Fiscal Year 2023

COMMUNITY COLLEGE
PROGRAM REVIEW REPORT

Submitted to the

Illinois Community College Board

Illinois Valley Community College

District 513
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Program Review Cover Page

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District Number	513
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Academic Years Reviewed:	2018-2023

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Academic Disciplines	
College Name:	Illinois Valley Community College
Academic Years Reviewed:	2018-2022
Discipline Area:	Mathematics

REVIEW SUMMARY	
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?	The program objective is to provide excellent instruction and assessment in all college level mathematics courses, resulting in course completion and student success. Students complete courses to fulfill degree requirements and to prepare for future courses of study.
To what extent are these objectives being achieved? How do you know the extent to which they are being achieved?	The program review indicates the program objectives are being accomplished. Rates of success have remained good over the past five years with 66% of all students taking college math courses earning a grade of C or better.
How does this discipline contribute to other fields and the mission of the College, including addressing the College's vision for equitable access for students?	Mathematics contributes to numerous fields of study for students. Examples include mathematics, engineering, business, and medicine. The program provides high quality mathematics instruction which is accessible and affordable. This is consistent with the College's mission. Co-requisite initiatives have allowed students to enroll in classes they previously may not have gained entry to. Multiple measures also promote enrollment using a variety of options for placement.
Prior Review Update Describe any quality improvements or modifications made since the last review period.	The mathematics department is moving away from developmental math courses in favor of co-requisite math courses. Co-requisite courses now exist for MTH 1003, College Algebra, and MTH 1008, Statistics. Multiple measures, including high school grade point average and PSAT scores, for placement into math courses are now accepted, along with ACT, SAT, and Accuplacer scores.
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**
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	Illinois Valley Community College is a member of the Illinois Articulation Initiative. All classes are articulated and course outlines are submitted, as requested, to the IAI panels for content review. This ensures that the content is correct and complete for articulation. The College's Curriculum Committee

by the curriculum review committee and campus academic leadership?	approves all courses prior to their submission to the ICCB. Math faculty routinely meet with IVCC CTE program coordinators to ensure course content meets individual program needs. In addition, program guide sheets are reviewed annually.
1.2 How are students informed or recruited for this program?	The College's Director and Assistant Director of Admissions play a major role in recruitment. In conjunction with faculty, students are recruited through high school visits, college events and activities, and annual publications.
1.3 What, if any, new Academic Transfer degrees/major options have been added/deleted to the College's offerings during the last review period? What determined this action?	None have been added as of the last review period.
1.4 How many total courses are offered by the College in this discipline? What courses see the largest need (enrollment) from students?	Fourteen courses are offered. The largest enrollments exist in MTH 1003, College Algebra, and MTH 1008, Statistics. On average, 61% of students taking a mathematics course in a fall or spring semester are enrolled in one of these two courses.
INDICATOR 2: COST EFFECTIVENESS	**RESPONSE**
2.1 What are the costs associated with this discipline? (How does the operational cost of this discipline compare to that of other baccalaureate/transfer disciplines and all programs offered by the College overall? What are the primary costs associated with this discipline? How many full- and part-time faculty are maintained for this discipline?)	The primary costs of the program are faculty salaries and benefits. Six full-time and four part-time math faculty are employed by the College. Costs also include general classroom instruction software and supplies. A three-year analysis reveals that the mathematics program has generated a net income of $68,749.00. Mathematics is the second largest income generator within the Natural Sciences division of the College.
2.2 What steps can be taken to offer curricula more cost-effectively?	Students in low enrollment math sections are placed in other sections when possible. Enrollments also guide instructor assignments. Multiple sections of classes are not assigned and offered if enrollment does not dictate a need. These steps help to ensure that curricula are offered in a cost-effective manner.
2.3 Is there a need for additional resources?	Not at this time.
INDICATOR 3: QUALITY	**RESPONSE**
3.1 Are there any alternative delivery methods of this discipline? (e.g. online, flexible scheduling, accelerated, team teaching, etc.)?	Many courses are offered in the on-line format. MTH 1000, 1003, and 1008 each have a late start 14-week section as part of Fast Track/late start offerings. Summer courses are offered in traditional eight-week face to face and on-line formats. The College also offers a number of math courses as dual credit at several district high schools.
3.2 If the College delivers a course in more than one method, does the College compare success rates of each delivery method? If so, how? How does	Yes, the College does compare the success rates of each delivery method. Institutional Research provides each department an analysis of the course success by delivery mode

the College provide supports to students to ensure that they have equitable access to these different course delivery methods?	for each course each semester. Success rates in online courses is 68%, with face-to-face courses at 64%. Supports are provided to students to ensure equitable access. Faculty receive training and skills in providing different delivery modes from the College's Center for Excellence, Teaching, Learning, and Assessment. Students in need have options to borrow laptops and/or hotspot devices each semester. The Student Help Desk supports all students with technology related issues. In addition, the College has programs, such as the federally funded TRIO program, Project Success, to help provide equitable access.
3.3 What assessments does the discipline use to measure full-time and adjunct instructor performance in the classroom?	The College has a very thorough formal evaluation process in place for all tenured, and pre-tenured full-time faculty. Classroom evaluation is conducted by the academic dean for tenured and non-tenured faculty, as well as by the Vice President for Academic Affairs for non-tenured faculty. Student evaluations are included in this effort. Adjunct faculty are also evaluated by student evaluations.
3.4 What professional development is offered for full- and/or part-time faculty in this discipline? Is all professional development offered to both full time and adjunct faculty?	All full-time faculty are allotted $1,000 in professional development funds each year. In FY2022, the College also began providing $3,000 to full-time faculty to attend a national conference once every three years. The College offers numerous opportunities for support and professional development through the Center for Excellence in Teaching, Learning, and Assessment for full and part time faculty. Additional professional development may be requested and fulfilled based on the availability of funds.
3.5 How many faculty have been actively involved in IAI panel review for courses in this discipline over the last review period?	One
3.6 How does the discipline identify and support "at-risk" students? What supports are available to these students and how are students made aware of these supports?	Faculty closely monitor student performance on formal and informal assessments. Faculty hold office hours for student help. The College has a formal "at-risk" notification program. Students are contacted with information indicating academic assistance is available. The College also has a free tutoring program which many math students take advantage of. In addition, the Center for Accessibility and Neurodiversity provides services for students with special learning needs.
3.7 To what extent is the discipline integrated with other instructional programs and services?	The math program is closely associated with peer tutoring to make sure that students get the extra help they may need. The program also works cooperatively with developmental math and college-level math faculty provide additional open math lab hours to assist students in this area. The faculty also work closely with the Center for Accessibility and Neurodiversity to assist students with special needs.

3.8 What does the discipline or department review when developing or modifying curriculum?	The requirements of the Illinois Articulation Initiative and Illinois legislation are reviewed. Curriculum is developed as transfer requirements change. Changing requirements for CTE programs are also examined
3.9 When a course has low retention and/or success rates, what is the process to address these issues? Are data reviewed to determine if one student population is disproportionately affecting course success rates? If so, how does the College address these disparities?	Meetings are held to discuss possible reasons for the results. Topics considered might include course delivery methods and assessments, prerequisites, and the specific issues associated with each particular class of students. Additional services, such as tutoring, are also discussed. Faculty implement intervention methods such as early assessment, required office hour visits, and the scheduling of tutors as needed. Data is going to be reviewed moving forward to determine if any student populations are disproportionately affected as shown by course success rates.
3.10 How does the College determine student success in this discipline?	Faculty monitor student performance on formal and informal assessments. Examples of formal assessments include exams, quizzes, and homework. Informal methods include practice exams and quizzes, checking for understanding in group work and "muddiest" point exercises. The College also has an active Assessment Committee which provides semester by semester data of achievement of specific institutional learning objectives, as determined by faculty. Results obtained are shared as part of the College's accreditation process.
3.11 Did the review of quality result in any actions or modifications? Please explain.	All course outlines have recently been updated to ensure that the latest requirements for course content and delivery are being met. Corequisite course instruction is going to continue to expand in lieu of developmental math. On-line offerings continue to increase, with Calculus II as the newest online offering. In addition, it is anticipated that dual credit offerings will continue to grow.

LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THIS DISCIPLINE.

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

Academic Discipline Area	Mathematics
Course Title	MTH-1000 - Math for Liberal Arts MTH-1003 - College Algebra MTH-1004 - Trigonometry MTH-1005 - Precalculus MTH-1006 - Finite Mathematics MTH-1007 - Calculus for Bus. & Soc. Sciences MTH-1008 - General Elementary Statistics

	MTH-1009 - Structure of Number Systems I
	MTH-1010 - Structure of Number Systems II
	MTH-1206 - Technical Mathematics I
	MTH-2001 - Calculus & Analytic Geometry I
	MTH-2002 - Calculus & Analytic Geometry II
	MTH-2003 - Calculus & Analytic Geometry III
	MTH-2007 - Differential Equations
Course Description	MTH-1000 - Intended as a survey course for those students interested in developing an appreciation of the role of mathematics and mathematical methods in contemporary thought. Emphasizes the understanding and application of mathematics. The course includes the study of counting methods and probability, statistics, mathematics of finance, and other selected topics such as set theory, logic, problem solving, geometry, graph theory, mathematical modeling, linear programming, and voting and apportionment. This course does not serve as the prerequisite for any other mathematics course. MTH-1003 - This course is primarily for students who need to continue on in mathematics. Topics of study include: review of fundamental algebraic operations, radicals, systems of equations, higher degree equations, inequalities, absolute values, exponential functions, logarithms functions, and matrices. MTH-1004 - This course is primarily for students who need to continue on in the study of mathematics. Topics of the study include trigonometric functions, equations, graphs, identities, and applications of trigonometry including vectors, polar equations, and parametric equations. MTH-1005 - This course covers the same topics as College Algebra (MTH 1003) and Trigonometry (MTH 1004) with emphasis on functions approach and curve sketching. It is recommended for students planning to take the calculus sequence but have not met the prerequisites. MTH-1006 - This course is intended for students in business, social science, and other areas in which a knowledge of the mathematics of probability, matrices, linear programming and their applications is used. MTH-1007 - This course is for students who need a basic understanding of differential and integral calculus, but do not need the more rigorous traditional calculus sequence. Applications in the fields of business and social sciences are stressed. MTH-1008 - This course is intended to provide students with a basic understanding of the role of statistics in society along with a workable knowledge of statistical methods. Topics include: graphical methods of organizing data, numerical descriptions of data, basic probability theory, probability distributions, statistical inference, estimation, hypothesis testing, correlation and regression, and analysis of variance.

MTH-1009 - This course is a study of the basic structure of the real number system, set theory, basic algorithms, informal geometry, and problem solving. The goal of this course is to increase the student's knowledge and understanding of mathematical theories and concepts. This is not a course in computational arithmetic skills. This course is recommended for students majoring in elementary or junior high education.

MTH-1010 - This course is the second course in a two-semester sequence. Topics of study include, but are not limited to, introductory geometry, measurement, probability, statistics, motion geometry, and coordinate geometry. This course is recommended for students majoring in elementary or junior high education.

MTH-1206 - This course in Technical Mathematics includes topics in arithmetic, the metric system, selected topics in basic algebra, practical geometry and right triangle trigonometry. Emphasis is on the use of mathematics to solve typical job problems. This course is not intended for transfer.

MTH-2001 - This course is the first in a three-semester sequence of analytic geometry and calculus. Topics include: real numbers, lines, circles, conics, functions, limits, derivative and anti-derivative with applications, transcendental functions and the definite integral with applications.

MTH-2002 - Topics include: differential equations; the calculus of inverse trigonometric functions; applications of the integral; techniques of integration, including numerical methods, substitution, integration by parts, trigonometric substitution, and partial fractions; indeterminate forms and L'Hopital's rule; improper integrals; sequences and series, convergence tests, Taylor series; conics; parametric equations; polar coordinates and equations.

MTH-2003 - Topics include: three dimensional vectors, parametric equations, analytical geometry, partial differentiation, multiple integrals, and vector analysis.

MTH-2007 - Topics covered include solutions of ordinary differential equations, first order differential equations and the existence and uniqueness of their solutions, higher order differential equations with constant coefficients by exact methods, some equations with variable coefficients, systems of equations, Laplace transforms, and an introduction to numerical methods. Applications of all topics to problems arising in engineering and the physical sciences are studied.

	Year 1 - FY18	*Year 2 - FY19*	*Year 3 – FY20*	*Year 4 – FY21*	*Year 5 – FY22*
MTH-1000 – Math for Liberal Arts					
Number of Students Enrolled	95	80	104	97	111
Credit Hours Produced	285	240	312	291	333
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	78.16%	81.33%	79.12%	69.32%	73.53%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 904	M1 904	M1 904	M1 904	M1 904
MTH-1003 – College Algebra					
Number of Students Enrolled	209	206	239	225	248
Credit Hours Produced	627	618	717	675	744
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	80.87%	75.15%	77.89%	81.37%	78.80%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
MTH-1004 - Trigonometry					
Number of Students Enrolled	41	52	54	47	40
Credit Hours Produced	123	156	162	141	120
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	92.11%	83.37%	84.09%	88.89%	89.16%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
MTH-1005 - Precalculus					
Number of Students Enrolled	92	69	51	41	17
Credit Hours Produced	460	345	255	205	85
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	81.93%	77.97%	91.49%	77.14%	93.75%

IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
MTH-1006 – Finite Mathematics					
Number of Students Enrolled	18	16	8	16	7
Credit Hours Produced	72	64	32	64	28
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	80.005	92.865	100.00%	86.67%	100.00%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 906	M1 906	M1 906	M1 906	M1 906
MTH-1007 – Calculus for Bus. & Soc. Sciences					
Number of Students Enrolled	36	56	50	52	54
Credit Hours Produced	144	224	200	208	216
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	80.00%	72.34%	95.35%	93.75%	82.61%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1900B	M1900B	M1900B	M1900B	M1900B
MTH-1008 – General Elementary Statistics					
Number of Students Enrolled	357	315	363	359	344
Credit Hours Produced	1071	945	1089	1077	1032
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	76.08%	77.57%	80.19%	78.51%	69.18%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 902	M1 902	M1 902	M1 902	M1 902
MTH-1009 – Structure of Number Systems I					
Number of Students Enrolled	12	10	15	10	14
Credit Hours Produced	36	30	45	30	42
Success Rate (% C or better) at the end of the course,	100.00%	9.00%	73.335	100.00%	85.71%

excluding Withdrawals and Audit students					
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
MTH-1010 – Structure of Number Systems II					
Number of Students Enrolled	26	30	22	25	16
Credit Hours Produced	78	90	66	75	48
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	72.005	96.00%	81.82%	95.65%	100.00%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 903	M1 903	M1 903	M1 903	M1 903
MTH-1206 – Technical Mathematics I					
Number of Students Enrolled	86	81	81	64	73
Credit Hours Produced	258	243	243	192	219
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	90.67%	78.08%	78.08%	79.03%	91.43%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
MTH-2001 – Calculus & Analytic Geometry I					
Number of Students Enrolled	129	118	69	46	55
Credit Hours Produced	645	590	345	230	275
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	86.84%	84.78%	84.755	87.18%	88.10%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 900-1; MTH 901	M1 900-1; MTH 901	M1 900-1; MTH 901	M1 900-1; MTH 901	M1 900-1; MTH 901
MTH-2002 – Calculus & Analytic Geometry II					
Number of Students Enrolled	58	55	34	28	25
Credit Hours Produced	232	220	136	112	100

Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	85.19%	85.71%	96.43%	92.86%	78.95%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 900-2; MTH 902	M1 900-2; MTH 902	M1 900-2; MTH 902	M1 900-2; MTH 902	M1 900-2; MTH 902

MTH-2003 – Calculus & Analytic Geometry III

Number of Students Enrolled	22	23	19	21	11
Credit Hours Produced	88	92	76	84	44
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	100.00%	90.48%	89.47%	82.35%	77.78%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	M1 900-3; MTH 903	M1 900-3; MTH 903	M1 900-3; MTH 903	M1 900-3; MTH 903	M1 900-3; MTH 903

MTH-2007 – Differential Equations

Number of Students Enrolled	13	15	16	9	1
Credit Hours Produced	39	45	48	27	3
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	100.005	100.005	87.50%	100.00%	100.00%
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	MTH 912	MTH 912	MTH 912	MTH 912	MTH 912

How does the data support the course goals? Elaborate.	Data provided by annual internal program review on student success shows that academic performance in the mathematics courses has remained solid. Course offerings meet the needs of students studying a variety of disciplines in the CTE and transfer options. Overall analysis of success rates indicates a relatively high level of performance across all courses. As mentioned previously, 66% of students pass IVCC math courses with a grade of C or better.
What disaggregated data was reviewed?	Disaggregated data by gender, race/ethnicity, age, full- or part-time, status, and disability status was reviewed.
Were there identifiable gaps in the data? Please explain.	A review of the data shows that Hispanic students and non-traditional age students are underrepresented in terms of enrollment related to the overall population within the IVCC district. The difference for Hispanic students is approximately 10% and 38% for non-traditional age students. The College continues to make efforts to recruit potential students from these populations.

Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	1. A review will take place to ensure course content with appropriate academic rigor is in place for all dual credit offerings. 2. The faculty will continue to work with the developmental math faculty in the expansion of corequisite course offerings. 3. A need exists to deepen the pool of transfer adjuncts, especially for summer courses. All of these action steps will be accomplished during the 2023/2024 and 2024/2025 academic years.
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	Program objectives are being met.
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Faculty and staff actively participate in DEI activities across the campus and community. The use of funding to provide childcare for students who need those services, scholarships for tuition assistance, and other grants provides additional support to math students while helping to address equity gaps.
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	The IVCC Math Department continues to meet the needs of its students with a strong curriculum and faculty. Success rates of students have been very good. Changes in multiple measures for meeting course admissions will result in changes in enrollments as more students will move directly into college-level math. This will result in increased classroom staffing needs. Faculty will continue to review and make necessary curriculum modifications as needed.
Resources Needed	Additional faculty and money for salaries will be needed.
Responsibility Who is responsible for completing or implementing the modifications?	The primary responsibility will fall on the math faculty and the Dean of Natural Sciences and Business.

Student and Academic Support Services

Address all fields in the template with an equity lens. If needed, you may provide a link to support your submission. 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 these data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

College Name:	Illinois Valley Community College
Academic Years Review:	2018-2022
Review Area:	Career and Placement Services
Review Team Please identify the names and titles of staff and faculty who were major participants in the review of this program/service and their role or engagement in this process.	Mark Grzybowski, Vice President for Student Services and Lisa Witalka, Career and Student Services Associate
Mission How does the program/service contribute to the mission of the college?	Career Services contributes to the mission of the College by providing accessible and affordable resources to inspire our students and community stakeholders to thrive in their search for opportunities that will take them closer to their career goals.
Advancement of Equity How does the program/service help advance equity?	In addition to various on-line resources, individual one-on-one sessions ensure that our students and community stakeholders have fair access to resources and tools to actively learn how to conduct a successful job search and/or career exploration. [Career exploration in terms of where will a student find employment opportunities at completion or a displaced individual that needs options for a career change.]
Service Objectives Please provide a brief overview of the program or service being evaluated. What are the overarching goals/ objectives of the program/service?	Our goal is to build connections. IVCC's Career Services Department assists IVCC students, alumni and the employers of the IVCC District. Our services include job and internships opportunities in www.collegecentral.com/ivcc; resume writing assistance and resume critiquing; tips on the job search process, including cover letters and interviewing; job fairs and special events; and access to occupational and career exploration information.
To what extent are these objectives being achieved? Please detail how achievement of program/service objectives is being measured or assessed?	The number of students being referred to Career Services has been increasing, with the College's quarterly Perkins reports being the primary source of measurement. IVCC's College Central Network (CCN) reports also provide data on the number of students and community stakeholders utilizing Career Services.
Past Program Review Action What action was reported last time the program/service was reviewed?	Since the last review period, the department continues to operate with one full-time employee, with some clerical

Were these actions completed? If not, what were the identified barriers to action?	assistance from the Administrative Assistant for Student Services. The Career Services department added classroom presentations to market the resources and assistance offered to our students. Job Search related presentations are program focused for relatability. Career Services has been pro-active in coordinating scheduled employer visits to various workforce development classes. These visits offer the students opportunities to learn about opportunities that may exist for them upon completion of programs. Additionally, the department has transitioned to sponsoring program specific mini-events each semester in lieu of the annual community wide Job Fair, as an attempt to encourage student engagement and participation. After the slow return to in-person classes, it made sense to afford students networking opportunities on a smaller scaled basis.

Indicator: Need

1.1. Is this program or service statutorily required? If yes, is the college meeting the required elements? How does the college ensure it meets all required elements?	This service is not statutorily required.
1.2 What is the *need* for this program/service and how does the institution determine *need*?	Preparing for a career is the primary reason for earning a post-secondary credential. It is never too early for a student to prepare to transition into their dream position once they graduate. IVCC's Career Services provides resources for all aspects of the job search, including helping students locate their internship site.
1.3 If applicable, what is the student usage for this program/service?	During the period of 2018-2022, Career Services had direct contact with 859 students, not including class presentations or other student development events sponsored.
1.4 How does the student usage compare to assessed need of the program/service?	The College relies on student feedback via surveys and questionnaires (CCSSE & NLSSI) to gain insight on how effective students feel our services are and how we can make improvements (if needed).

Indicator: Cost

2.1 What are the current expenditures of the department?	Expenditures include salary and benefits for one full-time employee, and an average of $1,990/year for marketing and supplies. Additional expenses include catering, marketing, and supplies for the College's Etiquette Dinner, where Career and Technical students are given the opportunity to learn dinner etiquette and practice with local employers.

	(Note: The Etiquette Dinner has not been held since Fall of 2019 due to the pandemic and loss of viable food service provider for this formal catered event.)
2.2 How is this program/service funded and what cost-effective strategies are in place to ensure sustainability?	The department is funded through the Student Services Division, which is funded through the College's General Education fund.

Indicator: Quality

3.1 If applicable, how does the college program/service measure against any quality benchmark and standards?	The CCSSE report provides feedback on how students view all facets of the College. IVCC students ranked Career Counseling with a mean value of 0.96 and 0.72, higher than our cohort at 0.60 and 0.58, during the 2018 and 2022 survey administrations.
3.2 How does the college ensure that all staff are qualified and appropriate to overseeing or providing the program/service?	Employee(s) are encouraged to participate in Development offerings. Additionally, Career Services is a member in the Illinois Community College Career Services Professionals (IC3SP). IC3SP consists of Administrators and Career Services Professionals from Career Services Offices at community colleges throughout Illinois. The Commission of IC3SP meets regularly and provides professional development opportunities for its members.
3.3 What, if any, innovations have been implemented within this program/service that other colleges may want to learn about? How have these innovations had an impact on student success?	Being invited to classrooms to present what Career Services has to offer has increased the student contact. There has been more student engagement as a result of just promoting awareness of the department. It is not unusual to receive an email, phone call or even drop-in visit just to say: "I got an interview!", "I got the Internship Site!", and, most excitingly, "I got the job!".
3.4 What are the strengths of this program or service?	The department is often recognized for its ability to provide individualized attention to students and employers. Career Services also rises to the demands of local industry and provides networking opportunities for students, alumni, community members, and employers. This is accomplished by establishing working rapports with our Program Coordinators, local employers and IVCC employees by: - Facilitating employer visits to classrooms so students hear first-hand about the various opportunities available to them and employers can describe the company's culture and hiring expectations. - Providing job search assistance to those affected by job loss, referrals from co-workers/faculty, GED and ESL instructors, as well as occasional requests from BEST Inc. career advisors.

	• Conducting presentations about the resources and assistance Career Services, thereby increasing the number of students requesting job or internship search assistance. Job search specific presentations have boosted the requests for assistance with assignments requiring resumes and cover letters. As a result, our students are contacting Career Services after completion at IVCC as well as when they need or want a career change. Students routinely comment in presentation evaluations that they appreciate knowing the department exists. The most prevalent comment is they are excited there is a resume builder in the CCN system. The department has also proven to be adept at pulling useful reports and information from the CCN that help shape and support the core functions of the College.
3.5 What are the challenges or weaknesses of the program/service?	Career Services utilizes College Central Network (CCN), an electronic job search/posting system. Employers can utilize CCN by posting open positions, which job seekers can then review and decide whether or not to apply for. While student usage has slightly increased, due to employer turnover and company acquisitions, knowledge of CCN employer accounts have not been passed on to the next in-line. These same obstacles have resulted in deficient contacts with local employers for Career Services to re-establish these connections. While not impossible to operate efficiently as a one employee department, it can present its challenges in terms of office coverage.
3.6 What tools were utilized to determine program/service strengths and challenges? i.e., student surveys, focus groups, interviews, co-curricular assessment, etc.	As a strength, after each class presentation or mini-event, student evaluations are completed and compiled to assess the interest and satisfaction of the materials discussed or presented, what the student found most interesting (or did not), what more they wished they had learned, how prepared they were for the event and whether or not they would recommend IVCC's Career Services to a friend or family member that needed job search assistance.
3.7 What, if any, continuous improvement processes are in place and utilized to evaluate data and implement solutions?	The College has implemented a Department Annual Plan Review schedule. Career Services planned activities are mapped to Strategic and Academic plans. For example: Become better prepared in working with the nontraditional adult student. [Mapped to IVCC's Goal 2: Provide resources and support systems that cultivate success for our students, employees,

	and community. Objective 4: Develop sustainable partnerships that contribute to the economic success of the individual and the community.]
3.8 What disaggregated data was collected, measured, and evaluated to assess program/service effectiveness?	Quarterly usage statistics are collected and evaluated so as to make appropriate recommendations for improvement.
3.9 Were there any identifiable equity gaps in the data? Please explain.	No equity gaps were identified.
3.10 How is the college seeking opportunities to close the gap and provide equitable access to programs and services?	Career Services' resources and services are distributed/offered to all students, alumni, and community members in a fair and equitable manner. For example, job opportunity announcements are shared with all stakeholders. The College seeks to continue to provide equitable access to this service by increasing classroom visits, and implementing a more focused approach towards offering several smaller content area-focused hiring events instead of one grandiose hiring event.
3.11 How does the program or service address inequities in instructional programs, if appropriate?	Not applicable.

Review Results

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	A review of the allocation of resources (physical space/location/additional staffing) will occur this Fall under the umbrella of establishing a vision for a Student Services Division reorganization.
To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Every attempt is made to minimize equity gaps in service. From offering evening office hours to being amenable to virtual meetings with students, our office has been mindful of this concern.
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	One major finding has been a lack of office coverage and, thus, intermittent periods of unavailable services. While some clerical support is provided by an adjoining department, additional office coverage is needed in times when the Career & Student Services Associate is unavailable, presenting in classrooms, attending meetings, or out of the office. Another finding is that additional promotion and marketing is an ongoing necessity to build awareness and interest of student and employer usage of the CCN. This is an extremely valuable tool that is still underutilized and underpromoted.
Resources Needed	Departmental reorganization that can better share resources and support positions. Budgeted funds for a support position and more efficient marketing of services and outreach to students/academic

	programs would also be welcomed and help achieve the goal(s)
Responsibility Who is responsible for completing or implementing the modifications?	The Vice President for Student Services and Career/Student Services Associate.

Student and Academic Support Services

Address all fields in the template with an equity lens. If needed, you may provide a link to support your submission. 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 these data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

College Name:	Illinois Valley Community College
Academic Years Review:	2018-2022
Review Area:	Tutoring and Writing Center
Review Team Please identify the names and titles of staff and faculty who were major participants in the review of this program/service and their role or engagement in this process.	Dr. Patrice Hess, Director of Learning Resources Angela Dunlap, Tutoring and Writing Center Coordinator Laura Kilmartin, Tutoring and Writing Center Coordinator
Mission How does the program/service contribute to the mission of the college?	IVCC's mission: Illinois Valley Community College provides a high-quality, accessible, and affordable education that inspires individuals and our community to thrive. The Tutoring and Writing Center (TWC) contributes to IVCC's mission by planning, delivering, and continuously improving programs and services in alignment with the Center's mission and theme. TWC mission: By providing a welcoming space, the Tutoring and Writing Center develops independent learners who improve their academic skills and confidence because everyone deserves an accessible and free environment to study and learn. TWC theme: Everyone deserves an accessible and free environment to study and learn.
Advancement of Equity How does the program/service help advance equity?	The TWC is open for free academic support services to all students. The TWC also serves community members and alumni. The TWC's staff are committed to be present, open-minded, and welcoming to all. By providing academic support, the TWC has the potential to contribute to advancing equity and closing achievement gaps for individuals using TWC programs and services. TWC services are available in-person/on-campus and online, and during varied hours to meet the diverse support needs of learners.
Service Objectives Please provide a brief overview of the program or service being evaluated.	The TWC's overarching goals/objectives are articulated in its "story", which was crafted by the TWC team:

What are the overarching goals/ objectives of the program/service?	At IVCC's Tutoring and Writing Center, we know that students struggle. Many students experience difficulties with course concepts, anxiety, and loneliness. They don't know they can ask for help. They don't feel comfortable asking for help. They don't know help is available. The good news is that the TWC is here to listen to and guide students to finding the help they need with studying, asking questions, and making connections. Students feel supported, seen, and heard, and they find their own success.
To what extent are these objectives being achieved? Please detail how achievement of program/service objectives is being measured or assessed?	TWC objectives are measured by participation, utilization, and feedback. The TWC is successful in all three areas. Participation is measured by a number of variables, including visits, students, appointment types, and services by location. Utilization is analyzed using tutor, service, visit, and appointment data. The TWC employs four professional writing tutors and seven professional course-specific tutors who tutor all science, all math, accounting and computer-related subjects. The TWC also employs 12-15 peer tutors each semester covering a variety of subjects. Feedback is collected from TWC users. Participation and utilization data is being used to support adding tutors to the TWC team. User feedback is extremely positive, indicating sessions are helpful, tutors listen, and students' confidence and academic skills improve as a result of using the TWC.
Past Program Review Action What action was reported last time the program/service was reviewed? Were these actions completed? If not, what were the identified barriers to action?	The last time Peer Tutoring and the Writing Center were reviewed, they were independent programs/services. In May 2021, the two centers came together to become the Tutoring and Writing Center, which is now part of IVCC's Academic Support Center. The centers were relocated from the Learning Commons at the back of the campus footprint to the A building, adjacent to the library, at the front of the campus. We believe this reorganization and the relocation have had positive impacts on the utilization of programs and services. The pandemic had a tremendous impact on our skills, abilities, and interests in providing online tutoring. We now provide online tutoring sessions and appointments for night and weekend tutoring as part of normal operations. ***Academic Support Services, Learning Commons*** 1. Design, implement, and use effective student tracking, data collection, and reporting processes. *Completed with the implementation of an updated version of Accudemia, a student tracking system.* 2. Design, implement, and use effective processes to measure student success relative to the use of student academic support services/Peer Tutoring. *Completed*

and in progress with regular feedback surveys and semi-regular surveys of all students.

3. Look for opportunities to continue to assess and modify physical spaces to offer more opportunities for semi-private tutoring and wayfinding. *Progress made with establishing the Academic Support Center (ASC) in 2021, with future plans to remodel the entire space.*

4. Take advantage of the rollout of a new college website, planned for fall 2018, to improve the web presence for Peer Tutoring. *Completed and enhanced by combining the Tutoring and Writing centers and forming the Academic Support Center.*

5. Expand, as needed and feasible, Peer Tutoring services at the Ottawa Center and online. *Completed and still in progress with changes in needs and demands each semester.*

6. Plan and implement outreach strategies (web, social media, presentations, word of mouth, referrals, through Score BIG) to promote Peer Tutoring among faculty, students, and the community. *Completed and still in progress with social media, print materials, digital signage, and other methods.*

7. Design and implement job descriptions for professional and peer tutors. *Completed.*

8. Plan and implement a recruitment strategy to hire needed, qualified tutors. *Completed, although candidate pools are often limited or not available.*

9. Sustain or expand the use of faculty as tutors in Peer Tutoring. *Pro tutors include current and former adjunct faculty. We are not using FT faculty as tutors as often as we had in the past; their time is needed in the classroom.*

Other Peer Tutoring initiatives from 2018

1. Implement peer tutor training starting with the fall 2018 semester. *Completed.*

2. Assess professional tutor rates and budget. *Completed with implementing a new pro tutor pay rate table.*

3. Assess high school and junior high tutoring programs for effectiveness. *Completed by discontinuing junior high tutoring and sustaining high school tutoring.*

Writing Center

1. Implement processes to maintain CRLA certification. *This certification was discontinued.*

2. Implement changes for Studio and Workshop models of tutoring in the Center. *This initiative was discontinued.*

	3. Expand access to online writing tutoring and support services. *Completed.*

Indicator: Need

1.1. Is this program or service statutorily required? If yes, is the college meeting the required elements? How does the college ensure it meets all required elements?	Tutoring is not a statutory requirement. It is, however, a strategic initiative of the College, Academic Affairs, and the Learning Resources division.
1.2 What is the *need* for this program/service and how does the institution determine *need*?	Academic support is a mission-critical program/service in a community college. The TWC provides services to the full range of learners, from adult basic education level through graduation and transfer. The need is mostly determined by faculty referral and student surveys (on service-related needs).
1.3 If applicable, what is the student usage for this program/service?	TWC reporting was enhanced by upgrading our student tracking system in summer 2020. We track semester and academic year data. Overall, an average tutoring session lasts 1.25 hours. Summer 2020: 196 visits, 27 students Summer 2021: 363 visits, 90 students Summer 2022: 284 visits, 63 students Fall 2020: 1180 visits, 279 students Fall 2021: 1777 visits, 393 students Fall 2022: 2251 visits, 426 students Spring 2021: 1286 visits, 267 students Spring 2022: 1523 visits, 393 students Spring 2023: 2690 visits, 430 students
1.4 How does the student usage compare to assessed need of the program/service?	Student use supports the notion that academic support is mission-critical. The TWC utilization reports, tracking scheduled tutor hours and actual service hours, indicate we are often at 60% utilization or higher, with busy times of the semester at nearly 100% utilization.

Indicator: Cost

2.1 What are the current expenditures of the department?	Salaries: 1 FT, 1 PT coordinator; 7-11 professional tutors in any semester; 8-14 peer tutors in any semester. The TWC budgets for the cost of instructional materials, specifically textbooks for professional tutors, and instructional supplies, such as markers and whiteboards for the Center. There is also funding in the division budget to support printing, staff development, and travel. The department expenditures of the TWC are around $4000 annually. Personnel costs are integrated into the division budget. Since 2019, the TWC has been included in a Resource Allocation Management Program (RAMP) request for financial support for remodeling. Recently and with funding for

	other IVCC projects secured, the priority to remodel the Academic Support Center, hopefully with the help of the RAMP funding, has moved up to the top of the College's list of priorities.
	A limited scope of services provided by professional tutors also include, occasionally, reading tests for students needing accommodations and serving as professional mentors to students in the College's grant-funded bridge program. When professional tutors serve as test readers, they are paid out of the same budget line as when they are providing tutoring services. When professional tutors serve as mentors to bridge program students, their wages are funded by a grant. The need for test readers is very ad hoc and may be changed in the future by adding staff readers to the division team. The bridge programs are grant funded and may or may not be sustained after the grant funding ends.
2.2 How is this program/service funded and what cost-effective strategies are in place to ensure sustainability?	The Tutoring and Writing Center is budgeted in the Learning Resources division through the College's General Education fund. Historically, IVCC hired professional tutors as adjunct faculty. As such, the tutor pay rate was determined by taking an hourly rate from the credit hour pay adjunct faculty received. This calculation set the hourly rate for professional tutors at nearly $40 per hour, which was neither sustainable nor equitable in comparison to other academic support staff. IVCC moved professional tutors from adjunct status to staff status in 2020. As a result, a new pay table was established. Current professional tutors who were previously hired as adjunct faculty retained their rates. New tutors have a rate set according to the professional tutor staff pay table. With this change, professional tutors also became eligible for paid time off and holiday pay as staff instead of adjunct faculty.
Indicator: Quality	
3.1 If applicable, how does the college program/service measure against any quality benchmark and standards?	IVCC participates in benchmarked surveys such as the Community College Survey of Student Engagement (CCSSE) and the Student Satisfaction Survey (SSI). In results from both surveys, academic support is ranked high in relation to importance and satisfaction.
3.2 How does the college ensure that all staff are qualified and appropriate to overseeing or providing the program/service?	The TWC coordinators are both highly qualified and experienced. The FT coordinator has over 20 years of service at the College. The PT coordinator has prior experience working at the College. Both coordinators have teaching experience and both engage in ongoing professional development. Prior to 2020, the Writing Center coordinator position was held by a full-time faculty member on reassigned time. The faculty member was often limited to 12 clock hours per week in fall and spring and even more limited time in

	summer term to engage in Writing Center operations. When the Center coordinator was not available in the Center or to Center staff, the gaps had to be filled by the Division director or the professional tutors. IVCC reorganized the Writing Center position from FT faculty on reassigned time to a part-time staff position in 2020 and aligned the FT and PT coordinator roles in the Tutoring and Writing Center in 2021. The coordinators utilize a tutor job description to advertise for and hire tutors. The TWC has a rigorous training program for new tutors and a commitment to ongoing tutor professional development. Professional coordinators and tutors are formally evaluated on an annual basis and informal feedback is ongoing. Student employees serving as tutors are formally evaluated within a semester of starting working in the Tutoring and Writing Center, and informal feedback to student tutors is ongoing as well.
3.3 What, if any, innovations have been implemented within this program/service that other colleges may want to learn about? How have these innovations had an impact on student success?	IVCC implemented a one-stop Academic Support Center model in 2021. We believe reorganizing and relocating our academic support services was an innovation to us, and those changes have had tremendous impact on the services we are able to provide and on the utilization of our services. We believe students might come to our Center for one service and benefit from learning about or receiving other services in the same location. We also believe the visibility of our Center helps outreach to and connection with students. Tutoring, writing, technology assistance, library/research, and disability services are now in connected or adjacent spaces closer to the front of the building. We have also created a space where students gather, study, and exist on campus even without using our services. The TWC has also made significant improvements in two academic support resources: the Plagiarism Tutorial and the Stylebook. In the past, the Plagiarism Tutorial was embedded content in the College's Learning Management System. Maintaining the content was a challenge and the content had not been reviewed or updated in several years. The PT TWC coordinator facilitated a work group to move the content to the public website, where it could be dynamically updated. The TWC also moved the Stylebook, a writing and citation resource, from an outdated, inaccessible file format to the TWC website. Improvements in both programs are ongoing.
3.4 What are the strengths of this program or service?	As indicated in the feedback from students, the strengths of the TWC are its tutors, professional and peer. TWC feedback surveys indicate the "best thing" about the TWC is the people with 65% of respondents positively mentioning tutors in their comments. One of whom writes, "The best thing about the

	TWC is that I don't feel judged or belittled when it comes to needing help on subjects. The people there are so welcoming and reassuring and want to see you succeed." The other "best things" mentioned in their comments include the help they received and the tutoring environment.
3.5 What are the challenges or weaknesses of the program/service?	With the growth in utilization and staffing part-time professional tutors, we are limited in the number of sessions we can offer. It seems we are constantly trying to find qualified tutors. We offer only part-time employment as professional tutors, so we have occasional turnover when professional tutors secure full-time employment or sometimes move on to advanced degree programs. We might be limited by our region and the availability of qualified subject matter experts. We also have turnover among peer tutors when students graduate, transfer, or cease attending.
3.6 What tools were utilized to determine program/service strengths and challenges? i.e., student surveys, focus groups, interviews, co-curricular assessment, etc.	The TWC regularly uses student surveys for semester feedback and semi-regular all-student surveys. The TWC is participating in a pilot of co-curricular assessment, aligning TWC services to IVCC's Institutional Learning Outcomes (ILOs). The TWC is using program and service data to inform the co-curricular learning and assessment process and outcomes.
3.7 What, if any, continuous improvement processes are in place and utilized to evaluate data and implement solutions?	Analysis of data has resulted in enhancing the types of tutoring offered, when tutoring is offered, and the number of tutors we wish to have on our team.
3.8 What disaggregated data was collected, measured, and evaluated to assess program/service effectiveness?	We collect and analyze most data by semester, but we can also analyze it by year or even by discrete month, week, day, or time of day. Semester-to-semester comparisons seem to be the most helpful perspective when we are analyzing our data and using it to inform our practices. See 1.3 for data.
3.9 Were there any identifiable equity gaps in the data? Please explain.	Most TWC services are used by students seeking support in Math, Science, and English in Associate of Science and Associate of Arts degree programs. We may not serve as many students in career/technical degree and certificate programs. TWC services are available to all students, so there is not an equity gap in access to services. However, there may be an opportunity for more outreach to career/technical degree and certificate seeking students who may not understand how academic support can benefit them.
3.10 How is the college seeking opportunities to close the gap and provide equitable access to programs and services?	TWC student users indicate hearing about services through their instructors and from their peers are the primary ways they learn about and become familiar with the TWC. We have opportunities to continue to promote the TWC through instructors and students.
3.11 How does the program or service address inequities in instructional programs, if appropriate?	While the TWC serves individual students, primarily, we also work with faculty who identify instructional problems in programs. If the opportunity presents itself, we work with

	faculty, deans, and other stakeholders to attempt to contribute to resolving inequities with academic support services such as subject-specific tutoring. The TWC also supports individuals who, as a result of placement testing, have placed out of adult basic education services but under the skills required for developmental college courses. The TWC provides tutoring in reading, math, and writing to help individuals improve skills before retaking placement tests. This program supports individuals who can no longer be served by adult education programs but who are not, as a result of placement testing, eligible for developmental college classes.
Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	1. Staff the TWC with the number of highly-qualified and trained professional and peer tutors needed to reasonably meet the demand for tutoring services each summer, fall, and spring semester. 2. Continue to administer and refine methods for data collection, analysis, and continuous improvement of participation, utilization, and feedback variables each semester. 3. Continue to administer and continuously improve methods to select, train, and develop highly qualified academic support personnel each semester. 4. Remodel the Academic Support Center to improve physical operations of the TWC by 2026. 5. Initiate and engage with a network of academic support professionals in our region. Share Center operations, strategies, and best practices by end of year 2024.
To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	The TWC will stay committed to being a free, open program to all. We are also working with and alongside other stakeholders committed to the College's work in diversity, equity, inclusion, and accessibility. As part of the College's Student Success Academy (HLC) work, we are learning more about the Hispanic student segment of our student population. We will continue to work with other stakeholders to determine if there are any opportunities to address gaps by providing new or revised academic support services.
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	The Tutoring and Writing Center at IVCC has seen tremendous change and growth 2018-2022. The TWC is in a position to keep growing and changing. We are also starting to assess and understand what it means to be an academic support program in a post-pandemic era. We believe more students are willing to ask for and are seeking help. Over the next five years, we will be able to examine this phenomenon more closely and report on it in our next review.

Resources Needed	The TWC has reasonable support from the College in the form of the division budget funding for personnel and operations. The TWC department has requested and received department and program funds each fiscal year. The College will need nearly $2M to fund its portion of the remodeling project if/when the RAMP funding is awarded for the Academic Support Center.
Responsibility Who is responsible for completing or implementing the modifications?	The Tutoring and Writing Center coordinators are responsible for the day-to-day operations and contributing to the strategic initiatives and improvements, which are overseen by the Division director and, ultimately, the Vice President for Academic Affairs. The TWC is also accountable for assessment and improvement through the College's annual planning and review processes. The TWC highlights achievements in a presentation given annually to IVCC's Strategic Leadership and Planning Council (SLPC).

Student and Academic Support Services

Address all fields in the template with an equity lens. If needed, you may provide a link to support your submission. 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 these data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

College Name:	Illinois Valley Community College
Academic Years Review:	2018-2022
Review Area:	Online Learning
Review Team Please identify the names and titles of staff and faculty who were major participants in the review of this program/service and their role or engagement in this process.	Dr. Patrice Hess, Director of Learning Resources
Mission How does the program/service contribute to the mission of the college?	IVCC's mission: Illinois Valley Community College provides a high-quality, accessible, and affordable education that inspires individuals and our community to thrive. Online Learning contributes to IVCC's mission by providing options to enroll in fully online classes and programs. Online classes and programs give students choice and flexibility alongside and in addition to the in-person classes IVCC offers. IVCC's online classes are taught by the same faculty who develop and teach in-person classes, using the same course outlines. Online learning options may create opportunities for access to education for students who have barriers to attending classes in-person. IVCC's online classes charge the same tuition rate as in-person classes. IVCC also supports all learners by providing online academic and technical support services.
Advancement of Equity How does the program/service help advance equity?	By enrolling in an online class or a fully online program, a student may have access to and opportunities for earning college credit if attending in-person classes is not an option. Students may also elect to enroll in online classes to be able to balance work schedules, caring for others, and other responsibilities that might limit educational opportunities if only in-person, on-campus options were available. IVCC's online students are predominantly traditional-aged, 18-24-years-old. The number of students attending IVCC part-time but completely online is increasing. In 23/SP, 302 students were taking only online classes, earning three to six credit hours in the semester.

	IVCC provides comprehensive online support services for all students. IVCC also provides long-term loans of laptops and Wi-Fi hotspot devices to students who may not have or be able to purchase their own devices.
Service Objectives Please provide a brief overview of the program or service being evaluated. What are the overarching goals/ objectives of the program/service?	IVCC offered its first fully online class in 1997. The first documented offering is English Composition I (ENG1001) in 20/SP. IVCC offered its first fully online Fundamentals of Speech (SPH1001) class in 2019. This closed a gap in the Communication degree requirement, making completion of the Associate of Science, Associate of Arts, and/or Associate in General Studies degrees possible through all online classes. IVCC offers some Associate in Applied Science programs and certificates fully or near-fully online. Information about online programs is maintained on IVCC's website, www.ivcc.edu/online Over the past five years, IVCC has had a strategic goal to grow its online footprint, with the aim of serving students who live in the district but who were enrolling in online classes and programs offered by other providers. In Fall 2022, 95% of IVCC's students enrolled in online classes lived within IVCC's district. The number of online class offerings and credit hours generated from online classes increased in FY18 and FY19. Near the end of FY20, IVCC experienced the start of the COVID-19 pandemic, when all classes went online for the remainder of 20/SP. IVCC operated mostly online in 20/SU and 20/FA. Data for online offerings from 20/SU through 21/SP were skewed significantly by the conditions imposed by the pandemic. Pre-pandemic (FY19) to post-pandemic (FY22), IVCC saw a significant increase in the number of online classes offered (from 59 to 116 sections), online enrollments (from 890 to 1685 enrollments), students taking online classes (from 569 to 942 students), and online credit hours generated (from 2,912 to 5,246.5 credit hours). The growth in online learning does not indicate enrollment growth for the College, however. In some cases, class sections that were once offered in-person were sustained as online offerings post-pandemic.

To what extent are these objectives being achieved? Please detail how achievement of program/service objectives is being measured or assessed?	The College went from generating about 8% of credit hours each fall and spring and about 40% of credit hours each summer term through fully online classes to nearly 25% of credit hours each fall and spring and over 50% of credit hours each summer term. The effects of the pandemic allowed IVCC to far-exceed its original goal, which was growing online credit hours by two percent year-to-year. IVCC is no longer focusing on growth but instead on maintaining offerings, quality, and access to education through online learning and support. In 17/FA, online credit hours equated to 2,134 out of a total 32,668 hours, or 6.5%. In 21/FA, online credit hours equated to 4,680 out of a total 22, 065 hours, or 21%.
Past Program Review Action What action was reported last time the program/service was reviewed? Were these actions completed? If not, what were the identified barriers to action?	This is the first time the Online Learning program is being reviewed in the five-year ICCB cycle. Online Learning is reviewed annually at IVCC as part of the Learning Resources division plan. There is also a report on Online Learning delivered annually to the Strategic Leadership and Planning Council (SLPC). Data on section offerings, enrollments, students, credit hours, online support, and related online initiatives are shared. The Online Learning program also has input from a joint advisory Distance Learning Committee comprised mainly of full-time faculty. The advisory committee was established after a long-term ad hoc work group focused primarily on contractual issues related to developing and teaching fully online and blended classes. The Distance Learning Committee still makes recommendations on maintaining and revising the language specific to Distance Learning in the full-time faculty contract. The Committee also provides leadership and recommendations for the Online Learning program, including its website, support for students, and professional development for faculty.
Indicator: Need	
1.1. Is this program or service statutorily required? If yes, is the college meeting the required elements? How does the college ensure it meets all required elements?	This program is not statutorily required. IVCC did participate in the State Authorization Reciprocity Agreement (SARA) to comply with requirements to deliver online classes to students in the US, outside of Illinois. After monitoring several semesters of online student residency data, IVCC decided to discontinue membership in SARA. IVCC monitors online enrollments and if out-of-state residency is discovered, the requirements of the student's state of residence are investigated. On a case-by-case, state-by-state basis, IVCC determines if individual state authorization is required to retain the enrollment. Worst case, the College would have to work with a student to drop a class if the student's state of residency prohibits IVCC from delivering online instruction to the student. Out of state enrollments in IVCC classes is extremely limited, and it was

	cost-prohibitive to continue paying $2000 annually to participate in SARA.
1.2 What is the **need** for this program/service and how does the institution determine **need**?	Online learning opportunities provide students with delivery mode choice and/or the option to earn college credit while managing other responsibilities, such as work and family. Online learning also gives students with transportation challenges in our rural area or students at a distance from our locations in our large geographic district to have access to classes without having to be physically on campus. Increased enrollments in online courses demonstrates the need.
1.3 If applicable, what is the student usage for this program/service?	IVCC has seen significant increases in online class section offerings, online enrollments, and credit hours generated from fully online classes, comparing 19/FA (pre-pandemic) to 22/FA (post-pandemic). Sections: 19/FA 59; 22/FA 116; 97% increase Enrollments: 19/FA 890; 22/FA 1701; 91% increase Credit Hours: 19/FA 2655; 22/FA 4645.5; 75% increase
1.4 How does the student usage compare to assessed need of the program/service?	The original growth goal, pre-pandemic, was a two percent increase in credit hours, year-to-year. The pandemic had a profound effect on this goal. IVCC is also working on a master scheduling project. This project should inform utilization and the need for online offerings in future semesters. Online classes are offered as a means to meet student needs and preferences, but also based on faculty preference for teaching online, as well. Our future master scheduling project should be able to help refine the assessment of these needs.
Indicator: Cost	
2.1 What are the current expenditures of the department?	Expenses for Online Learning are integrated into the academic divisions and departments developing, teaching, and supporting the classes and services. Faculty new to teaching online are expected to complete the College's online teaching workshop. Faculty who successfully complete this workshop are eligible for a stipend or for salary advancement. This expectation was implemented in the fall 2018 semester. Since then, nearly all faculty teaching online have completed the online teaching workshop. Faculty who teach an online class for the first time receive payment equal to one credit hour of pay at the overload teaching rate. These payments were made for nearly every existing online class during the pandemic. Faculty have the option to request course development funding for developing a new fully online class Per the full-time

	faculty contract, faculty must complete the online teaching workshop, complete professional development in online teaching equal to 2 credit hours of graduate work, and demonstrate their online course to a review team. Course development funding is available to faculty once every three years. The College also supports faculty participation in Illinois Online Network's Master Online Teacher program. IVCC pays the ION course fees for faculty completing an ION workshop to satisfy the course development funding requirements or pursuing the Master Online Teacher certification.
2.2 How is this program/service funded and what cost-effective strategies are in place to ensure sustainability?	Faculty teaching online are aligned with IVCC's four academic divisions: Humanities, Fine Arts, and Social Sciences; Natural Sciences and Business; Workforce Development; and Health Professions. Staff who support online learning in tutoring and technical support are in the Academic Support Center within the Learning Resources division. Resources needed for teaching and support are in the division and department budgets. IVCC discontinued participation in the State Authorization Reciprocity Agreement (SARA), which was a $2000 annual fee specific to delivering online classes to students residing outside of IL, as almost all students taking IVCC's online courses reside in IL.
Indicator: Quality	
3.1 If applicable, how does the college program/service measure against any quality benchmark and standards?	Quality standards monitored in Online Learning include enrollments, course success, and withdraw. Enrollments in online classes are steadily increasing. Course success, earning a C or better in online classes, is consistently in a range of four to six percent lower than course success in in-person classes. For example, online success rates for 22/FA were 73.06% as compared to in-person success rates of 78.53% The withdrawal rate from online classes is greater than that of in-person classes. Fall 2022 saw a withdrawal rate of 6.33% for in-person classes and a 9.42% rate for online classes. This lower success rate and greater withdrawal rate may be due to technology and time management challenges students may not experience while attending in-person classes. Despite these differences, all modes of instruction, including online, are consistently near or above 70% success each semester.
3.2 How does the college ensure that all staff are qualified and appropriate	All faculty and staff involved in online learning are within the academic divisions and departments delivering and supporting teaching and learning in all modes. Faculty must be qualified

to overseeing or providing the program/service?	to teach in the discipline and staff who meet or exceed the requirements of the position description are selected for support positions. Faculty new to teaching online are expected to complete the College's online teaching workshop. In addition, the Center for Excellence in Teaching, Learning and Assessment (CETLA) provides ongoing training and support to faculty for courses, with an emphasis on technology such as Blackboard and Brightspace to enhance online learning and engagement.
3.3 What, if any, innovations have been implemented within this program/service that other colleges may want to learn about? How have these innovations had an impact on student success?	IVCC established a standing Distance Learning Committee (DLC) comprised mostly of faculty. This committee is building momentum for enhancing support for online learning. The group provides recommendations on online learning program functions and ongoing development for faculty teaching online. It also assists in maintaining the faculty contract language specific to teaching online and blended classes. While there isn't any indication that the committee has had a direct impact on student success, the commitment to support, development, and continuous improvements in online learning does contribute to successes. The DLC was involved in the all-college Learning Management System (LMS) needs assessment and system evaluation. After using Blackboard for over 20 years, IVCC elected to license Brightspace by Desire2Learn starting in 2023. Brightspace was launched May 1, 2023, and summer 2023 classes were the first fully online classes delivered in Brightspace. After a rigorous assessment of LMS's, IVCC selected Brightspace based on D2L's attention to the College as a customer and partner and the potential for advancing online learning with the Brightspace system over the options presented in Blackboard Ultra and in Canvas. The DLC also worked with IVCC's Teaching and Learning Committee to implement recommendations for observing online classes. This recommendation was made in spring 2023 and will be implemented in the 2023-2024 academic year. The recommendation includes involving all deans/observers of online classes in taking IVCC's online teaching workshop. The recommendation also suggests full-time faculty who are being observed in the pre-tenure or post-tenure evaluation systems have an online class observed.
3.4 What are the strengths of this program or service?	Online learning gives students choice and opportunity to learn if they do not or cannot come to in-person classes.
3.5 What are the challenges or weaknesses of the program/service?	Prior to the pandemic some students misunderstood online classes; they thought they were "easier", "faster", and completely self-directed. During the pandemic, colleges taught

	nearly everything online and much of it went without rigorous standards or oversight. Post-pandemic, IVCC is trying to continue to refine students' understanding of what is required to take and successfully complete a fully online class. Many students do not have ready access to a computer or reliable internet. The College is addressing that concern by providing long-term loan laptops and hotspot devices. Students are encouraged to visit campus or their local public libraries if they need reliable access to computers and the internet. Additionally, students do not always ask for help. Online student academic and technology support services are available to all students. IVCC strives to ensure all students know what help is available and how to request it.
3.6 What tools were utilized to determine program/service strengths and challenges? i.e., student surveys, focus groups, interviews, co-curricular assessment, etc.	Online learning data is queried on a regular basis. Anecdotal feedback is collected from service areas. A college-wide student survey to collected feedback about students' learning experiences during the pandemic was conducted in 21/SP. In short, students indicated the College did "the best it could" under the pandemic conditions. This survey also indicated most students wanted choice in classes, with options to enroll in in-person and online classes at the same time.
3.7 What, if any, continuous improvement processes are in place and utilized to evaluate data and implement solutions?	Continuous improvement efforts are focused on providing faculty with development and support in teaching online and in providing accessible and reliable academic and technical support options to all students. Improvement plans specific to online learning are embedded in planning for faculty development and support in the Learning Resources division. Support for students is improved through department initiatives such as in the Tutoring and Writing Center and the Student Help Desk.
3.8 What disaggregated data was collected, measured, and evaluated to assess program/service effectiveness?	Online learning data is most-often collected and analyzed by semester and year. Semester and year comparisons indicate growth in online learning and changes in success measures, such as course success and withdraw rates.
3.9 Were there any identifiable equity gaps in the data? Please explain.	There may be equity gaps for individual students who do not have access to computer or internet resources.
3.10 How is the college seeking opportunities to close the gap and provide equitable access to programs and services?	IVCC is providing long-term loan of laptops and hotspot devices.
3.11 How does the program or service address inequities in instructional programs, if appropriate?	There are no perceived inequities specific to online learning and instructional programs.

Review Results	

Intended Action Steps
Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.
	1. Maintain one or more online class offerings in every general education core degree requirement for the AA, AS, AGS
	2. Maintain or expand online AAS and certificate programs as interest among program coordinators and faculty arise
	3. Learn from the master course schedule project about the utilization and need for online classes, completion of fully online degree and certificate programs; where online offerings can help us grow in enrollments and credit hours
	4. Continue to deliver timely, accessible online academic, technology, and personal support services to students
	5. Provide faculty development and support for quality online learning
	     a) Excellent Online Teaching workshop
	     b) Support for participation in the Master Online Teacher program
	     c) October 2023 faculty development day sponsored by the Distance Learning Committee
	6. Analyze course feedback survey results for online classes, using student feedback for continuous improvement. Adjust the course feedback survey to include questions specific to online learning.
	7. Revise the basics of, "Are you ready for online learning," which are published on our online learning website: www.ivcc.edu/online

To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Racial equity gaps have not been previously addressed. However, the College is participating in the HLC Success Academy, which requires IVCC to analyze student success by student population. IVCC's Hispanic student population is growing. There may be a future opportunity to analyze online learning data specific to the Hispanic student population.
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	IVCC will continue to offer online learning opportunities and options to complete degrees and certificates fully online. Post-pandemic, the focus is on sustaining offerings and quality vs. setting and meeting growth goals.
Resources Needed	IVCC will sustain the human and financial resources already involved in Online Learning.
Responsibility Who is responsible for completing or implementing the modifications?	Online Learning as a program and service is managed by the Director of Learning Resources, with significant involvement among administrators, faculty, and staff throughout the College. The Director of Learning Resources monitors and reports on all aspects of the Online Learning program.

Developmental Math

COLLEGE NAME:	Illinois Valley Community College
FISCAL YEAR IN REVIEW:	2018 - 2022

REVIEW SUMMARY	
Program Objectives What are the objectives or goals of the program/discipline?	The program is designed to improve students' mathematical skills to prepare students for enrollment into and successful completion of college-level mathematics courses. Each student enters the curriculum based upon placement testing. Classroom and individual instruction are designed to meet each student at their level of ability.
To what extent are these objectives or goals being achieved? How do you know the extent to which they are being achieved?	The data shows that in FY18, only 48.5% of developmental students were successfully completing their coursework compared to 65.1% in FY22. While trends in success rates vary at the course level, overall completion rates are very encouraging. The pandemic, combined with course redesigns, created challenges in assessing objective achievement at the course level over this review period.
How does this program contribute to other fields and the mission of the college?	The College's mission is: To provide a high-quality, accessible, and affordable education that inspires individuals and our community to thrive. Remedial math is fulfilling a need for those students who wish to complete necessary math requirements for a certificate or degree.
Prior Review Update Describe any quality improvements or modifications made since the last review period.	Since the last review period, the developmental sequence has been redesigned to minimize the number of developmental classes students must complete. Our former pre-algebra (MTH-0900) and basic algebra courses (MTH-0906) were combined to form Foundations of Algebra (MTH-0910). The former intermediate algebra course was revamped as well and is now Fundamentals of STEM Mathematics—Intermediate Algebra (MTH-0920). The math faculty also created two co-requisite courses—one for College Algebra (MTH-0103) and one for Statistics (MTH-0108). Our prior set up of lab instruction has changed to allow all developmental courses to be taught in a traditional classroom setting. Online sections of MTH-0910 and MTH-0920 are available. Geometry (MTH-0908) is only offered as an independent study due to very low, sporadic enrollment.

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**
1.1 Detail how the offerings are sufficient and aligned to meet the needs of students across all programs served and supportive academic programs (e.g. tutoring, co-requisite, summer bridge, AE-ICAPS, foundational mathematics).	Collaboration with college-level math faculty aligns remedial (developmental) math courses with the skill set required for college-level math courses. As an example, topics presented in intermediate algebra have been reviewed by college-level math faculty to ensure appropriate prerequisite skills are covered and assessed throughout the course. This type of review is regularly done for all remedial courses. Instructors work closely with Project Success, the Center for Accessibility and Neurodiversity, and the Tutoring Center to encourage and promote student success.
Indicator 2: Cost Effectiveness	**Response**
2.1 What are the costs associated with this program?	Costs include general operating expenditures, such as classroom instruction and supplies. Also included are faculty salaries and benefits.
2.2 How is the college paying for this program and its costs (e.g. grants, etc.)?	Costs are paid from the College's General Education fund. No grants are involved in the funding of the program.
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.	Not applicable.
2.4 Based upon this review, what steps are being taken to offer curricula more cost-effectively?	Steps are being taken to ensure minimum enrollment criteria are met for each section to maintain a cost-effective program. Enrollment figures also guide adequate staffing needs. Steps are taken to make sure that overstaffing does not occur.
2.5 Are there needs for additional resources? If so, what are they?	None at this time.

Indicator 3: Quality	Response
3.1 How is the college working with high schools to reduce remedial needs?	Early in this review period, the College worked with district high schools to implement the new Transitional Math initiative. Successful completion of the Transitional Math courses by high school students allows placement directly into college-level mathematics courses and reduces the number of students placed into remedial courses. Given the timeline for the implementation of these Transitional Math courses, it is too early to determine the impact the Transitional Math courses have had on enrollment.
3.2 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?	When IVCC's developmental math courses were redesigned, the pre-requisites and sequences required for progression through developmental and college-level math courses were also adjusted. Prior to the redesign, depending on placement, students would potentially have to move through MTH-0900, MTH-0906, and MTH-0907 before getting to a college-level course. With the redesign, MTH-0900 and MTH-0906 were merged and became MTH-0910. Students could now successfully complete MTH-0910 and then move directly into MTH-1000 (Math for the Liberal Arts) or MTH-1008 (General Elementary Statistics) the next semester. MTH-0907 became MTH-0920. Students successfully completing MTH-0920 would be eligible to take MTH-1003 (College Algebra), MTH-1004 (Trigonometry), and/or MTH-1005 (Pre-Calculus). With the creation and implementation of our co-requisite courses—MTH-0103 (College Algebra Supplement) and MTH-0108 (Statistics Supplement)—students with appropriate placement scores may take a supplement course concurrently with either College Algebra or Statistics, as appropriate, allowing them to complete their math sequence in one semester.
3.3 Provide a description of the developmental sequence. Colleges may attach a graphic representation.	See attached graphic, page 44.
3.4 Are there any alternative delivery methods of this program? (online, flexible-scheduling, team-teaching, accelerated, etc.)?	MTH-0910 and MTH-0920 are offered face-to-face and online. During the pandemic, courses were offered in a Virtual Class Meeting format, which was face-to-face via Zoom. MTH-0908 is offered as an independent study online.

3.5 What innovation has been implemented or brought to this program?	The creation of the co-requisite courses was new to the math department. While these courses primarily cover the pre-requisite skills necessary to be successful in either college algebra or statistics, they also incorporate study skills. The pre-requisite skills are covered in real-time as needed in their respective college-level course and provide students with the background content they need.
3.6 To what extent is the program integrated with other instructional programs and services?	All levels of mathematics courses are provided with an embedded tutor from the Academic Support Center. This tutor is another lifeline for the students to utilize. The math department also has a close working relationship with the Center for Accessibility and Neurodiversity. The math faculty also provide timely feedback to Project Success, which is our TRIO success initiative for first-generation, or low-income students, as well as those with learning differences.
3.7 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	Early in this review period, the College worked with district high schools to implement the new Transitional Math initiative. Successful completion of the Transitional Math courses by high school students allows placement directly into college-level mathematics courses and reduces the number of students placed into remedial courses.
3.8 How well are completers of remedial/developmental courses doing in related college-level courses?	The College has not formally followed remedial students in terms of their actual performance in related college-level courses. The data shows that the number of students who successfully complete developmental coursework and then go on to successfully complete their college-level math course has hovered around 50% (+- 1-3%).
3.9 What professional development or training is offered to instructors and/or staff to ensure quality programming?	All full-time faculty are allotted $1,000 in professional development funds each year. In FY2022, the College also began providing $3,000 to full-time faculty to attend a national conference once every three years. The College offers numerous opportunities for support and professional development through the Center for Excellence in Teaching, Learning, and Assessment for full and part time faculty. Additional professional development may be requested and fulfilled based on the availability of funds. The College also has the Center for Excellence, Teaching, Learning, and Assessment, which offers numerous activities /training sessions to all faculty throughout the academic year.
LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THE PROGRAM.	

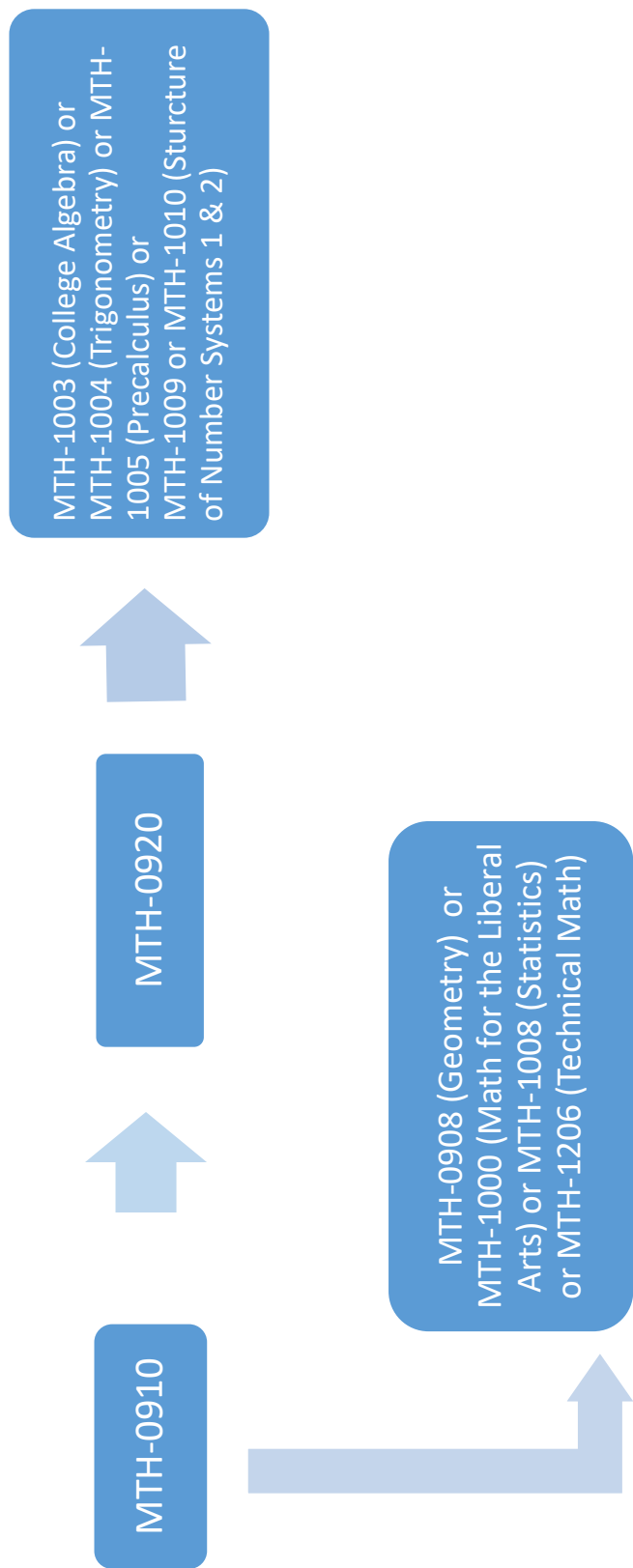| DATA ANALYSIS FOR DEVELOPMENTAL MATH	
Please complete for **each course** reviewed as part of the Remedial Math, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.	
Course Title	MTH-0103 – College Algebra Supplement MTH-0108 – Statistics Supplement MTH-0908 – Basic Geometry MTH-0910 – Foundations of Algebra MTH-0920 – Inter. Algebra – Foundations of STEM Math
Course Description	MTH-0103 – This course covers pre-requisite skills necessary to be successful in MTH 1003 College Algebra and is taught concurrently with MTH 1003. The course integrates mathematical content with instruction in the study/critical thinking skills necessary for successful completion of MTH 1003 College Algebra. Emphasis will be placed on work with systems of linear equations in 2 & 3 variables, absolute value equations/inequalities, polynomials, factoring, functions, rational expressions/equations, exponents, radicals, and quadratic equations. Additional topics to be addressed include time management, note-taking, study skills, math anxiety, test prep/test-taking/test analysis, problem-solving, personal responsibility, self-motivation and self-management. MTH-0108 – This course covers pre-requisite skills necessary to be successful in MTH 1008 General Elementary Statistics and is taught concurrently with MTH 1008. The course integrates mathematical content with instruction in the study/critical thinking skills necessary for successful completion of MTH 1008 General Elementary Statistics. Emphasis will be placed on work with fractions, decimals, ratios and proportions, percent, signed numbers, equation solving, Cartesian coordinate system, graphing and writing equations of lines and their applications, interpreting slopes and intercepts, and square roots. Additional topics to be addressed include time management, note-taking, study skills, math anxiety, test preparation, test-taking skills, critical thinking/problem-solving, personal responsibility, self-motivation and self-management. MTH-0908 – This is the beginning course in geometry. Topics of study include: angles, triangles, quadrilaterals, circles, congruence, similarity, area and perimeter of plane figures, and surface areas and volumes of selected solids. Emphasis is on applying knowledge of geometry relations to solve problems rather than on rigorous development of geometric relations. Completion of this course satisfies the geometry prerequisite for any other course. MTH-0910 - This course is for students planning to continue on a Non-STEM path for degree completion. (For those pursuing a STEM path, this is the first course in a 2-semester developmental algebra sequence.) Topics of study include: whole numbers, fractions, decimal numerals,

	percent, ratios and proportions, integers, algebraic expressions, linear equations & inequalities, linear equations in two variables, and square roots & Pythagorean Theorem. The grade in this course is not computed in G.P.A. or applicable to any degree or certificate program for graduation. This course is a prerequisite for MTH-0920, MTH-1000, or MTH-1008. MTH-0920 – This course is for students planning to continue on a STEM path for degree completion. Topics of study include: systems of linear equations in 2 & 3 variables, relations & functions, compound inequalities, absolute value equations/inequalities, polynomials, factoring, rational expressions/equations; exponents, radicals, and quadratic equations & functions. This course is a prerequisite for MTH-1003, MTH-1004, MTH-1005, MTH-1009 or MTH-1010.				
	2018	*2019*	*2020*	*2021*	*2022*
Number of Students Enrolled					
MTH-0103	N/A	N/A	N/A	N/A	81
MTH-0108	N/A	N/A	N/A	16	24
MTH-0900	43	40	30	N/A	N/A
MTH-0906	131	141	43	N/A	N/A
MTH-0907	335	250	88	N/A	N/A
MTH-0908	9	4	2	1	N/A
MTH-0910	N/A	N/A	48	53	50
MTH-0920	N/A	N/A	38	64	54
Credit Hours Produced					
MTH-0103	N/A	N/A	N/A	N/A	162
MTH-0108	N/A	N/A	N/A	32	48
MTH-0900	129	120	90	N/A	N/A
MTH-0906	524	564	172	N/A	N/A
MTH-0907	1340	1000	352	N/A	N/A
MTH-0908	27	12	6	3	N/A
MTH-0910	N/A	N/A	144	159	150
MTH-0920	N/A	N/A	114	192	168
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students					
MTH-0103	N/A	N/A	N/A	N/A	81.43%
MTH-0108	N/A	N/A	N/A	85.71%	71.43%
MTH-0900	97.14%	7.14%	70.37%	N/A	N/A
MTH-0906	58.77%	56.76%	55.26%	N/A	N/A
MTH-0907	65.71%	64.02%	51.61%	N/A	N/A
MTH-0908	100.00%	50.00%	100.00%	100.00%	N/A
MTH-0910	N/A	N/A	82.05%	70.21%	64.58%
MTH-0920	N/A	N/A	79.17%	66.67%	59.26%

REVIEW RESULTS	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	IVCC's Developmental Math department continues to meet the needs of its students with a strong curriculum and excellent faculty. Student success rates have improved over the course of the review period. Modifications in course content keep the curriculum current and relevant. It remains to be seen what the full impact of the Transitional Math initiative will be on developmental mathematics enrollments.
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	1. Research how to increase the number of students moving into college-level math courses once their developmental sequence is complete. 2. The scope of our data needs to be more focused at the course level to determine where modifications need to be made to improve completion rates of developmental students who go on to take college-level courses.
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	Overall, completion rates have improved. Continuous evaluation at the course level will be required to maintain and improve overall completion as well course-specific success rates.
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Faculty and staff actively participate in DEI activities across campus and community. The use of funding to provide childcare for students who are struggling, scholarships for tuition assistance, and other grants provides additional support to developmental math students. National data over the past two decades has shown that students of color are more likely to be over-represented in developmental education. By revamping the developmental ed sequences, increases to retention and completion rates for math courses across all populations is expected, but it can be inferred that these sequences should serve to reduce the equity gap. We do not have data on this currently but will evaluate the impact for future years.
Resources Needed	Continued support of faculty in terms of continual training and professional development.
Responsibility Who is responsible for completing or implementing the modifications?	The developmental math faculty and the Dean of Natural Sciences and Business are primarily responsible for implementing and completing any modifications

Current Developmental Math Sequence (as of April 6, 2022)

MTH-0910

MTH-0920

MTH-1003 (College Algebra) or MTH-1004 (Trigonometry) or MTH-1005 (Precalculus) or MTH-1009 or MTH-1010 (Sturcture of Number Systems 1 & 2)

MTH-0908 (Geometry) or MTH-1000 (Math for the Liberal Arts) or MTH-1008 (Statistics) or MTH-1206 (Technical Math)

Co-requisite courses also in place are MTH-0108 (Statistics Supplement) and MTH-0103 (College Algebra Supplement). Placement in these courses is determined by Accuplacer and are taken concurrently with MTH-1008 (Statistics) and MTH-1003 (College Algebra), respectively.

Career & Technical Education

College Name:	Illinois Valley Community College
Academic Years Reviewed:	2018-2022

Program Identification Information

Program Title	Degree or Cert	Total Credit Hours	6-Digit CIP Code	List All certificate programs that are stackable within the parent degree
Computer Aided Engineering and Design (AAS.CAD)	AAS	60	15.1302	
Basic Computer Aided Drafting (CERT.CAD.BAS)	Cert	12	15.1302	
Mechanical/Electronics CAD (CERT.CAD.M/E)	Cert	21	15.1302	
Architectural/Civil CAD (CERT.CAD.A/C)	Cert	21	15.1303	

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 within this template or results may be reported within its own template. This is at the discretion of the college.

Program Objectives What are the overarching objectives of the program? *(i.e. what are the program learning outcomes? What occupations is this program intended to prepare students for?)*	The following professional competencies are assessed in the CAD program: 1. Incorporate principles from the engineering graphics process to develop skills that are directed toward employment in an engineering field. 2. Function as a technician utilizing critical thinking and team work skills to assist engineers in the process of design, including production of working drawings. 3. Demonstrate design and drawing practices in a professional manner. 4. Conform to standards for specific engineering disciplines, (ANSI, ISO, JIS, ASME, etc.). 5. Demonstrate commitment to professional growth, self-development, and continuous learning. 6. Using latest technology, students will be able to use software and equipment used in modern engineering firms.
To what extent are these objectives being achieved? Please detail how achievement of program objectives is being measured or assessed. How do you know if and how objectives are	The overall success rate (student receiving a "C" or better) for the CAD courses was 84.39% in FY22and 80.99% in FY21. Assessment methods being used include: observation, competency tasks or labs, and quizzes. Discussion with industry and advisory boards.

being achieved? *This may include employment rates of graduates, passing exam/licensure rates, assessment of students meeting Program Learning Outcomes, etc.)*	The CAD program takes part in an internal annual program review that analyzes student outcomes and assessment data. The results are shared and discussed with the advisory committee.
Past Program Review Action What action was reported last time the program was reviewed? Were these actions completed?	The previous program review identified the need to recruit more female students into the CAD program and to develop short-term certificates. The College increased the promotion of non-traditional careers to women with advertising, branding, and direct outreach. The College also created a 12-credit Basic CAD certificate.
Review Team Please identify the names and titles of faculty and staff who were major participants in the review of this program. Also describe their role or engagement in this process.	Dorene Data – Program Coordinator and IVCC Faculty Shane Lange – Dean of Workforce Development The program coordinator developed and assessed the program objectives. The program coordinator supplied data and information and analyzed the effectiveness of the program outcomes. The dean evaluated the effectiveness of the program related to industry and institutional effectiveness.
Stakeholder Engagement Please list other stakeholders and participants who were engaged in this process (i.e. Student Support Services, students, employers, etc.) Also describe their role or engagement in this process.	Advisory Board- Computer Aided Engineering and Design Workforce Development uses the discussions with industry stakeholders, students, and faculty and staff to assess the technical programs, make curriculum adjustments, purchase equipment, and change course offerings.
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.	
Were pre-requisites for this program (courses, placement scores, etc.) analyzed as part of this review? If yes, please elaborate on any findings or revisions moving forward.	There are no prerequisites for entry into the program.
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 What is the labor market demand for the program? Cite local and regional labor market information.	According to Lightcast, the regional demand is greater than the national demand. The number of jobs is forecasted to increase by 18.8% over the next 10 years regionally, while it is only forecasted to increase by 6.5% nationally. The percentage of employees over the age of 55 in this region is greater than the national average as well.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The demand was greater in the previous five years for Architectural & Civil Drafters (21%) and Electrical & Electronics Drafters (27%) vs 11% and 14% forecasted respectively for the next five years. Mechanical Drafters, on the other hand, saw an increase in demand from a -8% loss of demand from the previous five years to an increase of 5% of forecasted jobs over the next five years.
1.3 What labor market information sources are utilized and how often are LMI data reviewed?	The College utilizes Lightcast, the Bureau of Labor Statistics, and the Illinois Department of Labor Security.
1.4 How does the institution/ program ensure that there is a sufficient "pipeline" or enrollment of students to fulfill the labor market need? (e.g. how/where are students recruited for this program?)	The Workforce Development faculty and leadership visit the area high school career and technical programs to recruit students into the program. The College also arranges for students from the area high schools to tour the College facilities and to explore the program. In the fall semester, the College hosts a "Career Night" for the technical programs. Dual Credit courses and stackable credentials assist students with the transition from the high school to IVCC. The College also hosts a Career Expo to expose middle school and freshman students to careers and to local industry representatives. The manufacturing programs are highlighted during the Manufacturing Expo, where regional employers and faculty members expose students to careers and hands-on activities.
1.5 How are needs/changes evaluated by the curriculum review committee and campus academic leadership?	The College utilizes an annual internal program review process for each program. During the review process, student success, labor market needs, current and past enrollments, and program cost are reviewed. Additionally, the Curriculum Committee meets monthly to discusses curriculum changes to support the needs of students.
1.6 Did the review of program need result in actions or modifications (e.g. closing the program, expanded industry partnerships, revised	The review revealed that enhanced directed marketing is needed for the CAD program. There is a greater need for trained CAD designers than the program produces. There are many changes being made at the College to address marketing

recruitment, reducing/expanding program offerings)? Please explain.	needs. The College is under a reorganization that will address these issues.
Indicator 2: **Cost Effectiveness**	**Response**
2.1 How does the institution assess cost-effectiveness for CTE programming? Consider: • Costs to the institution associated with this program • How costs compare to other similar programs on campus • How the college is paying for this program and its costs (e.g. grants, tuition, fees (lab, technology, background checks, etc.). • Revenue Analysis • Student to faculty ratio • Course/section fill rates • Enrollment trends • Credit hours earned year to year • Scheduling efficiency	The process begins by analyzing the demand for the program within the local and regional communities. Employee gap analysis data is analyzed to determine if the program is meeting the demand for workers. Then, enrollment and section utilization data are reviewed. Finally, the College looks at the costs associated with the courses, including student fee reimbursable expenses associated with holding team-based labs. The costs for the program are very similar to other CTE programs. The majority of the expenditures are for faculty salaries and benefits. The rest is used on student fee reimbursable expenses for additive manufacturing supplies and software. The reimbursable expenditures are comparable to other CTE programs Costs are primarily paid from the College's General Education Fund. The moneys are generated from tuition and lab fees. The Perkins Grant occasionally contributes funds for new equipment or recruiting materials.
2.2 What are the findings of the cost-effectiveness analysis?	Lower enrollment in the second-year courses makes it difficult to generate enough revenue to offset the instructional supply cost associated with the additive manufacturing materials used in the higher-level courses.
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? Please explain.	N/A
2.4 How does the institution/program assess student affordability for this program? (Consider if program costs are reasonable, comparable to like programs) How does the institution/ program assist students in overcoming financial barriers to participate in this program? (e.g. WIOA, Ability-to-Benefit, scholarships, grant funding, referral to services, apprenticeship programming)	The College is mindful of the barriers associated with the cost of higher education. Academic Affairs assesses the financial barriers associated with college programing, and makes every effort to utilize affordable curriculum and materials for instruction. The College feels we have struck a balance between cost and best practice. CAD has relatively low fees, which are used for industry recognized software systems and additive manufacturing supplies. The courses within the program utilize a lab fee to offset the cost of instructional software and supplies. Tuition is $133 per credit hour. Fees range from $0-$150 per course.

	Many of the students qualify for federal financial aid, and the College has several program specific and non-specific scholarships available. The foundation was able to award a scholarship to everyone that applied last fiscal year. The College also offers several tuition waiver initiatives such as a free course for students who complete the high school equivalency program.
2.5 How will the college increase the cost- effectiveness of this program?	N/A
2.6 Did the review of program cost result in any actions or modifications? Please explain.	No changes were made as a result of the current review. The College will continue to monitor the cost of reimbursable expenses to determine if an adjustment of student fees is necessary.
Indicator 3: Quality	**Response**
3.1 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching/ competency-based education, etc.)? How do the success rates of each delivery system compare?	CAD courses are taught in the traditional, hybrid, and online formats. The College reviews the success data during the annual review process. The success data is analyzed by delivery method. The data year-over-year between delivery methods suggests that students are slightly more successful in the traditional delivery method sections. It is difficult to draw conclusions from the data due to the limited number of section offerings. Most CAD courses are only offered once per year, so there are not multiple delivery method sections to compare. Comparison would have to be made based on different courses rather than different sections, and this would not be an accurate assumption because too many variables exist between courses.
3.2 How does the program ensure that quality, relevant, contextualized, and culturally responsive instruction is delivered?	The College utilizes annual program advisory meetings and quarterly industry partner meetings to drive program curriculum decisions. The division and program take guidance from the core College committees. These committees include the Diversity Equity and Inclusion committee and The Teaching and Learning committee. The Professional Development committee supports culturally responsive programming for the annual faculty professional development days.
3.3 Is this program part of a Program of Study as defined by Perkins V and approved by the ICCB? If yes, describe any strengths or challenge to program of study implementation.	The CAD program is one of the programs that will be submitted during the fall semester for Program of Study Approval. The CAD program utilizes relevant work-based learning and industry partnerships for decision making.

| 3.4 Does this program meet the definition of a [career pathway program](#)? If so, please describe each career pathway element and identify how the college plans to improve the program as it relates to the career pathway system elements. If no, please describe if and how the college will improve the program based on the career pathway elements. | A. The program analyzes and discusses labor market data in order to make informed decisions. The advisory committee meets annually, and they use the data to develop curricular changes. Relevant industry credentials are being incorporated in the program.

B. The College has developed multiple certificate options for the CAD program. There is the Basic Computer Aided Drafting Certificate for 12 credits, which gives students a general CAD skillset. Two other certificates move the students from a general skillset to a more focused skillset. Both the Architectural/Civil CAD Certificate and the Mechanical/ Electronic CAD Certificate, for 21 credits each, prepare individuals for specific career paths. Both of these certificates share courses with the basic CAD Certificate.

Dual credit is offered at the Area Career Center and several district high schools. DFT 1200 (Basic Drafting) and CAD 1200 (Computer Aided Design I AutoCAD) are offered as dual credit. Individuals can choose to start and stop with the multiple certificates and the AAS degree based on career aspirations. The College has a 3+1 agreement with Northern Illinois University that includes the AAS in CAD.

C. All students have the opportunity to work with College advisors to learn about and guide them through College processes. The College created the Get Set initiative which delivers a short burst of college knowledge before a semester starts. Students practice test-taking, note-taking and time management strategies, make sense of textbooks, class formats, and college environment, and learn how to develop good habits and harness diverse learning styles to succeed academically and socially. They also get logged in and use campus technology platforms, such as the Brightspace teaching/learning hub and eCampus textbook/hub. The College has developed a guided process for adult students centered around the Special Populations Transition Coordinator. Dual credit students have an opportunity to take part in Career Cruising, the Career Expo, and visit the College to learn about the CAD program and the careers associated with the certificates and degrees. The College has comprehensive student services, including financial aid.

D. Work-based learning opportunities have been incorporated in the CAD courses. The students participate in a program called 'Making Industry Meaningful In College' (MIMIC), where they design, build, and market items for sale to the community. |

	E. The program offers multiple entry and exit points, by which students can obtain skills to begin entry-level employment. F. The CAD AAS incorporates the three certificates. The Area Career Center offers IVCC's drafting course as dual credit. The stackable nature of the CAD certificates allows for multiple entry and exit points. G. All CTE programs work with the Continuing Education office to facilitate upskilling opportunities for students already in the workforce. The College provides customized training options as well as credit for prior learning.
3.5 What innovations, that contribute to quality or academic success, have been implemented within this program that other colleges would want to learn about?	Work-based learning opportunities have been incorporated in the CAD courses. The students participate in MIMIC, where they design, build, and market items for sale to the community.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	DFT 1200 (Basic Drafting) and CAD 1200 (Computer Aided Drafting I AutoCAD) are offered as dual credit at the LaSalle Peru Area Career Center, Seneca High School, and Ottawa Township High School.
3.7 Identify what work-based learning opportunities are available and integrated into the curriculum. How do these opportunities improve the quality of the program? In what ways can these opportunities be improved?	Besides the MIMIC curriculum, which was formulated on Tech Prep 18 Basic workplace skills, students completing the associate degree participate in an internship with local employers. Students are better prepared to use the skill that they acquire in the program because they have had multiple opportunities to practice. More cross curricular participation in the MIMIC process would improve student opportunities.
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).	Accreditation is not required and the College has decided to not seek industry accreditation.
3.9 Are there industry-recognized credentials embedded within this program? If so, please list.	Students enrolled in CAD 2200 (Computer Aided Design I) and CAD 2201 (Computer Aided Design II) take a SolidWorks Certification exam (SWCA).
3.10 Are there apprenticeship opportunities available through this program? If so, please elaborate.	Not at this time.
3.11 Please list all applicable licensure and industry/professional examinations. Include examination	Six students took the SWCA exam, with four of the students passing.

pass rates and the number of students who took each respective exam.	
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	A three-plus-one agreement is in place with Northern Illinois University. Students earning a CAD degree can take general education courses at IVCC and complete 30 hours of coursework at Northern Illinois University to earn their bachelor's degree.
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? What opportunities exist for other partnerships?	No new partnerships have been formed since the last external review.
3.14 What partnerships (internal or external) have been formed for the advancement of equitable access and outcomes for this program?	The College has developed frameworks for recruitment and retention of special populations as defined by Perkins V. During FY2022, the College hired a Special Populations Transition Specialist. Special Populations, as defined by Perkins V, includes adults or traditional students with disabilities, low income, preparing for nontraditional fields, single parents, out of workforce, English Learners, homeless, youth in or aged out of foster care, and youth with parent in the military. The Special Populations Transition Specialist helps students along their educational journey by helping diminish obstacles and connecting students to resources as needed. There is a range of support available to students experiencing barriers to their education. The College has developed relations with many organizations with the goal of helping people succeed. The College also developed a resource guide with information about many of these partnerships. It can be found at the following web address: https://www.ivcc.edu/specialpopulations/IllinoisValleyCommunityResourceGuide.pdf#search=crystal%20credi
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program? What additional professional development is needed?	All full-time faculty are allotted $1,000 in professional development funds each year. In FY2022, the College also began providing $3,000 to full-time faculty to attend a national conference once every three years. The College offers numerous opportunities for support and professional development through the Center for Excellence in Teaching, Learning, and Assessment for full and part time faculty. Additional professional development may be requested and fulfilled based on the availability of funds.
3.16 What professional development is provided for faculty and staff in this	The College hosts two days of professional development annually. There is an interdepartmental committee that develops that professional development offerings for the

program on Diversity, Equity, and Inclusion?	College. The DEI committee has input in all of the College decision making committees. The College has also initiated a One, Book, One College initiative. The books are selected with the intention of helping to promote DEI concepts.
3.17 What is the status of the current technology and equipment used for this program?	The program utilizes industry software, computers and additive manufacturing equipment such as 3-D printers
3.18 What assessment methods are used to ensure student success?	Multiple methods of formative assessment are used, including competency-based assessment. Classroom assessments help to understand the success of students at the course level. Discussion with members of the advisory committee and post-graduation student surveys are used to gauge the success of students who complete the program.
3.19 How are these results utilized and shared with others at the institution for continuous improvement?	Results are shared at least annually during the internal program review process. Results are shared with the advisory committee, and data is used for the purpose of curricular decision making.
3.20 What curriculum revisions to improve program quality and learning outcomes have been made based on the assessment of student learning? (How do you use the information gained from the assessment to improve your program and students learning?)	There has been a shift to more work-based and team-based learning. Students complete several design projects throughout the coursework. The assessment of student outcomes helps drive the frequency of exercises and adjustment in the scope of projects.
3.21 How satisfied are students with their preparation for employment? How is this student satisfaction information collected?	Anecdotal evidence has shown positive experiences with career preparation. Students and advisory committee members are confident in the student preparation from certificate and AAS coursework. Post-graduate surveys are given for program completers, students course feedback surveys are given as part of program assessment.
3.22 How does the program advisory committee contribute to the quality of the program? How can this engagement be improved?	The advisory committee informs the College of current industry needs, suggests curriculum changes, and advises of current best practices in facilities and equipment. The College could expand the number of industry partners for the CAD advisory committee. Survey research inquiring about employee satisfaction could help inform whether the changes are successful.
3.23 In what other ways are employers engaged in this program? (e.g. curriculum design, review, placement, work- based learning opportunities)	Employers are encouraged to visit the programs to speak to students and help with the MIMIC projects. Employers help recruit by participating in the Career Expo and the Manufacturing Expo.

3.24 How satisfied are employers in the preparation of the program's graduates? How is employer satisfaction information collected?	Local employers have expressed satisfaction through mailed surveys, participation in advisory committee meetings, and interaction with the program coordinator.
3.25 What are the program's strengths?	The program utilizes work-based learning projects, and has strong employer support.
3.26 What are the identified or potential weaknesses of the program?	The program has not submitted the ICCB Program of Study paperwork yet. The certificates could be reorganized to utilize cross-cutting concepts desired in all three areas of CAD, thereby creating certificates that stack better into the AAS degree. This work will be ongoing as the program moves toward an approved ICCB Program of Study.
3.27 Did the review of program quality result in any actions or modifications? Please explain.	Targeted marketing is being developed to increase non-traditional student participation in the program and to increase the number of students leading to the employment pipeline needed by local industry. The program will be submitted to ICCB to be included as a Program of Study.

List any additional barriers encountered while implementing the program not detailed above. Please consider the following: retention, placement, support services, course sequencing, etc.

Performance and Equity

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.

CTE Program	Computer Aided Engineering and Design
CIP Code	15.1302, 15.1303

	2018	2019	2020	2021	2022
Number of Students Enrolled					
AAS.CAD	18	17	26	20	21
CERT.CAD.BAS	0	4	4	11	8
CERT.CAD.M/E	6	8	2	8	5
CERT.CAD.A/C	5	10	5	5	7
Number of Completers					
AAS.CAD	5	4	4	5	3
CERT.CAD.BAS	0	4	2	9	4
CERT.CAD.M/E	4	8	1	7	2
CERT.CAD.A/C	4	8	2	1	4
Other (Please identify)					

What disaggregated data was reviewed? If program enrollment is low, programs may disaggregate data at the	The College analyzes disaggregated data by age, gender ethnicity, credit hour status, level of education, and educational goal.

department or discipline level. Disaggregated may include, but is not limited to race, ethnicity, gender, age, part-time/full-time status. It may also be appropriate to analyze intersectionality among student demographics (e.g. gender & race, special population status & race, etc.)	
How does the data support the program goals? Elaborate.	The data shows that many students begin the program because of the industry need of basic CAD and drafting knowledge. Not as many students complete the degree or certificates based on their individual career goals. This supports the claim that local industry needs students with the CAD skillset. The students are being employed before they can finish a degree or certificate.
Were there gaps in the data (equity gaps, enrollment gaps, retention gaps, success gaps, etc.)? Please explain.	Throughout the review period, there was an increasing number of traditional aged students participating in CAD coursework. Fewer adult learners were participating in the CAD program. Although the population is small (19 vs 26), half the number of nontraditional aged students were participating in the CAD program during FY22. The following is the population percentage of traditional aged students in the CAD program for the last five years: FY18 68% n=6, FY19 72% n=7, FY20 83% n=4, FY21 80% n=2, and FY22 73% n=3. Far more male students are participating in the CAD courses than females. During the last 5 fiscal years, the male participation in CAD consisted of the following: in FY18 it was 89%, in FY19 it was 84%, in FY20 it was 88%, in FY21it was 80%, and in FY22 the male participation in CAD was 88%.
What is the college doing to overcome any identified gaps? If nothing is currently being done, explain what the college plans to do to close identified gaps.	The College is expanding directed marketing to the special population groups as identified by Perkins V. The College has partnered with local industry, including the labor apprenticeship programs, hosting career expos and program showcases. The College schedules open houses to expose adult learners to what the College has to offer. The College has invested in staff to directly support adult learners and to help them navigate the college process.
Are the students served in this program representative of the total student population? Please explain.	Female participation in the CAD program is much lower than the College population. The population of female students ranged from 11-20% over the review period. Over the last two years of the review period, the CAD population shifted to more traditionally aged students. The

	Black/African American and Hispanic CAD student numbers are lower than the College at large.
Are the students served in this program representative of the district population? Please explain.	Female participation in the CAD program is much lower than the College district. The population of female students ranged from 11-20% over the review period. Over the last two years of the review period, the CAD population shifted to more traditionally aged students. The Black/African American and Hispanic CAD student numbers are lower than the College at large and the IVCC district.
Review Results	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	The review revealed that student participation does not accurately represent the IVCC population or the College district. There are fewer adult learners, females, Black students and Hispanic students participating in CAD programming than the College at large or the district. The review also discovered that the number of certificate and degree completions are not meeting the needs of local industry.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	The review revealed that enhanced directed marketing is needed for the CAD program to increase special population participation as defined by Perkins V. The program needs to increase the number of student completions needed for the employment pipeline required by local industry. There is a greater need for trained CAD designers than the program produces. There are many changes being made at the College to address marketing needs. The College is under a reorganization that will help address these issues. The program will be submitted to ICCB to be included as a Program of Study, and a reorganization of the certificates will help them become more stackable to better serve the needs of the students and industry.
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	Program objectives are being met, with the success rate for student completions over 80%.
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Targeted marketing and supports are being developed and strengthened for special populations as defined by the Career and Technical Education for the 21st Century Act. The College needs to do a better job of reaching and engaging traditionally underserved populations.

Resources Needed	Funds and staff resources for directed marketing and student retention support.
Responsibility Who is responsible for completing or implementing the modifications?	Dean of Workforce Development, Dr. Shane Lange; Community Relations and Marketing, and Student Services.

Career & Technical Education				
College Name:	Illinois Valley Community College			
Academic Years Reviewed:	2018-2022			
Program Identification Information				
Program Title	Degree or Cert	Total Credit Hours	6-Digit CIP Code	List All certificate programs that are stackable within the parent degree
Dental Assisting (AAS.DLA)	AAS	60	51.0601	Dental Assisting (CERT.DLA), Basic Dental Office Management (CERT.DLA.OFM.BAS), Advanced Dental Office Management (CERT.DLA.OFM.ADV)
Dental Assisting (CERT.DLA)	Cert	41	51.0601	Basic Dental Office Management (CERT.DLA.OFM.BAS), Advanced Dental Office Management (CERT.DLA.OFM.ADV)
Basic Dental Office Management (CERT.DLA.OFM.BAS)	Cert	9	51.0601	
Advanced Dental Office Management (CERT.DLA.OFM.ADV)	Cert	15	51.0601	CERT.DLA.OFM.BAS
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 within this template or results may be reported within its own template. This is at the discretion of the college.				
Program Objectives What are the overarching objectives of the program? *(i.e. what are the program learning outcomes? What occupations is this program intended to prepare students for?)*	The goal of the dental assisting program is to prepare students to meet and exceed the professional standards required of dental assistants in Illinois. This program aims to prepare dental assisting students to perform duties within existing ethical and legal parameters of clinical dentistry. Students develop skills to interact effectively with patients, peers, and team members, while applying current concepts of infection control and occupational safety.			
To what extent are these objectives being achieved? Please detail how achievement of program objectives is being measured or assessed. How do you know if and how objectives are being achieved? *This may include employment rates of graduates, passing exam/licensure rates,*	There is a 99% placement of students in dental offices after the completion in the program. Students are sent a graduate survey three months after graduation. Those students who did not gain employment after completion of the program noted returning to school for AAS in Dental Assisting, general education courses for dental hygiene, or changed major completely.			

assessment of students meeting Program Learning Outcomes, etc.)	
Past Program Review Action What action was reported last time the program was reviewed? Were these actions completed?	During the last program review, it was identified that armamentarium (equipment and instruments used in dental treatment) and procedures needed to be kept up to date with current standards. Since then, questionnaires have been sent to local dentists, and with their feedback updates have been made to procedures, equipment, materials, and the new dental health clinic.
Review Team Please identify the names and titles of faculty and staff who were major participants in the review of this program. Also describe their role or engagement in this process.	Heather Seghi - Program Reviewer, Interim Dean of Health Programs, Dental Assisting Program Coordinator Lyndsey Beetz - Program reviewer, Full-time faculty, Dental Hygiene Program Coordinator. While the Dental Assisting and Dental Hygiene programs are separate, the need for strong communication between the two programs is essential.
Stakeholder Engagement Please list other stakeholders and participants who were engaged in this process (i.e. Student Support Services, students, employers, etc.) Also describe their role or engagement in this process.	The Dental Assisting Advisory Board meets twice a year to discuss the program goals, curriculum, legislature, materials and other aspects of the program to ensure that material being taught is relevant to the area.
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.	
Were pre-requisites for this program (courses, placement scores, etc.) analyzed as part of this review? If yes, please elaborate on any findings or revisions moving forward.	A high school diploma or GED, a minimum of 2.0 GPA, and English placement testing is required for entry into the Dental Assisting Program. The English placement requirements were updated while completing this review to include the reading placement testing parameters that had changed.
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	A total of 41 hours is necessary for the Dental Assisting Certificate to cover the content required by the Commission on Dental Accreditation (CODA) and additional content and functions allowed by the Illinois State Dental Society (ISDS). The Dental Assisting AAS is 60 credit hours. During a review of the curriculum mapping, we were able to propose reducing the certificate credit hours to 39. This will be submitted to ICCB following the 9/11/23 curriculum committee meeting.

Indicator 1: Need	Response
1.1 What is the labor market demand for the program? Cite local and regional labor market information.	The job outlook for Dental Assistants in Illinois is expected to increase 12% from 2020-2030 according to Lightcast.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The aging population and ongoing research linking oral health to general health, have caused an increase in the demand for preventative dental services over the last five years that is expected to continue for the next several years. Data collected from the National Health Interview Survey (NHIS) shows an upward trend, even without data missing due to the pandemic. NHIS is a nationally representative household survey of the U.S. civilian noninstitutionalized population. The survey is conducted continuously throughout the year by National Center for Health Statistics (NCHS).
1.3 What labor market information sources are utilized and how often are LMI data reviewed?	Lightcast Q2 2023 data set was utilized. Lightcast data is a hybrid data set derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, Lighthouse's data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States. This data is reviewed quarterly.
1.4 How does the institution/ program ensure that there is a sufficient "pipeline" or enrollment of students to fulfill the labor market need? (e.g. how/where are students recruited for this program?)	Students are recruited from in-district high schools and junior high schools, adult students from the communities, and other college health programs. The College holds career days, health fairs, and college open house. There are current social media campaigns, college nights, and directed marketing (including high school visits).
1.5 How are needs/changes evaluated by the curriculum review committee and campus academic leadership?	Curriculum is evaluated after each semester to determine the efficacy and relevance of the material presented, while also reviewing legislature changes that effect the profession. Changes recommended by the advisory board are reviewed with all DLA faculty, presented to the dean for approval, and then submitted to the Curriculum Committee for a full review of how the changes could affect the institution as a whole, including financial aid, transfer, scheduling, budget, etc.
1.6 Did the review of program need result in actions or modifications (e.g. closing the program, expanded industry partnerships, revised recruitment, reducing/expanding program offerings)? Please explain.	There has been a recent increase in student interest in the Dental Assisting Program due to the updates in the dental clinic, and the interest in the dental hygiene program starting in Fall 2024. Because of this, industry partnerships need to be expanded in order to place a larger number of students at dental offices during their summer internship.

Indicator 2: Cost Effectiveness	Response
2.1 How does the institution assess cost-effectiveness for CTE programming? Consider: • Costs to the institution associated with this program • How costs compare to other similar programs on campus • How the college is paying for this program and its costs (e.g. grants, tuition, fees (lab, technology, background checks, etc.). • Revenue Analysis • Student to faculty ratio • Course/section fill rates • Enrollment trends • Credit hours earned year to year • Scheduling efficiency	• The majority of the program cost consists of salaries and benefits. The program currently employs one full-time and three part-time faculty members. • Additional operating expenditures include instructional supplies, maintenance, software, equipment, publications, conferences, etc. • Revenue comes from tuition, lab fees, clinic charges. • The Dental Assisting program costs are similar to other Allied Health Programs on campus. • Costs are primarily paid from the College's General Education Fund. The moneys are generated from tuition and lab fees. The Perkins Grant occasionally contributes funds for new equipment or recruiting materials. • Student to faculty ratio is determined by the Commission on Dental Accreditation (CODA): 1:24 for lecture, 1:6 for clinical practice labs; and 1:12 for preclinical practice labs. • Course and section fill rates are determined by guidelines set forth by CODA. • Enrollment trends have increased consistently over the last five years, increasing from 14 to 17 enrolled in the DLA program. • Credit hours earned year to year have increased due to the number of students enrolled increasing. • Faculty members work together to make the schedule as efficient as possible for both students and faculty members. • The schedule allows for at least one day off during the week to accommodate students' busy schedules.
2.2 What are the findings of the cost-effectiveness analysis?	Based on program costs published on CODA-accredited Dental Assisting Programs in Illinois, IVCC's Dental Assisting program costs less overall. Average tuition, fees, books and uniforms at similar dental assisting programs is $12,000, based on current amounts listed on their webpage. IVCC's Dental Assisting Program overall cost is $9,600. Students are able to obtain stackable credentials, while also having the ability to work in the field during the program.
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? Please explain.	The Dental Assisting program is not grant funded.

2.4 How does the institution/program assess student affordability for this program? (Consider if program costs are reasonable, comparable to like programs) How does the institution/ program assist students in overcoming financial barriers to participate in this program? (e.g. WIOA, Ability-to-Benefit, scholarships, grant funding, referral to services, apprenticeship programming)	The Dental Assisting program is comparable to other accredited dental assisting programs in Illinois. Total cost for the program is approximately $9,100, including textbooks, health assessment, uniforms, etc. Kaskaskia College's Dental Assisting Program cost is approximately $12,000. In an effort to assist students in overcoming financial barriers, the College offers additional funding through Perkins, BEST, scholarships, Emergency Fund, and Foundation.
2.5 How will the college increase the cost- effectiveness of this program?	The curriculum and scheduling are evaluated after each semester to ensure the most efficient program limiting credit hours and time spend on campus to the minimum possible. Curriculum mapping is completed to ensure limited redundancies.
2.6 Did the review of program cost result in any actions or modifications? Please explain.	The AAS and certificate will be updated, reducing the overall credit hours students must complete to gain their degree. This will reduce the overall cost to the student, as well as the time commitment necessary for success.
Indicator 3: Quality	**Response**
3.1 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching/ competency-based education, etc.)? How do the success rates of each delivery system compare?	Courses are delivered via traditional, online, hybrid, and team-teaching. All modalities present a similar success rate (over 92%), and students are constantly in contact with instructors, whether they are in an online class or face to face.
3.2 How does the program ensure that quality, relevant, contextualized, and culturally responsive instruction is delivered?	The instructors are eager to continue to learn and grow the program. Full- and part-time faculty are provided with in-house training through IVCC's Center for Excellence in Teaching, Learning, and Assessment, in addition to other professional development opportunities, to ensure culturally responsive instruction is delivered.
3.3 Is this program part of a Program of Study as defined by Perkins V and approved by the ICCB? If yes, describe any strengths or challenge to program of study implementation.	The Dental Assisting Program has a current Program of Study with ICCB that was approved in June 2022. There were no challenges in implementing the program of study, although the strengths of implementation included more faculty input and understanding of the data that needs to be evaluated.
3.4 Does this program meet the definition of a career pathway program? If so, please describe each career pathway element and identify how the college plans to improve the program as it relates to the career	A. The program analyzes and discusses labor market data in order to make informed decisions. The advisory committee meets annually, and they use the data to develop curricular changes.

pathway system elements. If no, please describe if and how the college will improve the program based on the career pathway elements.	B. The College has developed multiple certificate options for the DLA program. The Basic Dental Office Management Certificate for eight credits gives students a general Dental Office Management skillset while the Advanced Dental Office Management Certificate for 12 ~~C~~credits move the students from a general skillset to a more focused skillset. The Dental Assisting Certificate prepares individuals for a specific career path in general and specialty dental offices. Both the 8-credit and 12-credit certificates share courses with the Dental Assisting Certificate. C. Individuals can choose to start and stop with the multiple certificates and the AAS degree based on career aspirations. D. All students have the opportunity to work with college advisors to learn about and guide them through college processes. The College has developed a guided process for adult students centered around the Special Populations Transition Coordinator. Middle school and high school students have an opportunity to take part in Career Cruising, the Career Expo, and visit the College to learn about the DLA program and the careers associated with the certificates and degrees. The College has comprehensive student services, including financial aid. E. Work-based learning opportunities have been incorporated in the DLA courses. The students participate in community health fairs, and speak to area grade schools during Dental Health Month. Students also participate in specialty and general office observations as part of the curriculum. Students work with area dentists to complete required curriculum in a dental office with the supervision of DLA faculty. F. The program offers multiple entry and exit points, by which students can obtain skills to begin entry-level employment. The DLA AAS incorporates the three certificates. The stackable nature of the DLA programs allows for multiple entry and exit points. G. All CTE programs work with the Continuing Education office to facilitate upskilling opportunities for students already in the workforce. The College provides customized training options as well as credit for prior learning.

3.5 What innovations, that contribute to quality or academic success, have been implemented within this program that other colleges would want to learn about?	Instructors have implemented a flipped classroom to increase student engagement, feedback from current students is positive. Studies show the newly emerged flipped classroom represented significant advantage versus traditional lecture in improving theoretical performance, as well as in cultivating students' practical skills.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Not at this time, but discussions regarding offering some dental science courses at area high schools are underway.
3.7 Identify what work-based learning opportunities are available and integrated into the curriculum. How do these opportunities improve the quality of the program? In what ways can these opportunities be improved?	DLA 2202- Clinical Practice (externship) requires 300 hours of direct clinical experience at two separate clinical sites This opportunity allows students to gain real work experience before finishing the program. These opportunities can be improved by expanding partnerships with local dentists, specialists, labs, and health clinics.
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).	IVCC voluntarily participates in accreditation to offer better work placement. Commission on Dental Accreditation (CODA) through the American Dental Association
3.9 Are there industry-recognized credentials embedded within this program? If so, please list.	N/A
3.10 Are there apprenticeship opportunities available through this program? If so, please elaborate.	No
3.11 Please list all applicable licensure and industry/professional examinations. Include examination pass rates and the number of students who took each respective exam.	The Dental Assisting National Board is currently not required by the State of Illinois. As of 2018, all program graduates have taken the Dental Assisting National Board. The pass rate is 75%. This is not a state requirement, and is not needed to practice, but it is a requirement for IVCC's Dental Hygiene Program, so higher success rates moving forward are anticipated.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	There are no current articulation agreements in place for this program.
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? What opportunities exist for other partnerships?	The faculty continue to work with local dental professionals including dental offices, laboratories, specialty offices, and military and dental schools in Illinois. All adjunct faculty work in dental offices, and the dentist accommodates their schedules to allow for an effective and efficient partnership. The dentists also provide our students with discounted dental treatment, and volunteer their time in our clinic every Friday

	from January through April, providing free dental work and student experience. Students observe in oral surgery, orthodontics, periodontics, public health, endodontics and pedodontics shadowing a working dental assistant and obtaining working knowledge from the dentists. Faculty bring students to the Ottawa Dental Lab for a tour and lecture on the processes that occur when cases are sent to their lab as part of our curriculum. Graduates are given preference when applying for jobs at these offices and laboratories.
3.14 What partnerships (internal or external) have been formed for the advancement of equitable access and outcomes for this program?	The College has developed frameworks for recruitment and retention of special populations as defined by Perkins V. During FY2022, the College hired a Special Populations Transition Specialist. Special Populations, as defined by Perkins V, includes adults or traditional students with disabilities, low income, preparing for nontraditional fields, single parents, out of workforce, English Learners, homeless, youth in or aged out of foster care, and youth with parent in the military. The Special Populations Transition Specialist helps students along their educational journey by helping diminish obstacles and connecting students to resources as needed. There is a range of support available to students experiencing barriers to their education. The College has developed relations with many organizations with the goal of helping people succeed. The College also developed a resource guide with information about many of these partnerships. It can be found at the following web address: https://www.ivcc.edu/specialpopulations/IllinoisValleyCommunityResourceGuide.pdf#search=crystal%20credi
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program? What additional professional development is needed?	All full-time faculty are allotted $1,000 in professional development funds each year. In FY2022, the College also began providing $3,000 to full-time faculty to attend a national conference once every three years. The College offers numerous opportunities for support and professional development through the Center for Excellence in Teaching, Learning, and Assessment for full and part time faculty. Additional professional development may be requested and fulfilled based on the availability of funds. The College also has the Center for Excellence, Teaching, Learning, and Assessment, which offers numerous activities /training sessions to all faculty throughout the academic year.

3.16 What professional development is provided for faculty and staff in this program on Diversity, Equity, and Inclusion?	Professional development on diversity, equity, and inclusion is provided throughout the year by IVCC's DEI committee. Most recent professional development resources included How to be a Trans Advocate, Accessibility Matters, and Creating an Equity Minded Syllabus.
3.17 What is the status of the current technology and equipment used for this program?	IVCC built a new dental health clinic in 2022. Equipment and technology are new and up to date.
3.18 What assessment methods are used to ensure student success?	Mock exams are given to help the students gauge success on the Dental Assisting National Board. Students are assessed by faculty and attending dentists in both a clinical and lecture environment to locate educational deficits.
3.19 How are these results utilized and shared with others at the institution for continuous improvement?	Results are shared at least annually during the internal program review process. Results are shared with the advisory committee, and data is used for the purpose of curricular decision making.
3.20 What curriculum revisions to improve program quality and learning outcomes have been made based on the assessment of student learning? (How do you use the information gained from the assessment to improve your program and students learning?)	Curriculum is updated as needed. Modifications to dental science courses, materials, radiography, etc. were made as a result of legislature changes and accreditation standards.
3.21 How satisfied are students with their preparation for employment? How is this student satisfaction information collected?	Students indicate that they are well prepared for employment after graduation. Practice in the lab and clinical setting prepare them for the workplace. Information is collected via surveys and seminars.
3.22 How does the program advisory committee contribute to the quality of the program? How can this engagement be improved?	Yearly advisory board meetings are used to gain feedback from current and past students, local dentists, and faculty members. Feedback from local dentists is helpful in determining areas in which our program can improve. Engagement can be improved by an increased attendance.
3.23 In what other ways are employers engaged in this program? (e.g. curriculum design, review, placement, work- based learning opportunities)	Local dentists volunteer in our clinic every Friday from January through May to give their insight and help students prepare for work outside of a school setting. Dental Advisory Board members are involved in discussing all areas in the program, giving recommendations and insight into changes that are implemented twice a year.
3.24 How satisfied are employers in the preparation of the program's graduates? How is employer satisfaction information collected?	Local employers have expressed satisfaction through mailed surveys, participation in advisory committee meetings, and interaction with the program coordinator at clinical sites.
3.25 What are the program's strengths?	The Dental Assisting program is fully accredited. The program coordinator holds a Master in Public Health as well as

	certifications for Certified Dental Assistant (CDA), Certified Preventative Functions Dental Assistant (CPFDA) and Certified Restorative Functions Dental Assistant (CRFDA) through the Dental Assisting National Board (DANB and is currently working on an EdD. The other full-time faculty member holds a Master's in Education, Bachelor of Dental Hygiene Education (BSDH), and certifications as a Registered Dental Hygienist (RDH) and Certified Dental Assistant (CDA). All part-time faculty members have their CDA, and one part time faculty member has their BSDH and RDH, as well. All faculty are eager to continue to learn and grow the program, and they continually participate in education courses. The IVCC program has more rigorous standards than other Dental Assisting (DA) programs as it will serve as the first year of a Dental Hygiene Program.
3.26 What are the identified or potential weaknesses of the program?	Lack of flexibility when it comes to course offerings
3.27 Did the review of program quality result in any actions or modifications? Please explain.	No
List any additional barriers encountered while implementing the program not detailed above. Please consider the following: retention, placement, support services, course sequencing, etc.	

Performance and Equity
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.

CTE Program	Dental Assisting				
CIP Code	51.0601				
	2018	2019	2020	2021	2022
Number of Students Enrolled					
AAS.DLA	0	0	0	0	3
CERT.DLA	14	16	15	11	17
CERT.DLA.OFM.BAS	0	0	0	0	0
CERT.DLA.OFM.ADV	0	0	0	0	0
Number of Completers					
AAS.DLA	0	0	0	0	3
CERT.DLA	13	13	11	9	12
CERT.DLA.OFM.BAS	0	0	0	0	0
CERT.DLA.OFM.ADV	0	0	0	0	0
Other (Please identify)					

What disaggregated data was reviewed? If program enrollment is low, programs may disaggregate data at the department or discipline level. Disaggregated may include, but is not limited to race, ethnicity, gender, age, part-time/full-time status. It may also be appropriate to analyze intersectionality among student demographics (e.g. gender & race, special population status & race, etc.)	The College analyzes disaggregated data by age, gender, ethnicity, credit hour status, level of education, and educational goals.
How does the data support the program goals? Elaborate.	A major goal of the Dental Assisting program is to prepare students for a career as a dental assistant or dental office assistant. For the previous five fiscal years, over 87% of students have been successful in the coursework. In FY18, FY20, and FY21, the course success rate was over 93%. One hundred percent of students that started the upper-level coursework in FY22 and FY21 finished with their certificate in Dental Assisting. There are more non-traditional students enrolled in the DLA program compared to the College population. Less than a third of the students, from the last three years, fall into the 15-19 age category. This compares to the College at large percentage of over 50% for the same period of time. As the age increases, the disparity between the program and College at large increases. This data suggests that the program is preparing students for a future career and also upskilling individuals that care currently employed. Educational goal data shows a strong majority of students surveyed said that their goal was to prepare for a future job.
Were there gaps in the data (equity gaps, enrollment gaps, retention gaps, success gaps, etc.)? Please explain.	The Dental Assisting program consistently enrolls more female than male students. The number of male students in the program has increased in the past two years with the changing of recruitment materials to include male students and using gender-neutral themes. Our student population reflects the district ethnic backgrounds. There have been more female students participating in the Dental Assisting Program. The number of Hispanic students that participate in the DLA program is proportional to the College and the three-county district surveyed. A very small number (2) of Black/African American students have participated in the program during the review years. Targeted marketing for special populations has been increased during this review period.

	The student population usually falls into the age range of 18-24 due to the time commitment necessary to complete the program. There are no ways to improve this, as CODA requires that the majority of classes are held face-to-face, and IVCC has reached CODA's limit on online and blended sections. Students that were not successful in the program reported a difference in time commitment than originally anticipated. The program has held information sessions, participated in campus and community outreach programs to explain the expectations prior to enrollment. Retention has improved consistently.
What is the college doing to overcome any identified gaps? If nothing is currently being done, explain what the college plans to do to close identified gaps.	The College has expanded directed marketing to the special population groups as identified by Perkins V. The College has partnered with local industry and hosts career expos and program showcases. The College schedules open houses to expose adult learners to what the College has to offer. The College has invested in staff to directly support adult learners and to help them navigate the college process.
Are the students served in this program representative of the total student population? Please explain.	The students served in this program are not fully representative of the total student population. The majority of students in this program are female, so the male student population is not represented. The students in Dental Assisting are more non-traditional age (33-55% are 20-24 years old), whereby the majority of the total student population are traditional age (51-54%) are 15-19 years old. Ethnicity is representative of IVCC's student population. Hispanic students represent 12-17% of the DLA student enrollment, compared to 7-9% of the overall IVCC population. Black, Hispanic and Black, Non-Hispanic populations are not consistently represented in the DLA program.
Are the students served in this program representative of the district population? Please explain.	Male participation in the DLA program is much lower than the College district. The male population in the district ranged from 80-89% over the review period. During this review period, the DLA population shifted to less traditionally aged students. The Black participants in DLA are not represented when compared to the district which ranges from 2-2.5% for the review period.

Review Results	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	We reviewed curriculum at an in-depth manner to determine any redundancies within the program. Curriculum mapping identified a few courses that were repeating information, and the credit hours will be reduced following approval from IVCC's Curriculum Committee's and ICCB.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	Course updates and guide sheet changes will be presented to Curriculum Committee on September 11th. Some changes will go into effect in January 2023, while others will go into effect in August 2024.
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	N/A
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Faculty and staff actively participate in DEI activities across campus and community. IVCC funds on-campus childcare for students who are struggling, scholarships for tuition assistance, and other grants to provide additional support to DLA students.
Resources Needed	No additional resources are needed to make the changes discussed.
Responsibility Who is responsible for completing or implementing the modifications?	Heather Seghi, Dental Assisting Program Coordinator, Interim Dean of Health Professions

Career & Technical Education				
College Name:		Illinois Valley Community College		
Academic Years Reviewed:		2018-2022		
Program Identification Information				
Program Title	Degree or Cert	Total Credit Hours	6-Digit CIP Code	List All certificate programs that are stackable within the parent degree
Paramedic (CERT.PMD)	Cert	36	51.0904	
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 within this template or results may be reported within its own template. This is at the discretion of the college.				
Program Objectives What are the overarching objectives of the program? *(i.e. what are the program learning outcomes? What occupations is this program intended to prepare students for?)*		To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.		
To what extent are these objectives being achieved? Please detail how achievement of program objectives is being measured or assessed. How do you know if and how objectives are being achieved? *This may include employment rates of graduates, passing exam/licensure rates, assessment of students meeting Program Learning Outcomes, etc.)*		The program objectives are measured using completion, success, and retention rates for students, licensure exam passing rates, graduate employment rates, and graduate and employer surveys following licensure.		
Past Program Review Action What action was reported last time the program was reviewed? Were these actions completed?		The previous program review indicated a need for a full-time program coordinator. A full-time program coordinator was hired in January 2019. Minor curriculum changes have occurred, and the program has successfully completed re-accreditation by CAAHEP.		
Review Team Please identify the names and titles of faculty and staff who were major participants in the review of this program. Also describe their role or engagement in this process.		Nicholas Fish, EMS Program Coordinator Shane Lange, Dean of Workforce Development Heather Seghi, Interim Dean of Health Professions		

Stakeholder Engagement Please list other stakeholders and participants who were engaged in this process (i.e. Student Support Services, students, employers, etc.) Also describe their role or engagement in this process.	The Paramedic Advisory Board and EMS faculty were engaged in this process. The EMS program uses the discussions with industry stakeholders, students, and faculty and staff to assess the technical programs, make curriculum adjustments, purchase equipment, and change course offerings.

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.

Were pre-requisites for this program (courses, placement scores, etc.) analyzed as part of this review? If yes, please elaborate on any findings or revisions moving forward.	The Paramedic program uses EMS testing to administer placement exams to prospective students. The admissions process is noncompetitive, so the exam scores help the instructors learn about the current knowledge level of the students and their preferred learning styles.
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	The Paramedic certificate is currently 36 credit hours. This is due to the minimum number of required hours by the Illinois Department of Public Health for a paramedic program.

Indicator 1: Need	**Response**
1.1 What is the labor market demand for the program? Cite local and regional labor market information.	According to data collected by Lightcast, the eight-county district is a hotspot for paramedics and emergency medical technicians. The national average for an area this size is 249 employees, yet 498 are employed in IVCC's eight-county district. Because the district has a higher than average need, this higher than average supply of jobs makes it easier for workers to find employment in the area. The average growth is expected to increase by 3% locally, 6.4% in Illinois, and by 11.6% nationally over the next 10 years, according to Lightcast data.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Job posting activity shows high demand in our area, according to labor market demand from Lightcast. The national average for an area this size is 29 postings/month, while there are currently 36 in our area. Between 2023-2028, the regional listings are projected to grow by 2.6%, increasing from 2,915 jobs to 2,992 jobs in 2028. Nationally, the increase rises by 4.7%, from 1,614 jobs to 1,690 jobs in 2028. During the review period, the demand for this position has increased by 1-2% (Lightcast, 2022).

1.3 What labor market information sources are utilized and how often are LMI data reviewed?	Lightcast Q2 2023 Data set is utilized. Lightcast data is a hybrid data set derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, Lighthouse's data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States.

LMI are reviewed annually and reported to the Paramedic Advisory Committee. |
1.4 How does the institution/ program ensure that there is a sufficient "pipeline" or enrollment of students to fulfill the labor market need? (e.g. how/where are students recruited for this program?)	Students are recruited from in-district high schools and junior high schools, adult students from the communities, and other college health programs. The College holds career days, health fairs, and college open house and utilizes social media campaigns and directed marketing (including high school visits).
1.5 How are needs/changes evaluated by the curriculum review committee and campus academic leadership?	The College utilizes an annual internal program review process for each program. During the review process, student success, labor market needs, current and past enrollments, and program cost are reviewed. Additionally, the Curriculum Committee meets monthly to discusses curriculum changes to support the needs of students.
1.6 Did the review of program need result in actions or modifications (e.g. closing the program, expanded industry partnerships, revised recruitment, reducing/expanding program offerings)? Please explain.	Revised recruitment strategies are being addressed. Moving forward, information sessions will be provided quarterly and participation in college days, high school recruitment days and other community event will be increased.
Indicator 2: **Cost Effectiveness**	**Response**
2.1 How does the institution assess cost-effectiveness for CTE programming? Consider: • Costs to the institution associated with this program • How costs compare to other similar programs on campus • How the college is paying for this program and its costs (e.g. grants, tuition, fees (lab, technology, background checks, etc.). • Revenue Analysis • Student to faculty ratio • Course/section fill rates • Enrollment trends • Credit hours earned year to year • Scheduling efficiency	• The majority of the program cost consists of salaries and benefits. The program currently employs one full-time faculty member and five part-time faculty members who assist during skills assessments. • Additional operating expenditures include instructional supplies, maintenance, software, equipment, publications, conferences, etc. • Revenue comes from tuition, lab fees, clinic charges. • The Paramedic program costs are similar to other Allied Health Programs on campus. • Costs are primarily paid from the College's General Education Fund. The moneys are generated from tuition and lab fees. The Perkins Grant occasionally contributes funds for new equipment, recruiting materials, and tuition assistance. • Employer contribution to tuition is also a major benefit to students in the Paramedic program.

	• Student to faculty ratio, as determined by the Commission on Accreditation of Allied Health Programs (CAHEP), is 1:24 for lecture, 1:6 for clinical practice labs, and 1:12 for preclinical practice labs. • Course and section fill rates are determined by following guidelines set forth by CAHEP. • Enrollment trends have remained stable and low, but are anticipated to grow following the purchase of newer equipment and software, and due to the increased recruitment efforts. • Faculty and dean work together to make the schedule as efficient as possible for both students and faculty members.
2.2 What are the findings of the cost-effectiveness analysis?	The Paramedic program cost is similar to other IL paramedic programs, based on published program costs on program websites. On average, paramedic programs have an overall cost of $5,000-$6,275, and IVCC's Paramedic program costs $2,500.
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? Please explain.	This program is grant supplemented and is sustainable without this supplement.
2.4 How does the institution/program assess student affordability for this program? (Consider if program costs are reasonable, comparable to like programs) How does the institution/ program assist students in overcoming financial barriers to participate in this program? (e.g. WIOA, Ability-to-Benefit, scholarships, grant funding, referral to services, apprenticeship programming)	There are several opportunities available at IVCC to assist students in overcoming financial barriers to participate in the Paramedic program. The College employs a Health Careers Navigator who regularly meets with at-rick students to provide them with information on available services. Recruitment efforts by the program give some incumbent workers the opportunity for employer payment of tuition. IVCC offers free child watch services on campus through the YMCA for all students enrolled in three credit hours or more.
2.5 How will the college increase the cost- effectiveness of this program?	Through the annual internal program review, IVCC reviews costs for instructional supplies and salaries. The program will review redundancies between courses to decrease credit hours and contact time, thereby reducing costs for both the student and the College.
2.6 Did the review of program cost result in any actions or modifications? Please explain.	No. The Paramedic program is in line with programs in our area.
Indicator 3: Quality	**Response**
3.1 What are the delivery methods of this program? (e.g. traditional	The program uses a face-to-face teaching method. Students complete pre and post lesson assignments to determine effectiveness of teaching material.

format/online/hybrid/team-teaching/ competency-based education, etc.)? How do the success rates of each delivery system compare?	
3.2 How does the program ensure that quality, relevant, contextualized, and culturally responsive instruction is delivered?	Program faculty attend local EMS leadership meetings to discuss changes in practice, as well as national conferences to ensure that content is relevant. Changes to the content of the program must be approved by the medical director and advisory committee. The program students are surveyed during the class about the quality of the instruction and content as well as part of the post class surveys.
3.3 Is this program part of a Program of Study as defined by Perkins V and approved by the ICCB? If yes, describe any strengths or challenge to program of study implementation.	Yes. The program is supported by community, includes dedicated faculty who are practitioners in healthcare field, and is supported by dedicated hospital facilities and EMS agencies for clinical experiences. The program is accredited by Commission on Accreditation of Allied Health Education Program (CoAEMSP) and CAAHEP.
3.4 Does this program meet the definition of a career pathway program? If so, please describe each career pathway element and identify how the college plans to improve the program as it relates to the career pathway system elements. If no, please describe if and how the college will improve the program based on the career pathway elements.	A. The program analyzes and discusses labor market data in order to make informed decisions. The advisory committee meets annually, and they use the data to develop curricular changes. B. The College has developed multiple certificate options for the PARAMEDIC program. Students start with the EMT-B certificate, and can choose to continue with the Paramedic Certificate, or the A.A.S. in Paramedic (submitted, to be approved by ICCB). Individuals can choose to start and stop with the multiple certificates and the AAS degree based on career aspirations. C. All students have the opportunity to work with College advisors to learn about and guide them through college processes. The College has developed a guided process for adult students centered around the Special Populations Transition Coordinator. Middle school and high school students have an opportunity to take part in Career Cruising, the Career Expo, and visit the College to learn about the PARAMEDIC program and the careers associated with the certificates and degrees. The College has comprehensive student services, including financial aid. D. Work-based learning opportunities have been incorporated in the PARAMEDIC courses. The students

	participate in community health fairs, and work with local fire departments and emergency medical services in the area. E. The program offers multiple entry and exit points, by which students can obtain skills to begin entry-level employment. F. The PARAMEDIC AAS incorporates the two certificates. The stackable nature of the PARAMEDIC programs allows for multiple entry and exit points. G. All CTE programs work with the Continuing Education office to facilitate upskilling opportunities for students already in the workforce. The College provides customized training options as well as credit for prior learning.
3.5 What innovations, that contribute to quality or academic success, have been implemented within this program that other colleges would want to learn about?	In the past two years, the program has switched to a new text-book publisher that offers materials to deliver the class in a flipped classroom model, so less time is spent on lecture and more time is spent on hands-on skills.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	There aren't any dual credit options for the Paramedic program. IVCC offers a dual-credit option for the Emergency Medical Responder Program. Discussions regarding switching the dual credit opportunity to Emergency Medical Technician (EMT) class so that students would be able to attain licensure right out of high school and begin employment are in progress. EMT licensure is also the pre-requisite for entrance into the Paramedic program.
3.7 Identify what work-based learning opportunities are available and integrated into the curriculum. How do these opportunities improve the quality of the program? In what ways can these opportunities be improved?	During each semester of the program, students complete clinical time in the pre-hospital setting. During the first two semesters, they are learning and developing their skills. In the third semester, students are starting to function as entry level paramedics with supervision. The clinicals improve the program by allowing students to experience what they are learning in the classroom in a real-world environment. The clinicals could be improved by more direct supervision from the program faculty. Feedback from the preceptors is often times lacking. A request for a clinical preceptor position has been submitted to IVCC's Human Resources. This position will improve the experience for all students.
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	The program is accredited by the Commission on Accreditation of Allied Health Education Program upon the recommendations of the Committee on Accreditation of the EMS Provider.

voluntarily seek accreditation (e.g. automotive technology, NATEF).	
3.9 Are there industry-recognized credentials embedded within this program? If so, please list.	Advanced Cardiovascular Life Support International Trauma Life Support Pediatric Emergencies for the Pre-Hospital Provider
3.10 Are there apprenticeship opportunities available through this program? If so, please elaborate.	As part of the program, students complete an internship where they begin to function as an entry level paramedic. This internship is a minimum of 75 hours and 20 successful calls as a team leader.
3.11 Please list all applicable licensure and industry/professional examinations. Include examination pass rates and the number of students who took each respective exam.	After successful completion of the program, students are eligible to take the National Registry of EMT's paramedic exam. Upon passing this exam, they can apply for an Illinois Paramedic license. Last year, four students completed the course and, at this time, 50% have passed the licensure exam. For the previous year, 4 out of 6 (67%) students passed the licensure exam.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	There are no current articulation or cooperative agreements/initiatives in place for the Paramedic program.
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? What opportunities exist for other partnerships?	Clinical opportunities have been expanded to include new sites at Princeton Fire Department and OSF Saint Paul Medical Center. An anesthesia rotation was also added, but, due to the closing of two hospital in the area, is currently not available. The program is actively seeking a replacement facility for the anesthesia rotation.
3.14 What partnerships (internal or external) have been formed for the advancement of equitable access and outcomes for this program?	The College has developed frameworks for recruitment and retention of special populations as defined by Perkins V. During FY2022, the College hired a Special Populations Transition Specialist. Special Populations, as defined by Perkins V, includes adults or traditional students with disabilities, low income, preparing for nontraditional fields, single parents, out of workforce, English Learners, homeless, youth in or aged out of foster care, and youth with parent in the military. The Special Populations Transition Specialist helps students along their educational journey by helping diminish obstacles and connecting students to resources as needed. There is a range of support available to students' experiencing barriers to their education. The College has developed relations with many organizations with the goal of helping people succeed. The College also developed a resource guide with information about many of these partnerships. It can be found at the following web address:

	https://www.ivcc.edu/specialpopulations/IllinoisValleyCommunityResourceGuide.pdf#search=crystal%20credi
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program? What additional professional development is needed?	All full-time faculty are allotted $1,000 in professional development funds each year. In FY2022, the College also began providing $3,000 to full-time faculty to attend a national conference once every three years. The College offers numerous opportunities for support and professional development through the Center for Excellence in Teaching, Learning, and Assessment for full and part time faculty. Additional professional development may be requested and fulfilled based on the availability of funds. The College also has the Center for Excellence, Teaching, Learning, and Assessment, which offers numerous activities /training sessions to all faculty throughout the academic year. Full time faculty have attended conferences on trauma and accreditation since the last program review. Faculty also attended pediatric educational training and obtained master's degree in nursing education. Professional development on modes of education and how to add more online education into the program is needed.
3.16 What professional development is provided for faculty and staff in this program on Diversity, Equity, and Inclusion?	Faculty and staff participated in diversity, equity, and inclusion training as part of faculty development day and staff in-services. Best practices for diversity, equity, and inclusion were also discussed at national conference attended by program faculty.
3.17 What is the status of the current technology and equipment used for this program?	The program works to ensure that technology and equipment being used in the work environment are available for training in the classroom. Each year, the program surveys the employers and the students to determine what, if any, equipment should be added.
3.18 What assessment methods are used to ensure student success?	Students must complete a capstone internship where they serve as a team leader managing patient care for at least 20 patients. This care is provided under the direct supervision of a clinical preceptor. In addition to the capstone internship, the students receive a comprehensive final cognitive examination. Students must also pass a final practical examination, which is consistent with the National Registry of EMT's psychomotor examination.
3.19 How are these results utilized and shared with others at the institution for continuous improvement?	The Paramedic advisory committee meets 1-2 times per year. During those meetings, results of student performance, employer and graduate satisfaction, and the resource assessment completed by both students and program faculty are shared and reviewed.

3.20 What curriculum revisions to improve program quality and learning outcomes have been made based on the assessment of student learning? (How do you use the information gained from the assessment to improve your program and students learning?)	The program curriculum was updated to better reflect the sequencing required for the National Registry Portfolio. This included moving obstetrical, gynecologic, neonatology, and pediatrics from the spring semester to the fall semester. These changes better prepared students to manage all patient types that they may see in the clinical setting. The curriculum is reviewed every two years. Based on student assessments, the program curriculum has been modified to spend additional time on complex topics like pathophysiology and cardiology.
3.21 How satisfied are students with their preparation for employment? How is this student satisfaction information collected?	Student satisfaction with the program is measured by an end of program survey and graduate survey, which is sent approximately 6 months following graduation. The graduate survey is sent from Platinum Planner and results are tracked in that software.
3.22 How does the program advisory committee contribute to the quality of the program? How can this engagement be improved?	The program advisory committee reviews the data from the student and employer surveys, along with the retention and pass rates for the graduates of the program. The program advisory committee often makes recommendations on how to improve the program. Because the advisory committee has employers as member, they can provide feedback to the program regarding the performance of the graduates.
3.23 In what other ways are employers engaged in this program? (e.g. curriculum design, review, placement, work- based learning opportunities)	Employers are involved in the program through the advisory committee and supervision during the students' clinical opportunities. Several employers have used the clinical time as an opportunity to evaluate the students for possible employment post-graduation.
3.24 How satisfied are employers in the preparation of the program's graduates? How is employer satisfaction information collected?	The employers are surveyed approximately six months following graduation to determine how well the graduate is doing regarding their cognitive and psychomotor skills. As of the last employer surveys, the overall satisfaction with the program was at 75%.
3.25 What are the program's strengths?	The program has worked to accommodate the local employers needs by offering additional classes. The lower enrollments have allowed the program to provide students with more individualized instruction and attention when teaching difficult topics, such as medication math.
3.26 What are the identified or potential weaknesses of the program?	An area of weakness is in the clinical supervision. At the present time, the program coordinator is unable to monitor students while they are in the clinical setting. The feedback from the preceptors is limited. A part-time position is being created to address this.
3.27 Did the review of program quality result in any actions or modifications? Please explain.	Not at this time.

List any additional barriers encountered while implementing the program not detailed above. Please consider the following: retention, placement, support services, course sequencing, etc.
Recruitment continues to be problematic for the Paramedic program. This problem is not unique to this area, as it is a trend that is being seen nationally as well. Enrollment numbers for the EMT course, which is the pre-requisite, have been trending upwards.

Performance and Equity

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.

CTE Program	Paramedic
CIP Code	51.0904

	2018	2019	2020	2021	2022
Number of Students Enrolled					
CERT.PARAMEDIC	10	12	3	8	6
Number of Completers					
CERT.PARAMEDIC	9	11	3	6	6
Other (Please identify)					

What disaggregated data was reviewed? If program enrollment is low, programs may disaggregate data at the department or discipline level. Disaggregated may include, but is not limited to race, ethnicity, gender, age, part-time/full-time status. It may also be appropriate to analyze intersectionality among student demographics (e.g. gender & race, special population status & race, etc.)	Disaggregated data reviewed included ethnicity, part-time/full time status, highest degree earned, and educational goal.
How does the data support the program goals? Elaborate.	A major goal of the Paramedic Program is to prepare students for a career in paramedicine. The success rate for the Paramedic courses is over 80%. The Paramedic program is not supporting the pipeline for paramedics according to Lightcast data for the surrounding eight counties. There were 131 openings in the same region during FY21, yet only four students graduated during the same timeframe.
Were there gaps in the data (equity gaps, enrollment gaps, retention gaps, success gaps, etc.)? Please explain.	Consistently, the program enrolls more male than female students each year. In FY21 and FY22, the female student population had increased substantially to be greater than the male student population. FY18, FY21, and FY22 show 0% of the PARAMEDIC student population with an Academic Disadvantage. FY19 and FY 20 show 4.17% and 10.53%, respectively, of the student

	population at an academic disadvantage after the disaggregated data was reviewed. There was a higher percentage of Black/African American students during FY18, FY19, and FY20 in the Paramedic program than the College or the three-county district. The Hispanic participation percentage in the Paramedic program is less than the population or the College.
What is the college doing to overcome any identified gaps? If nothing is currently being done, explain what the college plans to do to close identified gaps.	The program coordinator has adjusted the recruitment efforts to be more inclusive of all genders and backgrounds. Emphasis has been placed towards female Paramedic students in marketing strategies in recent years. The College is expanding directed marketing to the special population groups as identified by Perkins V. The College has partnered with local industry, including the labor apprenticeship programs, hosting career expos and program showcases. The College schedules open houses to expose adult learners to what the College has to offer. The College has invested in staff to directly support adult learners and to help them navigate the college process.
Are the students served in this program representative of the total student population? Please explain.	Female participation in the PARAMEDIC program is lower than the College population, but has increased from 15-52% during the years in review. Black/African American and Hispanic students are limitedly represented in the PARAMEDIC program in relation to the College's overall population.
Are the students served in this program representative of the district population? Please explain.	The age of students enrolled in the program are representative of those in the district. The average of the district population is 50% female/male. Female participation in the PARAMEDIC program is lower than the district population, but the population of female students has increased from 15-52% during the years in review. Black/African American and Hispanic students are limitedly represented in the PARAMEDIC program in relation to the district's overall population.
Review Results	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale	Recruitment efforts to increase student enrollment will be the main priority moving forward. The program recently applied to

Please provide a brief rationale for the chosen action.	ICCB for the approval of an AAS degree for the Paramedic program. This will also substantially increase enrollment due to the large pay increase received by paramedics with an AAS in the industry. An ambulance was purchased using PATH funding, and has been wrapped with IVCC logo. This is marketing the program daily as it is driven from IVCC's main campus to the Ottawa Center.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	The program coordinator and faculty will attend all recruitment events for the College and community. Information sessions will be held regularly each semester to ensure the information is disseminated appropriately. - August 2023- start of the semester - Monthly high school tours of PARAMEDIC facilities - FA24 EMT-B students will be presented the option to start PARAMEDIC in the spring after completion of the EMT-B program (pool of 26 students) - October- College and Career Night - November- Explore IVCC Recruitment Event - Information Sessions held Mid and End of Semester each semester both virtually and in-person
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	N/A
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Targeted marketing and supports are being developed and strengthened for special populations as defined by the Career and Technical Education for the 21st Century Act. The College needs to do a better job of reaching and engaging traditionally underserved populations.
Resources Needed	Funds and staff resources for directed marketing and student retention support are needed.
Responsibility Who is responsible for completing or implementing the modifications?	Nick Fish-EMS/PARAMEDIC Program Coordinator Heather Seghi- Interim Dean of Health Professions

Career & Technical Education

College Name:	Illinois Valley Community College

Academic Years Reviewed:	2018-2022

Program Identification Information

Program Title	Degree or Cert	Total Credit Hours	6-Digit CIP Code	List All certificate programs that are stackable within the parent degree
Business Administration (AAS.BUS)	AAS	60	52.0201	Business Management

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 within this template or results may be reported within its own template. This is at the discretion of the college.

Program Objectives What are the overarching objectives of the program? *(i.e. what are the program learning outcomes? What occupations is this program intended to prepare students for?)*	The program is designed to prepare AAS students for jobs, as well as to provide a strong transfer option for our graduates choosing to attend a four-year university. Student Learning Outcomes include: 1. Listing advantages and disadvantages of a For Profit and Not for Profit Organization and giving examples of each 2. Finding three leaders that you admire and list their qualities that make them good leaders. 3. Find three leaders that you feel are less than perfect and list their negative qualities. 4. Find current GDP, Inflation, Business Cycle, Dow Jones Industrial Average, Unemployment, etc. 5. Relate the economic factors above to the international global environment. 6. Evaluate an organization from all departments, including Marketing, Management, IT, Finance, and Accounting. 7. Create a business plan for an organization that includes all aspects of the company.
To what extent are these objectives being achieved? Please detail how achievement of program objectives is being measured or assessed. How do you know if and how objectives are being achieved? *This may include employment rates of graduates, passing exam/licensure rates, assessment of students meeting Program Learning Outcomes, etc.)*	Program analysis reveals that objectives are being achieved. Rates of success have remained very good over the past five years with 72.1% of all students taking business courses earning a grade of C or better. Advisory committee reports and graduate surveys indicate students are gaining employment and feel well prepared as they enter the workforce. Assessment of student learning objectives for business courses is completed on a semester-by-semester basis.

Past Program Review Action What action was reported last time the program was reviewed? Were these actions completed?	The past program review resulted in the need to modernize and develop new recruitment materials, which is still on-going. Additionally, a review of courses to consider for online development was reported and progress is being made. The Let's Talk Business course, BUS 1201, is being given strong consideration for on-line development. Many issues, including annual enrollment numbers, are being considered.
Review Team Please identify the names and titles of faculty and staff who were major participants in the review of this program. Also describe their role or engagement in this process.	Ron Groleau – Dean, Natural Sciences and Business Bob Reese – Business Professor/Program Coordinator Both engaged in program analysis and data document review needed to answer questions.
Stakeholder Engagement Please list other stakeholders and participants who were engaged in this process (i.e. Student Support Services, students, employers, etc.) Also describe their role or engagement in this process.	IVCC Business Advisory Committee IVCC Counseling Department All played a role in providing information needed to answer questions and provide information for future goal setting.

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.

Were pre-requisites for this program (courses, placement scores, etc.) analyzed as part of this review? If yes, please elaborate on any findings or revisions moving forward.	No prerequisites are required for this program.
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	Not applicable.

Indicator 1: Need	**Response**
1.1 What is the labor market demand for the program? Cite local and regional labor market information.	Lightcast, formerly EMSI (Economic Modeling Solutions Incorporated), reveals that the occupational demand remains strong. A projected increase of 9.3% in business administration jobs is forecast over the next five years. This market information was compiled for eight counties which are fully and partially within the IVCC district.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Demand has remained strong for the past five years and the outlook is not expected to change for the next five years.

1.3 What labor market information sources are utilized and how often are LMI data reviewed?	Lightcast labor market information was utilized. The data is reviewed annually.
1.4 How does the institution/ program ensure that there is a sufficient "pipeline" or enrollment of students to fulfill the labor market need? (e.g. how/where are students recruited for this program?)	The program has a full-time program coordinator, who has a primary responsibility for recruitment. This faculty member works in conjunction with the College's Director and Assistant Director of Admissions, who also play a major role in recruitment. Students are recruited through high school visits, College events and activities, and annual publications. Students are recruited from the College's eight-county district.
1.5 How are needs/changes evaluated by the curriculum review committee and campus academic leadership?	In the past academic year, the Curriculum Committee has reviewed and approved all business course outlines to ensure proper course content and corresponding learning objectives. The academic leadership, including the VPAA and the Dean, reviews internal program reviews for all CTE programs annually. Needs and changes are based in part upon the results of these reviews. Input from the annual advisory committee meetings along with student feedback is also considered.
1.6 Did the review of program need result in actions or modifications (e.g. closing the program, expanded industry partnerships, revised recruitment, reducing/expanding program offerings)? Please explain.	The review revealed that "soft skills" associated with the business program need to be emphasized to an even greater extent than in the past. Examples of these soft skills include critical thinking, conflict management, team development, time management, and attendance. Student recruitment needs to retain a major emphasis. In conjunction with the hiring of a new division administrative assistant, new program flyers are being developed.
Indicator 2: **Cost Effectiveness**	**Response**

2.1 How does the institution assess cost-effectiveness for CTE programming? Consider:
• Costs to the institution associated with this program
• How costs compare to other similar programs on campus
• How the college is paying for this program and its costs (e.g. grants, tuition, fees (lab, technology, background checks, etc.).
• Revenue Analysis
• Student to faculty ratio
• Course/section fill rates
• Enrollment trends
• Credit hours earned year to year
• Scheduling efficiency
	Cost effectiveness for CTE programs is accomplished by annual internal program reviews. Costs to the institution come from three areas.
	1. Salaries and benefits ($141,102.00) account for 99.1% of the program expenditures.
	2. Costs compare favorably to other programs as most have significantly higher equipment and supply costs.
	3. The College pays for this program through the General Education fund.
	4. An analysis of the internal program review data reveals the following:
	   • Program revenue increased by $12,000, from FY21 to FY22, due to increases in student headcount and credit hours generated.
	   • Enrollment trends are on the increase. From FY21 to FY22, headcount increased by 31 students and credit hours increased by 92 hours. This continues a three-year trend of increasing enrollments.

	The Dean works closely with the Program Coordinator and faculty to ensure that scheduling efficiency takes place. Low enrollment courses are merged into other sections when possible or turned into independent study offerings. The course section fill rate is 48.66% for FY22. This is the highest rate in comparison to all CTE programs within the Natural Sciences and Business division. The student to faculty ratio is 35:1 per the faculty contract.
2.2 What are the findings of the cost-effectiveness analysis?	The program was in the red at $22,638.00 for FY22. This number shows a significant improvement over the past four years as the program averaged $34,976.00 in the red per year.
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? Please explain.	The Business program is not grant funded.
2.4 How does the institution/program assess student affordability for this program? (Consider if program costs are reasonable, comparable to like programs) How does the institution/ program assist students in overcoming financial barriers to participate in this program? (e.g. WIOA, Ability-to-Benefit, scholarships, grant funding, referral to services, apprenticeship programming)	Internal program reviews are conducted annually. The only non-salary/fringe costs are catering and printing. The total for these costs for FY22 was $217.00, which is less than 1% of the total expenditures for the year. Program costs are very reasonable in comparison to like programs. Numerous sources are available to assist students. The IVCC Foundation has a number of annual scholarships offered. Financial aid works with all students to determine eligibility to obtain funding. Other potential funding programs include Project Success, BEST, and the IVCC Emergency fund.
2.5 How will the college increase the cost- effectiveness of this program?	One of the issues faced is that the College is on sound financial ground and has not raised tuition for six years. Full-time and part-time faculty salaries have continued to increase and this accounts for the main reason for the program deficit. The College will continue to monitor course offerings as part of scheduling efficiency. The program has one full-time faculty member and three adjuncts.
2.6 Did the review of program cost result in any actions or modifications? Please explain.	The review created an awareness that recruitment of new students is of paramount importance. Continued increases in headcount and credit hours generated will help to offset the annual program deficit.
Indicator 3: Quality	**Response**
3.1 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching/ competency-based education, etc.)?	Courses are offered in face-to-face and online formats. Success rates of all courses have remained consistent over the past five years at 71.96%. Success rates are 67.3% for online course and 76.6% for face-to-face courses.

How do the success rates of each delivery system compare?	
3.2 How does the program ensure that quality, relevant, contextualized, and culturally responsive instruction is delivered?	In the past year, the program engaged in a complete review of course outlines for all classes offered. This review ensures that course content remains current and in compliance with requirements set forth by the Illinois Community College Board and the Illinois Articulation Initiative. Administrative and student evaluation of instruction helps to ensure that high quality instruction is maintained. In addition, faculty participate in workshops and professional development designed to address current initiatives such as DEI and culturally responsive instruction.
3.3 Is this program part of a Program of Study as defined by Perkins V and approved by the ICCB? If yes, describe any strengths or challenge to program of study implementation.	Yes, as of 2023. The program has a strong curriculum and one full-time instructor/program coordinator, excellent part-time faculty members, a strong advisory committee, and an excellent internship program. Enrollment is always a challenge. Recruitment materials are being updated and the possibility for additional online courses is being explored.
3.4 Does this program meet the definition of a career pathway program? If so, please describe each career pathway element and identify how the college plans to improve the program as it relates to the career pathway system elements. If no, please describe if and how the college will improve the program based on the career pathway elements.	In addition to the AAS degree, the program offers a certificate in Business Management. This certificate is designed specifically for students for work in a retail environment. Further coursework can be taken to complete the AAS degrees in Business and Marketing. Students obtaining the AAS degree are ready to pursue a variety of careers including, but not limited to, banking, sales, investments, retail management, entrepreneur, e-Marketing, and public relations. A. The program analyzes and discusses labor market data in order to make informed decisions. The advisory committee meets annually, and they use the data to develop curricular changes. Relevant industry credentials are being incorporated in the program. B. The College has a 30-credit hour Business Management Certificate and an AAS degree. The Business Administration, Accounting, and Office Professional AAS programs share an identical first semester to allow students to explore their future goals. Business Administration includes a coherent sequence of courses from secondary foundational preparation, to dual-credit to certificate, to an AAS degree. The IVCC Business

| | Program has an articulation agreement (3+1) with Franklin University for a Bachelor's Degree. Students may enter the pathway through dual-credit opportunities at the high school level, by taking the general education courses, or through direct entry into the program. Dual-credit opportunities are offered for general educational requirements as well as MGT 1230, Owning and Operating a Small Business at LaSalle-Peru High School and Streator High School.

C. All students have the opportunity to work with college advisors to learn about and guide them through college processes. The College has developed a guided process for adult students centered around the Special Populations Transition Coordinator. Dual-credit students have an opportunity to take part in Career Cruising, the Career Expo, and visit the College to learn about the Business program and the careers associated with the certificate and degree. The College has comprehensive student services, including financial aid.

D. The traditional face-to-face format is used along with a learning community and a variety of on-line offerings. Students use a developed company to complete an analysis of a real company similar to what would take place in the field. Students experience a team-based challenge by creating stock portfolios and complete a full marketing plan for a new product. The stock portfolio project begins with stock research and culminates with profit analysis. Students experience the profits and losses as they would in the real world. This program has a mandatory internship requirement.

E. The program offers two entry and exit points (certificate and degree), by which students can obtain skills to begin entry-level employment.

F. The Business Administration AAS incorporates the Business Management Certificate. LaSalle/Peru High School and Streator High School offer MGT 1230 as dual-credit.

G. All CTE programs work with the Continuing Education office to facilitate upskilling opportunities for students already in the workforce. The College provides customized training options as well as credit for prior learning. |
|---|---|
| 3.5 What innovations, that contribute to quality or academic success, have been implemented within this | The program has a learning community course entitled "Let's Talk Business" which merges business and accounting students together in a unique learning environment. This course is designed to show the integration of the content across the |

program that other colleges would want to learn about?	two target courses: Fundamentals of Accounting and Introduction to Business. An understanding of this connection between the courses will help to ease the student's transition into college-level business degree programs. Guest speakers and field trips, both on-campus and off-campus, expand the scope of the business and accounting courses to which it is linked. The program also co-sponsors the annual MIMIC (Making Industry Meaningful in College) fair.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Yes, Owning and Operating a Small Business (MGT-1230) is offered for dual credit at LaSalle-Peru High School and Streator High School.
3.7 Identify what work-based learning opportunities are available and integrated into the curriculum. How do these opportunities improve the quality of the program? In what ways can these opportunities be improved?	Work based learning opportunities are continually discussed in all classes. The required internship provides a strong work-based learning opportunity. These internships are offered in a variety of areas including human resources, accounting, payroll services, and retail businesses. Students avail themselves to working professionals and apply classroom knowledge to the real world of work. Continuous exploration of new opportunities is always a goal of the program.
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 there industry-recognized credentials embedded within this program? If so, please list.	No
3.10 Are there apprenticeship opportunities available through this program? If so, please elaborate.	No
3.11 Please list all applicable licensure and industry/professional examinations. Include examination pass rates and the number of students who took each respective exam.	Licensure examination is not required.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	The College is a member of the Illinois Articulation Initiative ensuring that all IVCC Business transfer classes will transfer seamlessly to all participating Illinois colleges and universities.
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?	New partnerships in the internship program have been formed with the City of Peru, Ficek Electric, and Green River Lines Bus Company. New opportunities exist in the rapidly growing cannabis industry.

What opportunities exist for other partnerships?	
3.14 What partnerships (internal or external) have been formed for the advancement of equitable access and outcomes for this program?	The College has a number of programs designed to ensure equitable access and outcomes for the Business program. These include free tutoring services, a federally funded TRIO grant program for first generation college students, and a Transformative Growth counseling service for students with mental health and related issues.
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program? What additional professional development is needed?	All full-time faculty are allotted $1,000 in professional development funds each year. In FY2022, the College also began providing $3,000 to full-time faculty to attend a national conference once every three years. The College offers numerous opportunities for support and professional development through the Center for Excellence in Teaching, Learning, and Assessment for full and part time faculty. Additional professional development may be requested and fulfilled based on the availability of funds. The College also has the Center for Excellence, Teaching, Learning, and Assessment, which offers numerous activities /training sessions to all faculty throughout the academic year. The College provides two in-service days for full and part-time faculty. Training opportunities are provided in a number of areas including pedagogy, assessment, and instructional technology. All are designed to improve the components of quality instruction for the program.
3.16 What professional development is provided for faculty and staff in this program on Diversity, Equity, and Inclusion?	The College has a very active Diversity, Equity, and Inclusion committee. The committee has distributed information and held presentations and workshops. On-going efforts continue with this initiative.
3.17 What is the status of the current technology and equipment used for this program?	It is excellent. All classrooms are equipped with the most current Smart Room technology.
3.18 What assessment methods are used to ensure student success?	Traditional assessment, including exams, quizzes, and written papers are used. Other forms of formal assessment include assessment grids used with internship providers. Emphasis is also placed on informal methods of assessment. The College also has an assessment committee. Faculty provide semester by semester documentation that institutional learning objectives are being met.
3.19 How are these results utilized and shared with others at the institution for continuous improvement?	Results are shared electronically with the faculty. Faculty meet to discuss the results as part of continuous program improvement and implement change as needed.
3.20 What curriculum revisions to improve program quality and learning outcomes have been made based on	More application-based case studies have been implemented into the curriculum to improve student leaning. These cases

the assessment of student learning? (How do you use the information gained from the assessment to improve your program and students learning?)	have been developed for content areas in investments, marketing plans, and human resource management plans.
3.21 How satisfied are students with their preparation for employment? How is this student satisfaction information collected?	A review of information provided from the advisory committee and internship members reveals that students are well prepared for employment. A need exists for the College to once again conduct post graduate surveys in this area.
3.22 How does the program advisory committee contribute to the quality of the program? How can this engagement be improved?	The program advisory committee meets annually. A formal agenda is followed and members give advice and feedback on the following items: • Curriculum • Internships • Program Graduates • Employment Opportunities • Teaching and Learning • Program Goals • Other A goal will be to increase advisory committee membership to increase and improve feedback
3.23 In what other ways are employers engaged in this program? (e.g. curriculum design, review, placement, work- based learning opportunities)	Employers play a key role in the offering of internships. Some employers teach within the program and have been involved in curriculum design and assessment. Other are members of the advisory committee.
3.24 How satisfied are employers in the preparation of the program's graduates? How is employer satisfaction information collected?	Feedback indicates that employers are very satisfied. This feedback is collected during advisory committee meetings. In addition, employers provide feedback to the program coordinator. Employers report that the "job preparedness and knowledge level of the graduates is very good." As mentioned previously, a need exists for the College to return to administering formal graduate surveys to employers.
3.25 What are the program's strengths?	The program has multiple strengths. • Experienced full-time instructor/program coordinator. • Solid and current curriculum with AAS and certificate offerings. • Outstanding internship program. • Adjunct faculty offering very good instruction while being solidly committed to the program. • Excellent advisory committee. • Excellent classroom facilities with Smart Classroom equipment. • Excellent support services such as the free tutoring program.

3.26 What are the identified or potential weaknesses of the program?	While not seen as a weakness at this time as it is going up, increasing enrollment remains a priority. This will lead to increased program revenue. Marketing efforts of the program need to improve. Advisory committee membership should be increased.
3.27 Did the review of program quality result in any actions or modifications? Please explain.	Yes. Efforts are underway to work with the new marketing coordinator at the College. The program coordinator is going to work the new division administrative assistant to update existing and create new marketing materials. A plan will be developed and implemented to increase advisory committee membership.

List any additional barriers encountered while implementing the program not detailed above. Please consider the following: retention, placement, support services, course sequencing, etc.
None at this time.

Performance and Equity

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.

CTE Program	Business Administration				
CIP Code	52.0201				
	2018	2019	2020	2021	2022
Number of Students Enrolled					
AAS.BUS	53	46	23	44	20
Number of Completers					
AAS.BUS	11	6	4	2	3
Other (Please identify)					

What disaggregated data was reviewed? If program enrollment is low, programs may disaggregate data at the department or discipline level. Disaggregated may include, but is not limited to race, ethnicity, gender, age, part-time/full-time status. It may also be appropriate to analyze intersectionality among student demographics (e.g. gender & race, special population status & race, etc.)	The College analyzes disaggregated data by age, gender ethnicity, credit hour status, level of education, and educational goal.
How does the data support the program goals? Elaborate.	Data provided by annual internal program review on student success shows that academic performance in the Business courses has remained solid. Course offerings meet the needs of students studying a variety of disciplines in the AAS and certificate. Overall analysis of success rates

	indicates a relatively high level of performance across all courses. As mentioned previously, 72.1% of students pass IVCC Business courses with a grade of C or better.
Were there gaps in the data (equity gaps, enrollment gaps, retention gaps, success gaps, etc.)? Please explain.	A review of the data shows that Non-traditional students between the ages of 35 – 55 are underrepresented in terms of enrollment related to the overall population with the IVCC district. The difference is approximately 13.54%. The College continues to make efforts to recruit students from these populations.
What is the college doing to overcome any identified gaps? If nothing is currently being done, explain what the college plans to do to close identified gaps.	The College, specifically the Enrollment Management Taskforce, has identified low enrollments of non-traditional students in a variety of programs as an issue to address. The College has recently appointed a new marketing director to help with this effort. The division office is developing and updating marketing materials. Some will be targeted to this non-traditional group.
Are the students served in this program representative of the total student population? Please explain.	Yes. A thorough review of the data provided by the College reveals that students served in the program are representative of the total student population. One exception is non-traditional students in the 35 – 55 age range.
Are the students served in this program representative of the district population? Please explain.	Yes. A thorough review of the data provided by the College reveals that students served in the program are representative of the district population. One exception is non-traditional students in the 35 – 55 age range.
Review Results	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐ Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	This program review was performed primarily by the Division Dean and the Program Coordinator. The review was thorough and multiple strengths (previously listed) and areas for improvement have been identified. This is a solid program with excellent faculty, current curriculum content and offerings, and very good stakeholder participation.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	All action steps below will be addressed and implemented in the 23/24 and 24/25 academic years. • Increased marketing efforts designed to boost enrollment • Increased advisory committee membership • Formation of new internship partnerships • Continued emphasis on student recruitment, including non-traditional students

Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	Program objectives are being met.
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	Faculty and staff participate in DEI activities across the campus and community. The use of funding to provide childcare for students who need those services, scholarships for tuition assistance, and other grants provides additional support to Business students while helping to address equity gaps.
Resources Needed	Administrative, faculty, and staff services will be needed to accomplish the initiatives listed. Funds will need to be budgeted and made available as well.
Responsibility Who is responsible for completing or implementing the modifications?	Ron Groleau – Dean of Natural Sciences and Business Bob Reese – Business Professor/Program Coordinator

Career & Technical Education

College Name:	Illinois Valley Community College
Academic Years Reviewed:	2018-2022

Program Identification Information

Program Title	Degree or Cert	Total Credit Hours	6-Digit CIP Code	List All certificate programs that are stackable within the parent degree
Office Professional (AAS.OFP)	AAS	60	52.0407	CERT.OFP.I CERT.OFP.II
Office Professional I (CERT.OFP.I)	Cert	26	52.0408	
Office Professional II (CERT.OFP.II)	Cert	41	52.0407	CERT.OFP.I

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 within this template or results may be reported within its own template. This is at the discretion of the college.

Program Objectives What are the overarching objectives of the program? *(i.e. what are the program learning outcomes? What occupations is this program intended to prepare students for?)*	1. Apply business standards for efficiency, time management, and quality of work while projecting a professional image including ethical standards with respect to privacy, confidentiality, and personal behavior both independently and in group situations. 2. Apply fundamental principles of spelling, grammar, and punctuation to a wide variety of business communication messages, documents, and reports appropriate for the intended audience. 3. Select, apply, and adapt computer software tools such as word processing, spreadsheet, database, accounting, and presentation to business-related tasks and assess the logic of the results. 4. Demonstrate an understanding of the accounting cycle to record business transactions for both service and merchandising businesses including adjustments, closing procedures, preparation of financial reports, bank statement reconciliations, petty cash transactions, and record payroll transactions. 5. Apply standard records management procedures when establishing and maintaining systems to classify, organize, store, and retrieve hard copy and electronic files. 6. Demonstrate active listening skills to accurately condense and record verbal information, instructions, and ideas.

	The Office Professional program prepares students for occupations as Administrative Assistants, Human Resource Assistants, Information Clerks, Insurance Processing Clerks, Office Supervisors, and Receptionists.
To what extent are these objectives being achieved? Please detail how achievement of program objectives is being measured or assessed. How do you know if and how objectives are being achieved? *This may include employment rates of graduates, passing exam/licensure rates, assessment of students meeting Program Learning Outcomes, etc.)*	The program objectives are being met with an 85% proficiency rate. Program objectives are embedded into the course objectives in the second year, second semester.
Past Program Review Action What action was reported last time the program was reviewed? Were these actions completed?	The past program review action reported was to continue to work with advisory members in evaluating program name, course offerings, and marketing to local employers to encourage continued education to support the program. To improve the understanding of the degree with the general population, the program name was changed from Office Technology to Business Technology to Office Professional. This aligned with other community college program names in Illinois. Additional actions: The first fall semester was aligned with Business, Accounting, and Marketing so students had the flexibility to move from one program to the next without losing credit hours. Keyboarding and Advanced Keyboarding were changed to two-credit-hour courses, utilizing one textbook for both classes, and scheduled back-to-back in eight-week sections, which allowed for faster progression through courses and cost savings for the students.
Review Team Please identify the names and titles of faculty and staff who were major participants in the review of this program. Also describe their role or engagement in this process.	Michelle Story, Program Coordinator and Faculty Shane Lange, Dean of Workforce Development, approved program changes. Adjunct faculty Chris Jauch, Business Applications, and Kim Eccles, Office Applications, identified industry needs and supported changes. Renee Prine, Student Advising Counselor
Stakeholder Engagement Please list other stakeholders and participants who were engaged in this process (i.e. Student Support Services, students, employers, etc.)	Advisory/Employer members identified industry needs. Participants included: Bonnie Barkman, Executive Secretary IDOT Lou Ann Birkley, Administrative Assistant, Citizens First National Bank

Also describe their role or engagement in this process.	Brenda Grobe, Administrative Assistant, Mendota Community Hospital JoAnn Johnson, Administrative Assistant, Business Employment Skills Team Roseann Rossi, PQ Corporation High School Advisory Members shared current trends and ISBE requirements. Participants included: Jeanette Maurice, Grant Coordinator Shawn LaRette, Business Instructor Carol Darveau, Business Instructor Tiara Bedenko-Hill, Business Instructor

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.

Were pre-requisites for this program (courses, placement scores, etc.) analyzed as part of this review? If yes, please elaborate on any findings or revisions moving forward.	The program does not require pre-requisites.
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 What is the labor market demand for the program? Cite local and regional labor market information.	According to Lightcast (formerly EMSI), new job opportunities for First-Line Supervisors of Office & Administrative Support Workers (43-1011) will have the largest number of openings, with 98% of occupations listed with 43 as a SOC code having an increase in job openings. However, the medium hourly earnings remain stagnant at $18 - $19 per hour. Occupations with higher earnings are seeing a decrease in the number of job openings, specifically Secretaries & Admin Assistants. Most positions do not require a degree after high school.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The demand for office and administrative support in the past five years has changed from a growth of 6 percent to a decline of 10 percent in the next five years.
1.3 What labor market information sources are utilized and how often are LMI data reviewed?	Lightcast occupation employment data are based on final EMSI industry data. Final EMSI staffing patterns wage estimates are based on occupational employment statistics and the American Community Survey. Occupational wage estimates are also affected by county-level EMSI earnings by industry. Data is reviewed annually.

1.4 How does the institution/ program ensure that there is a sufficient "pipeline" or enrollment of students to fulfill the labor market need? (e.g. how/where are students recruited for this program?)	Students are recruited through a variety of admissions activities including the annual open house, career fair, high school visits, and manufacturing expo, which is geared toward junior high students.
1.5 How are needs/changes evaluated by the curriculum review committee and campus academic leadership?	Curriculum and workforce trends are discussed at advisory meetings and needed changes are brought to IVCC's Curriculum Committee for approval.
1.6 Did the review of program need result in actions or modifications (e.g. closing the program, expanded industry partnerships, revised recruitment, reducing/expanding program offerings)? Please explain.	Low enrollments identified program revisions are necessary to attract incoming students and retain a strong program in our community. Additional stackable credentials should be investigated to provide students with industry skills in a variety of certificates. The College is investigating implementation of three additional certificates: 1) 12-credit Microsoft Office Specialist certificate; 2) 18-credit Administrative Office Support certificate, and 3) 18-credit Office Management certificate. Each of the proposed certificates support student growth toward specific career goals. Microsoft certifications are currently offered at the Area Career Center, which may lead to additional certificates earned within the OFP program.
Indicator 2: **Cost Effectiveness**	**Response**
2.1 How does the institution assess cost-effectiveness for CTE programming? Consider: • Costs to the institution associated with this program • How costs compare to other similar programs on campus • How the college is paying for this program and its costs (e.g. grants, tuition, fees (lab, technology, background checks, etc.). • Revenue Analysis • Student to faculty ratio • Course/section fill rates • Enrollment trends • Credit hours earned year to year • Scheduling efficiency	Each year, the College conducts an Internal Program Review for every academic department and program. The Internal Program Review analyzes student enrollment in courses, credits earned, course success, completion, and revenues and expenses. The majority of the cost for the Office Professional program is for full and part-time salary and benefits. The salary costs have decreased in the past five years due to decreasing enrollments. Currently, the program is supported by one full-time and two part-time faculty members. The costs are comparable to the other 60 credit-hour programs on campus. Total income for the program is sustained by tuition, course fees, and apportionment. Three courses in the program are also required for other business programs, thereby increasing enrollment. This strategic move is a cost- and time-effective opportunity for our students. The faculty contract sets the faculty-to-student ratio at 1:20 for lectures and labs.

	Course/Section fill rates remain low due to low enrollment for courses that are not offered in other programs. Scheduling efficiency: First-year courses are offered in fall, spring, and summer semesters. However, second-year courses are only offered during one semester, either fall or spring, to maximize enrollments and minimize costs.
2.2 What are the findings of the cost-effectiveness analysis?	The cost-effectiveness analysis shows that the program needs to increase enrollments in order to be sustainable.
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? Please explain.	N/A
2.4 How does the institution/program assess student affordability for this program? (Consider if program costs are reasonable, comparable to like programs) How does the institution/ program assist students in overcoming financial barriers to participate in this program? (e.g. WIOA, Ability-to-Benefit, scholarships, grant funding, referral to services, apprenticeship programming)	Program costs are routinely evaluated in the Internal Program Review and during the budget cycle. Program costs are comparable to like programs and the Program Coordinator continues to investigate options to reduce student costs. Inclusive Access is one such option. With Inclusive Access, students have access to textbook and courseware resources on the first day of class and typically pay 25% to 40% less than when purchasing paper textbooks. Cengage allows students in three or more classes to pay a set price of $99 for an entire semester. This service is offered during the spring semester for OFP students based on the course offerings. Many of our students qualify for financial aid and the College has a Foundation which offers a variety of scholarships annually. Students are also referred to services on- and off-campus for support. IVCC also hosts a Food Pantry for students in need.
2.5 How will the college increase the cost- effectiveness of this program?	Textbook costs are a major barrier to students. Inclusive Access is one way to lower the total cost for students.
2.6 Did the review of program cost result in any actions or modifications? Please explain.	The program cost review did not result in any action during this evaluation.
Indicator 3: Quality	**Response**
3.1 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching/ competency-based education, etc.)? How do the success rates of each delivery system compare?	Delivery methods include traditional, blended, and online. However, not all classes and delivery modes are offered consistently due to the low enrollment. Therefore, there isn't enough data for analysis of success by delivery mode. During COVID (2020 – 2021) all courses were online and success rates steadily increased as more students became acclimated to the online environment. Success rates in 2021 are significantly higher than in previous years, averaging 82%

	percent. In 2022, enrollments increased, but the success rates dropped to an average of 75%. The entire program is now offered online after the success of offering Keyboarding, Advanced Keyboarding, and Job-Seeking Skills online during COVID.
3.2 How does the program ensure that quality, relevant, contextualized, and culturally responsive instruction is delivered?	Full and part-time faculty are provided with in-house training through IVCC's Center for Excellence in Teaching, Learning, and Assessment, in addition to other professional development opportunities, to ensure culturally responsive instruction is delivered.
3.3 Is this program part of a Program of Study as defined by Perkins V and approved by the ICCB? If yes, describe any strengths or challenge to program of study implementation.	The Office Professional Program will be a focus for Program of Study for Perkins in 2023-2024.
3.4 Does this program meet the definition of a career pathway program? If so, please describe each career pathway element and identify how the college plans to improve the program as it relates to the career pathway system elements. If no, please describe if and how the college will improve the program based on the career pathway elements.	A. The program analyzes and discusses labor market data in order to make informed decisions. The advisory committee meets annually, and they use the data to develop curricular changes. Relevant industry credentials are being incorporated in the program, such as the Microsoft Office Specialist certifications. B. The College has developed multiple certificate options for the Office Professional Program. There is the Office Professional I for 26 credit-hours and the Office Professional II which adds 15-credit hours of advanced coursework. The College is adding three other certificates to increase student pathways toward the AAS degree and employment. The new certificates are: Microsoft Office Specialist (12-credits), Microsoft Office Support (18-credits), and Office Management (18 Credits). These certificates increase in specificity. They help students strategically prepare for careers with local businesses. Dual credit is offered at the Area Career Center and several district high schools. Computer Keyboarding and Applications are offered as dual credit. Individuals can choose to start and stop with multiple certificates and an AAS degree based on career aspirations. C. All students have the opportunity to work with college advisors to learn about and guide them through college processes. The College has developed a guided process for adult students centered around the Special Populations Transition Coordinator. Dual credit students have an

	opportunity to take part in Career Cruising, the Career Expo, and visit the College to learn about the Office Professional program and the careers associated with the certificates and degrees. The College has comprehensive student services, including financial aid.
	D. In the CSM 2240 Office Management course, students complete projects created by local businesses. Students and community members have the opportunity to work with our Career Services department for job placement.
	E. The program offers multiple entry and exit points, by which students can obtain skills to begin entry-level employment. New changes in curriculum will offer additional short-term certificates.
	F. The Office Professional AAS incorporates the two certificates. Students can take three of the four Microsoft Office Specialist for free once they complete the corresponding Office course.
	G. All CTE programs work with the Continuing Education office to facilitate upskilling opportunities for students already in the workforce. The College provides customized training options as well as credit for prior learning.
3.5 What innovations, that contribute to quality or academic success, have been implemented within this program that other colleges would want to learn about?	Our three MS Office courses offer micro-credentials for students that earn 90% on capstone exams. Badges can be shared on professional social media accounts like LinkedIn. This initiative has increased success rates.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Dual Credit partnerships include three area high schools that offer first-year coursework. LaSalle-Peru and Ottawa Township High School offer CSP-1230 and CSP-1203, while LaMoille High School offers CSP-1230, CSP-1203, and CSP-2203.
3.7 Identify what work-based learning opportunities are available and integrated into the curriculum. How do these opportunities improve the quality of the program? In what ways can these opportunities be improved?	CSP-2222, Internship, requires 225 hours of work experience, with an additional 16 hours of seminar, which allows students to discuss their experience with other students and the program coordinator. CSM 2240 assignments allow students to use workforce assignments as a replacement for classroom assignments.
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).	N/A

3.9 Are there industry-recognized credentials embedded within this program? If so, please list.	Industry-recognized credentials were not offered during this review cycle, but will be offered during the next review cycle.
3.10 Are there apprenticeship opportunities available through this program? If so, please elaborate.	N/A
3.11 Please list all applicable licensure and industry/professional examinations. Include examination pass rates and the number of students who took each respective exam.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	There are no articulation or cooperative agreements/ initiatives in place for the Office Professional program. Classes transfer as electives to most in-state universities.
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? What opportunities exist for other partnerships?	The program continues to work with advisory members from several industries including education, manufacturing, healthcare, and government. Advisory members include former students who are working professionally in the district and can speak to the curriculum goals and outcomes, and the quality of the education they received.

Initiatives with the Area Career Center exist to provide students college credit for the Microsoft Office Specialist Certificates received in their classes. Although the certifications are earned, IVCC does not currently have a process in place to allow students to receive college credit for the course(s). |
| 3.14 What partnerships (internal or external) have been formed for the advancement of equitable access and outcomes for this program? | The College has developed frameworks for recruitment and retention of special populations as defined by Perkins V. During FY2022, the College hired a Special Populations Transition Specialist.

Special Populations, as defined by Perkins V, include adults or traditional students with disabilities, low income, preparing for nontraditional fields, single parents, out of the workforce, English Learners, homeless, youth in or aged out of foster care, and youth with a parent in the military. The Special Populations Transition Specialist helps students along their educational journey by helping diminish obstacles and connecting students to resources as needed.

There is a range of support available to students experiencing barriers to their education. The College has developed relations with many organizations with the goal of helping people succeed. The College also developed a resource guide with information about many of these partnerships. It can be found at the following web address: |

	https://www.ivcc.edu/specialpopulations/IllinoisValleyCommunityResourceGuide.pdf#search=crystal%20credi In addition, the Center for Accessibility and Neurodiversity implemented one-week boot camps for students to better understand college requirements and technology. This initiative provides a solid foundation for students.
3.15 What professional development or training is offered to adjunct and full-time faculty that may increase the quality of this program? What additional professional development is needed?	All full-time faculty are allotted $1,000 in professional development funds each year. In FY2022, the College also began providing $3,000 to full-time faculty to attend a national conference once every three years. The College offers numerous opportunities for support and professional development through the Center for Excellence in Teaching, Learning, and Assessment for full and part-time faculty. Additional professional development may be requested and fulfilled based on the availability of funds. Microsoft Office Specialist (MOS) certification should be earned by faculty teaching MS Office coursework.
3.16 What professional development is provided for faculty and staff in this program on Diversity, Equity, and Inclusion?	The College hosts two days of professional development annually. There is an interdepartmental committee that develops professional development offerings for the College. The DEI committee has input in all of the College decision-making committees. The College has also initiated a One, Book, One College initiative. The books are selected with the intention of helping to promote DEI concepts.
3.17 What is the status of the current technology and equipment used for this program?	Lab computers provide students with the latest software versions, although students are trending to BYOD for classes post-COVID.
3.18 What assessment methods are used to ensure student success?	Traditional assessment methods include standardized assessments embedded into the course LMS, writing samples, test questions, and student surveys to ensure student success.
3.19 How are these results utilized and shared with others at the institution for continuous improvement?	Results are shared at least annually during the internal program review process. Results are shared with the advisory committee, and data is used for the purpose of curricular decision-making.
3.20 What curriculum revisions to improve program quality and learning outcomes have been made based on the assessment of student learning? (How do you use the information gained from the assessment to improve your program and students learning?)	In the first year, first semester computer applications course, language was a barrier to student success, and this showed in the assessment of student learning. Based on this information, the Computer Cost Comparison assignment, which is in the Computer Concepts module, was moved from the beginning of the course to the end of the course. This allowed students to become acclimated to computer software and hardware language throughout the semester. The instructions were also modified to clarify objectives. This curriculum revision led to students having higher success rates.

	Textbook changes were also implemented to provide students with the opportunity to earn micro-credentials through textbook courseware and improve program quality through simulated environments.
3.21 How satisfied are students with their preparation for employment? How is this student satisfaction information collected?	The internship and seminar allow students and employers to provide feedback regarding preparation for employment. Student satisfaction is gathered from an internship survey. Almost every student has indicated complete satisfaction with the program regarding their preparation for employment.
3.22 How does the program advisory committee contribute to the quality of the program? How can this engagement be improved?	The Advisory Committee members are at the heart of the program, driving program changes. The Advisory Committee provides industry trends and discusses the implementation of these trends in the Office Professional program. Current topics include embedding MOS certifications. Engagement can be improved by advisory members providing internships to students.
3.23 In what other ways are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Some employers are part-time faculty which helps stimulate curriculum design, review, and placement of internships. Advisory members review program courses, identify current trends, determine strengths and weaknesses within the curriculum, and offer suggestions for change based on industry guidelines.
3.24 How satisfied are employers in the preparation of the program's graduates? How is employer satisfaction information collected?	Surveys are distributed to employers during the final assessment of the student internship. All have responded "satisfied" and would "hire them full-time" after the internship has ended.
3.25 What are the program's strengths?	The program coordinator, who is also the only full-time faculty member, recently earned an MBA. Adjunct faculty earned the MOS certification in Word, Excel, and PowerPoint. The strengths of the program include the three MS Office Professional courses which are included in other business programs and certificates on campus.
3.26 What are the identified or potential weaknesses of the program?	A potential weakness is the lack of marketing in our community regarding the courses and programs offered. Information overload is a barrier when communicating with our local workforce and local businesses. Adding additional dual credit business courses at area high schools would provide greater opportunities for pathways from high school to college.

	The rapidly advancing technology creates challenges to stay ahead of the curve. For example, cloud technology has increased substantially since COVID-19. The program coordinator, dean, and advisory committee need to determine if the technology should be incorporated into courses as modules or if new courses need to be created.
3.27 Did the review of program quality result in any actions or modifications? Please explain.	Program learning objectives need to be expanded to other courses and identified as to whether they are introduced, proficient, or mastered. Tracking the objectives throughout the program provides a better understanding of how the students will master the skills to be successful in the program, which determines the quality of the program. Continued research is necessary to determine if students meet personal and career goals before they complete a college credential.

List any additional barriers encountered while implementing the program not detailed above. Please consider the following: retention, placement, support services, course sequencing, etc.

Performance and Equity

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.

CTE Program	Office Professional
CIP Code	52.0407, 52.0408

	2018	2019	2020	2021	2022
Number of Students Enrolled					
AAS.OFP	23	16	15	14	8
CERT.OFP.I	31	27	31	18	7
CERT.OFP.II	9	2	7	3	2
Number of Completers					
AAS.OFP	10	0	1	0	2
CERT.OFP.I	7	1	1	6	2
CERT.OFP.II	6	0	0	1	2
Other (Please identify)					
What disaggregated data was reviewed? If program enrollment is low, programs may disaggregate data at the department or discipline level.	Age, gender, ethnicity, status, highest degree, educational goal, academic disadvantage, and course success by instructional method data is reviewed.				

Disaggregated may include, but is not limited to race, ethnicity, gender, age, part-time/full-time status. It may also be appropriate to analyze intersectionality among student demographics (e.g. gender & race, special population status & race, etc.)	
How does the data support the program goals? Elaborate.	Low enrollments make it very difficult to correlate data to the program.
Were there gaps in the data (equity gaps, enrollment gaps, retention gaps, success gaps, etc.)? Please explain.	While the majority of students in the program are white females with no prior higher education, enrollment is too low to determine gaps.
What is the college doing to overcome any identified gaps? If nothing is currently being done, explain what the college plans to do to close identified gaps.	The College has hired a Special Populations Transition Specialist. Their job is to help adult learners through their registration and throughout their college experience. This may support the demographic of students currently enrolled in the program, as many are non-traditional.
Are the students served in this program representative of the total student population? Please explain.	A more diverse age group and ethnicity is trending in the years 2021 and 2022 over previous years. White females with no prior higher education are the primary enrollees. Approximately two-thirds are preparing for future jobs. Enrollment in the program is too low to determine representation of the total student population.
Are the students served in this program representative of the district population? Please explain.	Enrollment in the program is too low to determine representation of the district population.

Review Results

Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐ Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	The viability of the program hinges on future students and employers understanding the program, either by additional marketing or a change in the program to provide MOS certification and other stackable credentials. Building enrollments through dual credit partnerships to include other first-year business courses would provide many opportunities for students.

Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	The Program Coordinator, faculty, and dean need to continue to work with advisory members in evaluating the program course offerings and marketing to local employers to encourage continued education to support programs and a diverse workforce.
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	Program learning objectives need to be expanded to other courses and identified as to whether they are introduced, proficient, or mastered. Tracking the objectives throughout the program provides a better understanding of how the students will master the skills to be successful in the program which determines the quality of the program.
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	The College has hired a Special Populations Transition Specialist to help adult learners through their registration and throughout their college experience. This may support the demographic of students currently enrolled in the program, as many are non-traditional students by age.
Resources Needed	Additional marketing dollars are needed to educate the community about the Office Professional program. Professional development funds are needed to provide MOS certification to computer application faculty.
Responsibility Who is responsible for completing or implementing the modifications?	Michelle Story, Program Coordinator and Faculty Shane Lange, Dean of Workforce Development.

Career & Technical Education	
College Name:	Illinois Valley Community College
Academic Years Reviewed:	2018-2022

Program Identification Information				
Program Title	Degree or Cert	Total Credit Hours	6-Digit CIP Code	List All certificate programs that are stackable within the parent degree
Forensic Science (CERT.CRJ.FRS)	Cert		43.0406	
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 within this template or results may be reported within its own template. This is at the discretion of the college.				

Program Objectives What are the overarching objectives of the program? *(i.e. what are the program learning outcomes? What occupations is this program intended to prepare students for?)*	Unknown. This program was started by a former full-time faculty member who retired after it was created. No students have enrolled in this program. There is no data to review. Note: This program will be discontinued/eliminated.
To what extent are these objectives being achieved? Please detail how achievement of program objectives is being measured or assessed. How do you know if and how objectives are being achieved? *This may include employment rates of graduates, passing exam/licensure rates, assessment of students meeting Program Learning Outcomes, etc.)*	
Past Program Review Action What action was reported last time the program was reviewed? Were these actions completed?	N/A
Review Team Please identify the names and titles of faculty and staff who were major participants in the review of this program. Also describe their role or engagement in this process.	N/A

Stakeholder Engagement Please list other stakeholders and participants who were engaged in this process (i.e. Student Support Services, students, employers, etc.) Also describe their role or engagement in this process.	N/A

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.

Were pre-requisites for this program (courses, placement scores, etc.) analyzed as part of this review? If yes, please elaborate on any findings or revisions moving forward.	
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	

Indicator 1: Need	Response
1.1 What is the labor market demand for the program? Cite local and regional labor market information.	
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	
1.3 What labor market information sources are utilized and how often are LMI data reviewed?	
1.4 How does the institution/ program ensure that there is a sufficient "pipeline" or enrollment of students to fulfill the labor market need? (e.g. how/where are students recruited for this program?)	
1.5 How are needs/changes evaluated by the curriculum review committee and campus academic leadership?	

1.6 Did the review of program need result in actions or modifications (e.g. closing the program, expanded industry partnerships, revised recruitment, reducing/expanding program offerings)? Please explain.	
Indicator 2: **Cost Effectiveness**	**Response**
2.1 How does the institution assess cost-effectiveness for CTE programming? Consider: • Costs to the institution associated with this program • How costs compare to other similar programs on campus • How the college is paying for this program and its costs (e.g. grants, tuition, fees (lab, technology, background checks, etc.). • Revenue Analysis • Student to faculty ratio • Course/section fill rates • Enrollment trends • Credit hours earned year to year • Scheduling efficiency	
2.2 What are the findings of the cost-effectiveness analysis?	
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? Please explain.	
2.4 How does the institution/program assess student affordability for this program? (Consider if program costs are reasonable, comparable to like programs) How does the institution/ program assist students in overcoming financial barriers to participate in this program? (e.g. WIOA, Ability-to-Benefit, scholarships, grant funding, referral to services, apprenticeship programming)	
2.5 How will the college increase the cost- effectiveness of this program?	

2.6 Did the review of program cost result in any actions or modifications? Please explain.	
Indicator 3: Quality	**Response**
3.1 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching/ competency-based education, etc.)? How do the success rates of each delivery system compare?	
3.2 How does the program ensure that quality, relevant, contextualized, and culturally responsive instruction is delivered?	
3.3 Is this program part of a Program of Study as defined by Perkins V and approved by the ICCB? If yes, describe any strengths or challenge to program of study implementation.	
3.4 Does this program meet the definition of a career pathway program? If so, please describe each career pathway element and identify how the college plans to improve the program as it relates to the career pathway system elements. If no, please describe if and how the college will improve the program based on the career pathway elements.	
3.5 What innovations, that contribute to quality or academic success, have been implemented within this program that other colleges would want to learn about?	
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	

3.7 Identify what work-based learning opportunities are available and integrated into the curriculum. How do these opportunities improve the quality of the program? In what ways can these opportunities be improved?	
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).	
3.9 Are there industry-recognized credentials embedded within this program? If so, please list.	
3.10 Are there apprenticeship opportunities available through this program? If so, please elaborate.	
3.11 Please list all applicable licensure and industry/professional examinations. Include examination pass rates and the number of students who took each respective exam.	
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	
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? What opportunities exist for other partnerships?	
3.14 What partnerships (internal or external) have been formed for the advancement of equitable access and outcomes for this program?	
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program? What additional professional development is needed?	

3.16 What professional development is provided for faculty and staff in this program on Diversity, Equity, and Inclusion?	
3.17 What is the status of the current technology and equipment used for this program?	
3.18 What assessment methods are used to ensure student success?	
3.19 How are these results utilized and shared with others at the institution for continuous improvement?	
3.20 What curriculum revisions to improve program quality and learning outcomes have been made based on the assessment of student learning? (How do you use the information gained from the assessment to improve your program and students learning?)	
3.21 How satisfied are students with their preparation for employment? How is this student satisfaction information collected?	
3.22 How does the program advisory committee contribute to the quality of the program? How can this engagement be improved?	
3.23 In what other ways are employers engaged in this program? (e.g. curriculum design, review, placement, work- based learning opportunities)	
3.24 How satisfied are employers in the preparation of the program's graduates? How is employer satisfaction information collected?	
3.25 What are the program's strengths?	
3.26 What are the identified or potential weaknesses of the program?	
3.27 Did the review of program quality result in any actions or modifications? Please explain.	
List any additional barriers encountered while implementing the program not detailed above. Please consider the following: retention, placement, support services, course sequencing, etc.	

<table>
<tr><td colspan="6" align="center">Performance and Equity
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.</td></tr>
</table>

CTE Program	Forensic Science				
CIP Code	43.0406				
	2018	2019	2020	2021	2022
Number of Students Enrolled					
CERT.CRJ.FRS				0	0
Number of Completers					
CERT.CRJ.FRS				0	0
Other (Please identify)					

What disaggregated data was reviewed? If program enrollment is low, programs may disaggregate data at the department or discipline level. Disaggregated may include, but is not limited to race, ethnicity, gender, age, part-time/full-time status. It may also be appropriate to analyze intersectionality among student demographics (e.g. gender & race, special population status & race, etc.)	No disaggregated data was reviewed as there aren't any students enrolled in this program of study.
How does the data support the program goals? Elaborate.	There isn't any data to support the program goals, as there aren't any students enrolled in this program of study.
Were there gaps in the data (equity gaps, enrollment gaps, retention gaps, success gaps, etc.)? Please explain.	There isn't any data to analyze for this program of study.
What is the college doing to overcome any identified gaps? If nothing is currently being done, explain what the	

college plans to do to close identified gaps.	
Are the students served in this program representative of the total student population? Please explain.	No, there aren't any students in this program, so there isn't any representation.
Are the students served in this program representative of the district population? Please explain.	No, there aren't any students in this program, so there isn't any representation.

Review Results

Action	☐ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☒ Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	
Resources Needed	
Responsibility Who is responsible for completing or implementing the modifications?	