculty also serve as judges or record educational commercials for the WGEM Academic Challenge, which enables faculty to interact with some of the area's brightest high school students. Faculty in the department have also participated in career fairs or given science-based presentations to students at K-12 schools in the district and in the local community.</p>
<p>INDICATOR 2: COST EFFECTIVENESS</p>	<p>RESPONSE</p>
<p>2.1 What are the costs associated with this discipline?</p>	<p>Total Natural Sciences Department costs for FY2018 were \$113.30 per credit hour with net revenue of \$78.26 per credit hour. The total cost per credit hour is above the College average of \$102.52 for transfer disciplines, and the net revenue is below the College average of \$81.76 for transfer disciplines.</p>
<p>2.2 What steps can be taken to offer curricula more cost-effectively?</p>	<p>As the cost and net revenue data suggest, the Natural Sciences program is consistent with the College's mission by providing educational opportunities at an exceptional value, especially when considering the fact laboratories can be expensive to stock and maintain. The program continues to maintain cost-effectiveness by strategically scheduling course sections at a variety of days and times to offer student choice and flexibility and avoidance of scheduling conflicts with other courses needed by the student, but with the minimum number of projected sections needed for each course per student demand, to ensure the greatest enrollment possible per section. (Additional sections are added when warranted by student demand). This high enrollment per section is particularly the case with the life sciences course sections, the majority of which reach the enrollment cap (determined by lab space) each semester, despite multiple sections being offered.</p> <p>Laboratory costs are kept low by using up all stock and materials on hand before purchasing new, and by maintenance performed on older microscopes and models instead of frequently making new acquisitions. However, additional expenses will be incurred over the next few years as newer equipment and materials will be needed to bring the laboratory offerings more up to date.</p>

<p>2.3 Is there a need for additional resources?</p>	<p>Resource needs include:</p> <ul style="list-style-type: none"> • An additional lab space to separate chemistry labs from physics/engineering labs. Currently we have one primary lab (A135) that is being used by chemistry, physics and engineering courses, and one additional small lab (A107) that is used for Chem 100, but it is not fully equipped with all the necessary chemical equipment. This causes scheduling complications and in-class interruptions to collect, set up and move equipment. Both labs were designed as Chemistry labs and often do not meet the precise needs of physics and/or engineering courses. • Updating chemical/biological supplies and storage. BIO 101 lab activities for cellular respiration, photosynthesis, DNA extraction, and gene transfer will require additional expenses to be updated to current standards. Chemical supplies acquired by a previously retired faculty member have been utilized the last several years to reduce costs, but these will need to be re-stocked within the next year. • Updating laboratory equipment to current standards, including a spectrometer for chemistry, updated tracks and sensors for physics and engineering, more models of the systems for anatomy & physiology, software and new landform models for geology, and additional modern microscopes, prepared slides, and other supplies related to culture preparation for microbiology.
<p>INDICATOR 3: QUALITY</p>	<p>RESPONSE</p>
<p>3.1 Are there any alternative delivery methods of this discipline? (e.g. online, flexible-scheduling, accelerated, team teaching, etc.)?</p>	<p>AST 101 Elementary Astronomy and BIO 103 Environmental Conservation are both offered online through the College's partnership with MACC. BIO 105 Human Biology is offered at JWCC as an online option for students to fulfill the life sciences general education requirement whereas SCI 100 Environmental Geology and SCI 105 Weather & Climate are offered as online options for the physical science's general education requirement. SCI 100 Environmental Geology is also offered as a blended course for students that wish to have their labs in a structured setting on campus. BIO 293 Microbiology also has a blended section each fall and spring to accommodate students in the College's nursing program whose course schedules preclude them from taking the course in a totally structured setting.</p>
<p>3.2 If the college delivers the course in more than one method, does the college compare success rates of each delivery method? If so, how?</p>	<p>The Office of Institutional Effectiveness provides success rates for all courses across all locations and delivery methods.</p>
<p>3.3 What assessments does the discipline use to measure full-time and adjunct instructor performance in the classroom?</p>	<p>Teaching observations of full-time faculty are conducted by the administration and those of associate faculty are done by the department chair. Student evaluations for all course sections and delivery methods are completed online. A technical audit of online courses is performed by the office of instructional support and distance learning. An instrument for department chairs to conduct content audits of online courses will be developed this year.</p>

3.4 How does the discipline identify and support at-risk students?	At-risk students are identified via the former early alert system which has converted to the Starfish retention program in the last two years. Experienced faculty in the department are also adept at identifying at-risk students early in the semester and setting them up with tutoring via TriO or instructional services. Faculty in the department also spend large numbers of hours each semester working with at-risk students outside of class during office hours which are held both face-to-face and virtually.
3.5 To what extent is the discipline integrated with other instructional programs and services?	Natural Sciences is integrated with all other arts and sciences disciplines as students must complete at least one life science and one physical science course for their degree programs. However, the most overlap occurs with health sciences and math as students often take courses in Natural Sciences as prerequisites for various health sciences programs. STEM students taking physics, chemistry, and engineering courses are usually enrolled in calculus, differential equations, or other math courses which necessitates some degree of scheduling coordination between the departments. Students in agriculture transfer also take natural sciences courses. In addition, Natural Sciences is integrated with a whole host of student services programs such as Support Services for tutoring and disability accommodations as well as the Admissions and Academic Advising departments. The JWCC Library director and staff work closely with Natural Sciences faculty to select appropriate databases and other scholarly materials to enable students to research, read, and write about the primary scientific literature.
3.6 What does the discipline or department review when developing or modifying curriculum?	Assessment results, student success rates, transfer rates, student requests for specific course needs, the needs of other disciplines within the College or outside, and adherence to IAI standards.
3.7 When a course has low retention and/or success rates, what is the process to address these issues?	The department reviews the course content and resources and implements changes as needed. However, success rates are high for nearly all courses in the Natural Sciences program as revealed by the attached course-specific data.

LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THIS DISCIPLINE.

The greatest barrier (or challenge) is in scheduling all sections with the limited number of laboratory spaces available per the explanation provided in 2.3 above.

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

<i>ACADEMIC DISCIPLINE AREA</i>	Natural Sciences
<i>COURSE TITLE</i>	AST 101 Elementary Astronomy
<i>COURSE DESCRIPTION</i>	An elementary survey of the nature and behavior of the solar system and the regions beyond and of basic physical processes occurring throughout the universe. (Offered in structured format at JWCC and offered online through partnership with MACC).

	FY14	FY15	FY16	FY17	FY18
<i>NUMBER OF STUDENTS ENROLLED</i>	103	96	113	94	109
<i>CREDIT HOURS PRODUCED</i>	309	288	339	282	327
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	83.67%	84.95%	87.74%	83.52%	88.57%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	P1 906				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 101 General Biology				
COURSE DESCRIPTION	An introductory biology course covering the chemistry of living organisms, cellular biology, cellular respiration, photosynthesis, genetics, and topics in evolution.				
	FY14	FY15	FY16	FY17	FY18
<i>NUMBER OF STUDENTS ENROLLED</i>	382	397	383	378	370
<i>CREDIT HOURS PRODUCED</i>	1528	1588	1532	1512	1480
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	72.93%	77.13%	82.44%	73.26%	78.03%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	L1 900L				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 103 Environmental Conservation				
COURSE DESCRIPTION	A look at the conservation of biodiversity, including the study of ecology (interactions of plants and animals with their environment), the study of natural ecosystems and human disturbances placed on them, and the ethical and practical issues involved in conserving biodiversity. (Offered entirely online through partnership with MACC).				
	FY14	FY15	FY16	FY17	FY18
<i>NUMBER OF STUDENTS ENROLLED</i>	6	24	16	36	45

<i>CREDIT HOURS PRODUCED</i>	18	72	48	108	135
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	70.83%	85.71%	100.00%	84.09%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 105 Human Biology				
COURSE DESCRIPTION	An introductory course that looks at the role of the human being as a species and at how humans are changing and affecting the world in which we live. Selected topics such as cloning, biotechnology, health, general wellness, bio-ethical issues and our impact on the environment will be integrated with how humans affect society. Human physiological systems will also be studied as they relate to topics being studied. (Offered online).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	82	101	101	75	86
<i>CREDIT HOURS PRODUCED</i>	246	303	303	225	258
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	87.80%	89.80%	93.00%	93.15%	93.10%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	L1 904				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 111 General Botany				
COURSE DESCRIPTION	A study of plant structure, growth, physiology, reproduction, evolution, classification, and distribution. This course is intended both for life science majors who desire to attain substantial knowledge of how plants function and for non-majors to develop a better understanding and appreciation of how plants impact many facets of our society and the environment.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	7	N/A	5	N/A	10

<i>CREDIT HOURS PRODUCED</i>	28	N/A	20	N/A	40
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	N/A	80.00%	N/A	90.00%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	L1 901L				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 221 General Zoology				
COURSE DESCRIPTION	A comparative study of the animal kingdom focusing on the study of animal structure, growth, physiology, reproduction, classification, and distribution. This course is designed for students planning to pursue additional study in the natural sciences. (Course has not been offered for several years due to lack of student demand for environmentally based courses beyond the 100-level).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	11	N/A	N/A	N/A	N/A
<i>CREDIT HOURS PRODUCED</i>	44	N/A	N/A	N/A	N/A
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	50.00%	N/A	N/A	N/A	N/A
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	L1 902L				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 275 Human Anatomy & Physiology I				
COURSE DESCRIPTION	A study of the structures and functions of the human body; an integrated study of the systems of the human body including gross and microscopic structures and their physiology. Course covers cells, tissues, chemistry of life, metabolism and the systems: integumentary, skeletal, muscular, digestive and urinary.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	183	135	132	164	160

<i>CREDIT HOURS PRODUCED</i>	732	540	528	656	640
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	89.02%	86.07%	90.98%	84.56%	88.49%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	L1 904L				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 276 Human Anatomy & Physiology II				
COURSE DESCRIPTION	A continuation of BIO 275. Emphasis is on more depth in the physiology of various body systems including the central and peripheral nervous systems, sensory organs, endocrine, cardiovascular, lymphatic, respiratory, male and female reproductive and human development.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	128	116	98	105	136
<i>CREDIT HOURS PRODUCED</i>	512	464	392	420	544
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	94.17%	97.17%	91.11%	83.33%	92.56%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 293 Microbiology				
COURSE DESCRIPTION	Introduces characteristics, actions and control of microorganisms with emphasis on their relation to health and disease. The application of the principles of microbial control and laboratory techniques will be stressed. (Offered in both structured and blended formats to accommodate JWCC nursing program students' course schedules).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	138	103	117	103	109
<i>CREDIT HOURS PRODUCED</i>	552	412	468	412	436

<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	88.64%	83.00%	87.85%	77.01%	87.37%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	BIO 295 Adv Special Topics – Autoimmune Disease Research				
COURSE DESCRIPTION	This course will introduce students to the design, implementation, and basic analysis of research projects in the context of autoimmune diseases. Students will be expected to read and discuss peer-reviewed research articles on varying aspects of autoimmune disease and prepare a written research paper and formal oral presentation in a selected area of focus. Basic experiments will also be conducted with gene editing technology using bacterial models.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	N/A	N/A	N/A	N/A	3
<i>CREDIT HOURS PRODUCED</i>	N/A	N/A	N/A	N/A	3
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	N/A	N/A	N/A	N/A	100.00%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	CHM 100 General Chemistry				
COURSE DESCRIPTION	Fundamentals of chemistry for the non-science major. One semester may be taken by science majors who have not passed the placement test for regular beginning college chemistry for science majors.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	57	49	44	43	44
<i>CREDIT HOURS PRODUCED</i>	228	196	176	172	176

<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	82.14%	95.83%	83.36%	90.78%	95.35%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	P1 902L				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	CHM 103 Principles of Chemistry I				
COURSE DESCRIPTION	Comprehensive coverage of the basic principles of chemistry including bonding, nomenclature, reactions, stoichiometry, thermodynamics, kinetics and equilibrium. Designed for pre-med, pre-pharmacy, engineering and science majors with above-average mathematical and scientific backgrounds.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	33	35	30	22	27
<i>CREDIT HOURS PRODUCED</i>	132	140	120	88	108
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	96.97%	93.94%	96.67%	95.65%	85.19%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	P1 902L, CHM 911				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	CHM 104 Principles of Chemistry II				
COURSE DESCRIPTION	Continued comprehensive coverage of the basic principles of chemistry including atomic structure, covalent bonding, molecular structure, properties of gases, liquids, solids, and solutions, acid-base chemistry, oxidation-reduction reactions, and electrochemistry.				
	<i>YEAR 1</i>	<i>YEAR 2</i>	<i>YEAR 3</i>	<i>YEAR 4</i>	<i>YEAR 5</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	25	20	21	18	21
<i>CREDIT HOURS PRODUCED</i>	100	80	84	72	84
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	92.00%	95.00%	95.00%	100.00%	68.42%

<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	CHM 912				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	CHM 195 Special Topics – Chemistry Lab Internship				
COURSE DESCRIPTION	This course was taught in Fall, 2013 and provided an advanced chemistry student with the opportunity to learn how to maintain standards of safety when managing a chemistry lab and how to properly inventory, store, and mix chemicals needed for class experiments and lab activities.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	1	N/A	N/A	N/A	N/A
<i>CREDIT HOURS PRODUCED</i>	1	N/A	N/A	N/A	N/A
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	N/A	N/A	N/A	N/A
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	CHM 201 Organic Chemistry I				
COURSE DESCRIPTION	Structure, nomenclature, classification, properties and reactions of organic compounds including saturated and unsaturated hydrocarbons and alcohols. Determination of molecular structure using infrared, nuclear magnetic and mass spectroscopy. Designed for pre-med, pre-pharmacy, engineering, biology and chemistry majors. (Now offered through arrangement with Quincy University).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	4	3	7	N/A	N/A
<i>CREDIT HOURS PRODUCED</i>	20	15	35	N/A	N/A
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	66.67%	83.33%	N/A	N/A

<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	CHM 913				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	CHM 202 Organic Chemistry II				
COURSE DESCRIPTION	Continued coverage of the structure, nomenclature, classification, properties and reactions of organic compounds including ethers, conjugated double bonds, aromatic hydrocarbons, carbonyl compounds, amines, carboxylic acids and their derivatives, and an introduction to biochemistry. (Now offered through arrangement with Quincy University).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	4	2	3	N/A	N/A
<i>CREDIT HOURS PRODUCED</i>	20	10	15	N/A	N/A
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	66.67%	100.00%	100.00%	N/A	N/A
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	CHM 914				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	CHM 295 Advanced Special Topics – Chemistry Lab Internship				
COURSE DESCRIPTION	This course was taught in Spring, 2014 and provided an advanced chemistry student with a second semester of training in how to maintain standards of safety when managing a chemistry lab and how to properly inventory, store, and mix chemicals needed for class experiments and lab activities.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	1	N/A	N/A	N/A	N/A
<i>CREDIT HOURS PRODUCED</i>	1	N/A	N/A	N/A	N/A
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	N/A	N/A	N/A	N/A
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				

ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	EGR 203 Engineering Mechanics: Statics				
COURSE DESCRIPTION	This course teaches basic theory of engineering mechanics using calculus, involving the description of forces, movements, and couples acting on stationary engineering structures, equilibrium in two and three dimensions, free-body diagrams, friction, centroid, centers of gravity, and moments of inertia.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	2	3	9	6	6
<i>CREDIT HOURS PRODUCED</i>	6	9	27	18	18
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	100.00%	88.89%	83.33%	83.33%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	EGR 942				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	EGR 204 Engineering Mechanics: Dynamics				
COURSE DESCRIPTION	This course teaches basic theory of engineering mechanics using calculus, involving the motion of particles, rigid bodies, and systems of particles, Newton's Law, work and energy relationships, principles of impulse and momentum, and application of kinetics and kinematics to the solution of engineering problems.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	1	3	8	7	5
<i>CREDIT HOURS PRODUCED</i>	3	9	24	21	15
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	100.00%	87.50%	71.43%	100.00%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	EGR 943				
ACADEMIC DISCIPLINE AREA	Natural Sciences				

<i>COURSE TITLE</i>	EGR 221 Electrical Circuit Analysis				
	This course is designed to teach principles of electrical circuits and systems as well as basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage and current sources). Other topics covered include topology of electrical networks, Kirchhoff's laws, node and mesh analysis, DC circuit analysis, operational amplifiers, transient and sinusoidal steady-state analysis, AC circuit analysis, first- and second-order circuits, Bode plots, and use of computer simulation software to solve circuit problems.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	N/A	2	8	5	4
<i>CREDIT HOURS PRODUCED</i>	N/A	8	32	20	16
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	N/A	100.00%	87.50%	80.00%	100.00%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
<i>ACADEMIC DISCIPLINE AREA</i>	Natural Sciences				
<i>COURSE TITLE</i>	PHY 103 Fundamentals of Physics I				
<i>COURSE DESCRIPTION</i>	General survey of various aspects of mechanics, heat, sound, electricity, magnetism, modern physics optics, and relativity. (Will not transfer for engineering or physics major).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	5	2	7	6	6
<i>CREDIT HOURS PRODUCED</i>	20	8	28	24	24
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	50.00%	85.71%	83.33%	80.00%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	P1 900L				
<i>ACADEMIC DISCIPLINE AREA</i>	Natural Sciences				

COURSE TITLE	PHY 104 Fundamentals of Physics II				
COURSE DESCRIPTION	A continuation of Physics I.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	2	1	2	4	2
<i>CREDIT HOURS PRODUCED</i>	8	4	8	16	8
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	100.00%	100.00%	100.00%	50.00%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	PHY 227 Principles of Physics I				
COURSE DESCRIPTION	First of the two-semester calculus-based physics sequence, this course is for engineering and science majors. A thorough coverage of the fundamental principles of physics, including conservation of momentum, energy and angular momentum, Newton's Laws of motion, oscillatory, motion, planetary motion, and special relativity.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	7	10	13	13	10
<i>CREDIT HOURS PRODUCED</i>	35	50	65	65	50
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	66.67%	90.91%	91.67%	92.31%	70.00%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	PHY 911				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	PHY 228 Principles of Physics II				
COURSE DESCRIPTION	Continuation of the two-semester calculus-based physics sequence. This course is for engineering and science majors. A thorough coverage of the fundamental principles of physics, including electricity, circuits, magnetism, thermodynamics,				

	waves, optics, quantum physics, and atomic and nuclear physics.				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	4	5	9	6	8
<i>CREDIT HOURS PRODUCED</i>	20	25	45	30	40
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	100.0%	100.00%	77.78%	83.33%	87.50%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	PHY 912				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	PHY 295 Adv Special Topics – Strength of Materials				
COURSE DESCRIPTION	<p>Topics include concepts of stress and strain; material properties (elastic and plastic); torsion: shear stresses and deformations; thermal stresses; thin-walled pressure vessels; pure bending: stresses and strains; transverse loading of beams: shear stress and combined loadings; transformation of stress and strain (Mohr's Circle); design of beams and shafts for strength: shear and moment diagrams; deflection of beams; energy methods; and columns.</p> <p>The course was initially taught as PHY 295 in Summer, 2016, until it went through the curriculum approval protocol in Fall, 2018 and was formally established as EGR 205 - Strength of Materials (IAI EGR945). It was added to the curriculum in the Engineering program after a program-level assessment revealed that the course was needed by graduates of the AES program when transferring to baccalaureate programs in Engineering.</p>				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	N/A	N/A	N/A	5	N/A
<i>CREDIT HOURS PRODUCED</i>	N/A	N/A	N/A	15	N/A
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	N/A	N/A	N/A	100.00%	N/A
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>				N/A	

ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	SCI 100 Environmental Geology				
COURSE DESCRIPTION	An introductory study of forces that continually shape the surface of the earth, including examination of geological formation processes and our impact on the environment. (Offered in blended format in fall and spring and offered online in summer).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	37	29	31	37	49
<i>CREDIT HOURS PRODUCED</i>	148	116	124	148	196
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	75.00%	90.91%	89.66%	86.49%	85.11%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	P1 905L				
ACADEMIC DISCIPLINE AREA	Natural Sciences				
COURSE TITLE	SCI 105 Weather and Climate				
COURSE DESCRIPTION	An elementary survey of the properties of the atmosphere and the principles that govern weather and climate change. Real-time weather data will be used to predict weather and historical data archives to study climate. (Offered online).				
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	88	100	129	100	134
<i>CREDIT HOURS PRODUCED</i>	352	400	516	400	536
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	87.06%	90.91%	92.00%	91.58%	95.35%
<i>IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)</i>	N/A				
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	Student success rates were high in nearly all courses in Natural Sciences with those of many courses in the 80's and 90's per cents as shown in the course-specific data above. Despite these high success rates, students find their Natural Sciences courses to be some of their most challenging, yet many students move on to successfully complete career and technical programs in health sciences or baccalaureate programs in STEM fields at				

	<p>transfer institutions, supporting the notion that they were well prepared at JWCC.</p> <p>One interesting trend revealed by the data supports the ongoing importance of the BIO 101 prerequisite for students needing to take BIO 275 and 293. The data show that success rates increase from BIO 101 to BIO 275 to BIO 276, thereby demonstrating that students passing BIO 101 are better prepared to succeed in BIO 275 and those passing BIO 275 are then better prepared for success in BIO 276. The same trend of increased success rates from BIO 101 to BIO 293 also underscores the importance of the BIO 101 prerequisite for future success in BIO 293.</p>
WHAT DISAGGREGATED DATA WAS REVIEWED?	N/A
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	N/A
ACADEMIC COURSE REVIEW RESULTS	
<p>Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.</p>	<p>The department plans to move forward, budget permitting, with the acquisition of equipment and materials needed to enhance and update the laboratory components detailed in 2.3 above. This acquisition would ideally occur over the next two fiscal years beginning with supplies for chemistry and engineering and the upgrades to the general biology lab activities. To maintain or improve success rates, the department has written a five-year timeline to assess all courses in the program. Course assessments will be authentic and unique to each course and will inform the department of any potential modifications needed in content delivery.</p>
<p>Rationale Provide a brief summary of the review findings and a rationale for any future modifications.</p>	<p>Despite the high student success rates for individual courses as discussed above, the department conducted a program-level assessment of its requirements for the AS with concentrations in biology, chemistry, or physics. It was noted that due to the lack of required core courses, students are permitted to take natural sciences electives and can graduate with a concentration in which they have taken no courses. Students may ultimately end up graduating from a baccalaureate institution but require an extra year or more because they did not take enough of the required courses prior to transfer. For example, an adequately prepared biology transfer student should also have completed at least one year of Principles of Chemistry (if not a second year of chemistry with the Organic sequence) to successfully take upper division biology courses at the transfer institution. The department plans to propose a more robust Life Sciences concentration option and a Physical Sciences concentration option that will require more core courses so that students will be compelled to take more of the needed courses at JWCC prior to transfer, thereby shortening the time required for a baccalaureate degree after they transfer. This approach will have the added benefit of integrating more of the courses across the subdisciplines of the Natural Sciences curriculum (i.e. biology, chemistry, physics) and should result in an increase in discernable patterns of student success beyond the simple pattern mentioned above for the BIO prefix courses.</p>
Resources Needed	Resources needed to enhance or improve courses in Natural Sciences largely center around laboratory space, equipment, and materials. The needed resources are detailed in 2.3 above.
Responsibility	All members of the department are responsible for completing or implementing course or program modifications. The department chair will provide oversight and coordinate with the instructional administration as

Who is responsible for completing or implementing the modifications?	needed when any major modifications to the curriculum are proposed or requested.
--	--

Remedial English Language Arts (Reading and Communication Skills)

College Name:	John Wood Community College
Fiscal Year in Review:	2019
Review Summary	
Program Objectives What are the objectives or goals of the program?	Remedial English Language Arts classes are designed to bring students up to college-level in both reading and writing.
To what extent are these objectives or goals being achieved?	Success rates for completion of 099 are consistently over 70%. With the decision to bring dev-ed English and reading back into the same department that teaches on-level courses, there is increased communication between dev-ed instructors and composition instructors.
How does this program contribute to other fields and the mission of the college?	All students benefit from improved reading and writing skills. The impact of helping students achieve on-level skills will contribute to success in virtually every other course taken. Remedial courses also allow the community college policy of open enrollment to continue and allows students of all abilities a chance at higher education.
Prior Review Update Describe any quality improvements or modifications made since the last review period.	Our primary dev-ed instructor has completed the credentialing requirements to allow her to teach composition and therefore spearhead the Co-req. courses. In addition, at least two instructors taught ENG 099 in the fall of 2018. A significant change occurring in 2017 impacting all incoming students is placement according to Accuplacer and additional multiple measures including a writing placement test. Cut-off scores continue to be tweaked to ensure that students are being placed properly, and the additional writing placement test evaluated by faculty allows any student with borderline scores on Accuplacer to move into on-level composition. The clear majority of students writing the essay are being placed into ENG 101. With the change to multiple measures placement, we will continue to find ways to ensure students are properly placed.

Review Analysis

Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. Review will be sent back if any of the below fields are left empty or inadequate information is provided.

Indicator 1: Need	Response
-------------------	----------

1.1 Detail how the offerings are sufficient and aligned to meet the needs of students and supportive academic programs.	The department works to ensure that there are multiple sections and seats for students, including an increase in remedial offerings at the outlying campuses through OLC options. Students are encouraged to meet with the JWCC Writing Center tutor for additional feedback and instruction for paragraph and essay revision.
Indicator 2: Cost Effectiveness	Response
2.1 What are the costs associated with this program?	Total Developmental Education Department costs for FY2018 were \$74.95 per credit hour with net revenue of \$91.84 per credit hour.
2.2 How is the college paying for this program and its costs (e.g. grants, etc.)?	There were no grant expenditures for this department. All costs are paid through tuition and fee revenue.
2.3 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? If so, please elaborate.	NA
2.4 Based upon this review, what steps are being taken to offer curricula more cost-effectively?	We continue to become more efficient by offering OLC options rather than individual structured sections of courses that traditionally have low enrollment.
2.5 Are there needs for additional resources? If so, what are they?	One full time position was lost several years ago and never replaced. We have become reliant on associate faculty to teach both in Quincy and the outlying centers. A half- or full-time position in Dev-ed English would allow us to better serve the Quincy Campus as well as the outlying centers.
Indicator 3: Quality	Response
3.1 How is the college working with high schools to reduce remedial needs?	Our faculty that teach dual credit are in communication with the high school instructors. Quincy Public High School is a part of the Competency Based Education which may impact developmental education placements. If so, we will identify, and make suggestions to QPS as we continue our communication with our high school partners.
3.2 Are there any alternative delivery methods of this program? (online, flexible-scheduling, team-teaching, accelerated, etc.)?	We have recently revised delivery of ENG 080, ENG 099, CMN 080 and CMN 090 through Open Learning Center (OLC) as well as offering an OLC section over the summer to allow students to enter fall semester on level. The CMN 080 and 090 courses were revised to reflect an 8-week unit and developed using online instruction as well as one-on-one feedback from the instructor in OLC to move students through the sequence in one semester vs. two. We have discussed an online section of ENG 099; however, there are some concerns that this extra technological hurdle and lack of face-to-face communication will lead to lower success rates.

<p>3.3 What innovation has been implemented or brought to this program?</p>	<p>Curriculum for 099 is being revised to emphasize more paragraph writing in the first 8 weeks and essay writing in the final 8 weeks. The course is being streamlined to allow students to focus more on the writing part of the course. Online quizzes for vocabulary and grammar and the use of Canvas for course management also prepares students for the technical challenges of both structured and online on-level courses. Reading courses (CMN 080, 090) reflect an 8-week module unit which allows students to complete two levels of reading communication in one semester integrated with new, online, self-grading platforms to ensure immediate feedback for students. Beginning in spring 2017, we made another major switch in ENG 080 by implementing a digital component for grammar. While the students are receptive, we found that we needed to supplement the program materials with additional practice and application opportunities. Student writing focuses on constructing clear and complete sentences leading to paragraphs. Reading current events and selected short stories and articles, students write summaries focusing on identifying main ideas and supporting details and making accurate attribution of sources.</p>
<p>3.4 To what extent is the program integrated with other instructional programs and services?</p>	<p>The remedial courses are not integrated with other programs but do prepare students to enter any of the programs with the communication skills necessary for success.</p>
<p>3.5 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?</p>	<p>NA</p>
<p>3.6 How well are completers of remedial/developmental courses doing in related college-level courses</p>	<p>See data below.</p>
<p>3.7 What is the college doing to develop and implement co-requisite or pathway models to ensure students placing into development education finish the sequence within one academic year?</p>	<p>We have piloted a new Co—Requisite section of 098/101. Students are able to move more quickly through remedial writing. Fall 2018 section was small. In Spring 2019, we allowed 25 seats in the co-req section and will have more data to review this fall. The Reading courses have been redesigned as 8-week courses, so that students can complete in one semester. We have eliminated the lowest level of Reading, a CMN 005 course. Multiple measures placement will also help place students beyond what the Accuplacer alone can signify. While few students place into ENG 005, serious consideration is being given to eliminating this lowest dev-ed course. For those few students, ENG 005 is currently offered as an OLC course.</p>
<p>3.8 Provide a description of the remedial/developmental sequence. Colleges may attach a graphic representation.</p>	<p>See handout on courses.</p>

3.9 What professional development or training is offered to instructors and/or staff to ensure quality programming?	Faculty and staff are encouraged to attend conferences. There is also much collaboration within the department to ensure that individual courses are meeting student needs. Several faculty attended a conference on Co-Req standards and practices in Fall of 2018.
---	--

List any barriers encountered while implementing the program.

DATA ANALYSIS FOR ENGLISH LANGUAGE ARTS
Please complete for each course reviewed as part of the Remedial English Language Arts, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.

<i>COURSE TITLE</i>	CMN 005 – Written Communications/Dev Ed				
<i>COURSE DESCRIPTION</i>					
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	15	14	15	N/A	N/A
<i>CREDIT HOURS PRODUCED</i>	45	42	45	N/A	N/A
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	93.33%	75.00%	42.86%	N/A	N/A
<i>COURSE TITLE</i>	CMN 080 – Understanding Written Communication				
<i>COURSE DESCRIPTION</i>					
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	26	17	10	18	22
<i>CREDIT HOURS PRODUCED</i>	78	51	30	54	66
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	79.17%	70.59%	88.89%	66.67%	54.55%
<i>COURSE TITLE</i>	CMN 090 Interpreting Written Communication				
<i>COURSE DESCRIPTION</i>					
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>

<i>NUMBER OF STUDENTS ENROLLED</i>	47	19	9	13	31
<i>CREDIT HOURS PRODUCED</i>	141	57	27	39	93
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	67.44%	63.16%	83.33%	61.54%	77.42%
<i>COURSE TITLE</i>	ENG 005 English for Developmental Ed				
<i>COURSE DESCRIPTION</i>					
	<i>FY15</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	19	17	20	14	9
<i>CREDIT HOURS PRODUCED</i>	57	51	60	42	27
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	88.24%	85.71%	58.82%	100.00%	55.56%
<i>COURSE TITLE</i>	ENG 080 Basic Writing				
<i>COURSE DESCRIPTION</i>					
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	43	37	31	36	38
<i>CREDIT HOURS PRODUCED</i>	129	111	93	108	114
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	89.47%	77.42%	74.07%	70.00%	75.68%
<i>COURSE TITLE</i>	ENG 099 Writing Skills				
<i>COURSE DESCRIPTION</i>					
	<i>FY14</i>	<i>FY15</i>	<i>FY16</i>	<i>FY17</i>	<i>FY18</i>
<i>NUMBER OF STUDENTS ENROLLED</i>	161	149	141	109	143

<i>CREDIT HOURS PRODUCED</i>	483	447	423	327	429
<i>SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS</i>	68.06%	71.53%	77.86%	86.60%	87.40%
REVIEW RESULTS					
<p>Rationale Provide a brief summary of the review findings and a rationale for any future modifications.</p>	<p>The decreasing success rates of the CMN 005 students was the rationale for dropping that course offering, and there is no movement to bring it back. The uneven success statistics of the ENG 005 course have led us to consider eliminating that course as well and trying to find a spot for the higher end of those students in ENG 080. Success rates for the ENG 099 course look very good. We will be looking at the co-req results as well after the 2018-2019 academic year and continue to find ways to help students move to on-level work more quickly and be in compliance with directives from ICCB. Success rates in CMN 080 and 090 are not as high as we would like; we would like to examine how to bring the success rates up. In some ways, it is important that success in these reading courses help students understand what will be expected of them in on-level courses.</p>				
<p>Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.</p>	<ul style="list-style-type: none"> • Continue to revise curriculum for all remedial English and reading courses to make sure that they prepare students and are placed appropriately. Changes are in place for ENG 099 to increase the number of paragraphs in the first half and decrease the number of essays, allowing more time for revision and reflection during the writing process. • The curriculum for the reading courses will be reviewed • OLC course delivery will be evaluated and revised if needed • Analysis of the new placement systems and follow-up to make sure that students are in the courses they need • Assessing the number of co-req. seats needed in a “full” rollout and if students are successful in this format in 2018-2019 pilot. Formalizing curriculum of the ENG 098 part of the co-req and assessing the need to offer this course in any of the outlying campuses or the need to train additional instructors in this course. 				

Student and Academic Support Services

The ICCB Program Review requires each college to submit a statement of the review of student and academic support services that the college completed during the year. A completed and comprehensive review will likely be between **4 – 8 pages in length**.

<i>COLLEGE NAME:</i>	John Wood Community College
<i>FISCAL YEAR IN REVIEW:</i>	2019
<i>REVIEW AREA:</i>	Financial Aid
<p>Program Summary Please provide a brief summary of the function of the program.</p>	<p>At John Wood Community College, the Office of Financial Aid works closely with students and families to provide access to financial assistance through federal and state resources, as well as internal scholarship opportunities. The Office works closely with district high school partners to provide financial literacy activities keeping prospective students and families informed. The Office also works with JWCC instruction on campus to educate current the student body.</p> <p>The office is committed to:</p> <ul style="list-style-type: none"> • Assisting students and families with completing the Free Application for Federal Student Aid (FAFSA); • Assisting returning students with FAFSA completion and account resolution; • Providing quality customer service to our students and families. <p>Staffed with four full-time professionals (three Coordinators and one Office Assistant) and the Dean of Enrollment Services/Director of Financial Aid, the office is a part of the Student Services area and the Dean reports directly to the President.</p>

Prior Review Update

Describe any quality improvements or modifications made since the last review period.

Since our last review we have accomplished some of the following:

- Implemented an automatic notification to new students with a gainful employment (GE) certificate declared. Students who declares or changes their major to a GE certificate receives email notification of the GE template and request confirmation of receipt.
- Satisfactory Academic Progress Notification –At the end of each semester, the College performs an academic review with notification being sent via mail. This would take up to a week for delivery to the student. We now are able to notify students within 48 hours concerning their Satisfactory Academic Status and financial aid access coming up for the next semester of enrollment.
- College Work Study Program – We have transitioned the placement of student workers from the Human Resources Department to the Financial Aid Office. Through this process, we have implemented tracking documents online to assist us with better communication between students and potential work supervisors for College Work Study.
- Expanded monthly reconciliation processing to utilize Banner-processing systems to better track and balance with systems and COD processing.
- The Office implemented quarterly spot audits to gage throughout the year if we are maintaining quality standards when processing financial aid. Each semester we select 15 random files to go through our internal audit process.
- For fiscal year FY 18 and FY 19, the Financial Aid Office has had the opportunity to work with a regional ISAC Corp member. We have provided individual FAFSA assistance with our fourteen-district high school. In addition we provided each schools junior and senior classes the opportunity to attend a FAFSA Information Night and for seniors the opportunity to receive FAFSA filing assistant on-site at the high schools. Each senior gets a mascot specific invite to participate.

What are the identified or potential weaknesses of the program?

The Financial Aid Office continues to look for ways to streamline processes and ways to serve students. A few opportunities we are working toward implementing:

- Software transition – We are currently working through a system upgrade from Banner 8 to Banner 9. The Financial Aid Office is taking this opportunity to serve as a beta site as self-service financial aid is being developed. This we believe will improve our student experience. In addition, we have two additional system developments to work towards implementation, which is “class toward course of study” tracking as well as period based budgeting. All three of these items will assist in improved services as well as support compliance.
- Loan notification to students – recent state regulations changes requires the college to send loan notification to students concerning all outstanding debt as well as payoff options. The Office is working through how to access this information as well as manage the tracking within the system. Benefit will be to better serve student body and assist them being informed consumers.
- Loan processing – to better serve students and to decrease unnecessary loan borrowing we are implementing a semester by semester loan process. Student will continue to be able to request fall and spring loans but processing will be done on a semester only basis. This will provide opportunities to communicate with students and give them the option to decrease or increase loan request.
- Through surveys, the college continues to hear about lack of clear communication concerning financial aid information. On a national level, this has also been noted as a growing concern. We continue to look for ways to be clarify our messaging.
- Year Round Pell Misconceptions – We continue to work on educating students as well as staff members of the year round PELL access for student who qualify during summer months.

<p>What are the program's strengths?</p>	<p>Our strengths continues to be the area partnerships the College maintains with area high school and community organizations. As noted above we continue to work with our 14-area high school providing FAFSA information as well as filing assistance. This past year we also assisted the Adams County (Court) Employment Ready program with providing FAFSA assistance preparation to come back to school.</p>
<p>Rationale Detail all major findings resulting from the current review.</p>	<p>1718 Year Department Outcomes: Number of FAFSA applicants - 2786 Pell Grant recipients - 1,040 - \$3.3 million MAP recipients – 418 – \$488 thousand Auto Zero Expected Family Contribution – 380 Student Employment Opportunities - 42 placements Community Outreach – 28 events</p> <p>Through yearly review of federal and state regulations, we continue to work towards meetings new and maintaining standards. We have been able to achieve 99% notification of GE template information to students but continue to increase our response rate.</p> <p>We have achieved a notification time after a Satisfactory Academic Progress status update has occurred to within 48 hours.</p> <p>This year the College was able to provide presentation impacting 100% of our high schools providing them access either high school on-site or one of our outlying center sites.</p>

Intended Action Steps

Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.

Some actions moving forward:

- **The Financial Aid Office has signed up to be a beta tester during the implementation stage of Self-Service Banner 9 Financial Aid.** This will require dedicated staff time during the month of June 2019 with implementation phases starting in August 2019.
- A representative will be attending Ellucian Live to explore implementation options of “Course towards Declared Degree” and period based budgeting to prioritize;
- Loan communication updates – we are working on Banner coding to assist with tracking loan specific plus sending a representative to ILASFA to determine information access;
- Working with Marketing and Public Relations on how to inform students about Year Round Pell opportunities as well as a communication plan to inform staff who work directly with students.