

2009



PROGRAM REVIEW REPORT

Black Hawk College conducts an annual systematic Program Review of its Programs and Support Services. The primary objective is to assure the quality of the Colleges Programs; one that reflects student needs, employer, community and transfer institutions needs and supports student success. By conducting a review of our Program and Services, Black Hawk College demonstrates its commitment to innovation and continuous improvement.

TABLE OF CONTENTS

Contents

TABLE OF CONTENTS	2
SUMMARY REPORT OF REVIEW RESULTS	3
Apprenticeship Pipe Trades	3
SUMMARY REPORT OF REVIEW RESULTS	4
Apprentice Patternmaker	4
Apprentice Sheet Metal	5
Heating, Ventilation & Air Conditioning – 470201	7
Visual Communication	8
Welding	10
Accounting Specialist	12
Accounting Clerk	12
Accounting Transfer, Associate in Arts	15
Banking and Finance, Certificate	13
Life Sciences including Biological Sciences, Associate in Science	17
Pre-Engineering Associate in Science	21
Pre-Chiropractic/Medicine/Pharmacy Associate in Science	23
Health, Physical Education, Recreation, and Sports Management, Associate in Arts	24
Remedial/ Developmental Education	25
Best Practice-Linkages Program	27
Program Review Schedule	28

SUMMARY REPORT OF REVIEW RESULTS

Program Title: **Apprenticeship Pipe Trades- 460501/460599/469996**

Action: (*Select ONE*)

- Continue with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

The Apprenticeship Pipe Trades (APT) Program is designed for those who have been accepted into the Pipe Trades Training Program, Local 25 Program School. This is a five-year program that includes 8500 hours of Pipe Trades apprenticeship training. Students seeking admission must meet the admissions requirement of the Bureau of Program Training, U.S. Department of Labor, the Joint Apprenticeship Committee of Eastern Iowa and Western Illinois LU 25 JAC, and Black Hawk College.

This program is in great demand, provides high-quality instruction, and is very cost-efficient. Minor improvements may include adding prerequisites and updating course syllabi.

The APT is a certificate program that will train apprentice plumbers, pipefitters, steamfitters, pipelayers, and heating and cooling technicians. The program stresses successful coordination with technicians of other trades through blueprint reading, applied mathematics, and interpersonal relationship skills. The certificate program is intended for entry-level jobs. A person with work experience may wish to complete the necessary coursework for an AAS degree in APT which may then lead to a leadership position.

The degree program includes core courses in communications and math in addition to technical skills training. General education courses are offered at BHC and the apprenticeship training is coordinated through the LU JAC training center.

The APT program received approval during FY08. It has the full support of the local union, and they are eager to be a partner in its initial delivery. The local union must follow their required curriculum materials from the Bureau of Apprenticeship. They closely monitor the progress of each apprentice both in the classroom and in the field.

The biggest need right now is to have a person in a position to set up PT sections, register students, and support the training center instructors. Setting up the sections and registering students needs to be streamlined as it is becoming a big task. Plans are currently under way to shift the burden of administering this program from a Dean to one of the new co-chairs of a newly created academic department.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify: Use of U.S. Department of Labor: Apprenticeship Bureau standards and skills' checklists. Also, some third-party assessments (etc., OSHA, STARS) are embedded in the program outcomes.

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

Program Title: **Apprentice Patternmaker -480505**

Action: (*Select ONE*)

- Continue with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

The Patternmaker Apprenticeship Program is a 15-course program that has not been offered for some time. BHC has decided to keep it as active on the curriculum master file so that if the need arose, it could be easily delivered. Three years ago, the Rock Island Arsenal thought about having a very small group of employees take the program. They eventually decided on a revised machinist program would be better.

The occupational report estimates a 9% decline in Illinois patternmaker jobs from 2004 to 2014. This makes sense as so much of their work can now be done with specialized components of drafting software packages. Technology is forcing the patternmaker occupation to be performed by many fewer individuals using some very robust software programs.

Statewide Program Issues (if applicable) None

2009 CAREER AND TECHNICAL EDUCATION PROGRAM REVIEW REPORT

Program Title: **Apprentice Sheet Metal - 480206**

Action: (Select ONE)

- Continue with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

The Sheet Metal Apprenticeship Program is a twelve course sequence of three credit hour courses. During the past five years it has been listed as active in the curriculum master file but not been offered. The few credit hours that have been assigned to this CIP code are from a heating and ventilation course that has been offered through Scott Community College.

The occupation report indicates that the BHC district might see a 7.07% decrease in jobs in this area even though the state of Illinois might see a 16% increase. Our district has seen all of this apprenticeship education taught through the sheet metal workers union.

Leave on active list so that BHC can respond to industry need as applicable.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) Non

Program Title: ***Apprentice Tool & Die - 480507***

Action: (Select ONE)

- Continue with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

The Tool and Die Maker Apprenticeship program is a 36 credit hour curriculum that includes twelve three-credit hour courses. It has not been offered on a regular basis for some time. It has been left as active on our curriculum master file so that it is available in the event that BHC can respond to a special request for it. This actually happened in 2007-2008 when the Rock Island Arsenal requested that the second half of this program, TDA 201 through TDA 206, be taught to a class of four employees on campus.

Over the past five years there have been only a couple of students take some of the TDA courses through the on-campus apprenticeship offerings. The occupation report estimates a 5% increase in the BHC region, but a 3% decrease in Illinois from 2008 to 2015. Other than the special offering for RIA, there does not appear to be much demand.

With a class of four, the students received much individual instruction, especially in the machine shop. They had written work in the classroom and projects in the shop.

Principle Assessment Methods Used in Quality Assurance for this Program include Course Embedded Questions and shop projects

Leave on active list so that BHC can respond to industry need as applicable

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

These two programs are part of the Scott Community College Agreement

Program Title: **Heating, Ventilation & Air Conditioning -470201**

Program Title: **Interior Design- Scott Community College 151303/200501/500407/500408**

Action: (Select ONE)

- Continued both programs with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

These two programs are offered collaboratively between Black Hawk College and Scott Community College and are reviewed annually when the cooperative agreement between the two entities is reviewed.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

Program Title: **Visual Communication**

6-digit CIP:

Degree Type:

Action: (Select ONE)

- X Continued both programs with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

Visual Communications will meet the needs of both the students and the employers by staying current in its content to produce qualified job applicants in the visual communications field. Students will learn basic skills applicable to career possibilities in graphic design, editorial design, desktop publishing or production artist, illustration, photography and photo retouching, Web design, digital prepress, etc.

Based on the State of Illinois Occupation Employment Projections, from 2004 to 2014, there will be an increase in the demand for art directors (7%), multi-media artists and animators (12%), and graphic designers (6%). Within the Black Hawk College district the demand will also increase in these areas: art directors (7%), multi-media artists and animators (18%), and graphic designers (4%). Within Iowa's Region #9, the demand for graphic designers will increase by 17%. Based on Henry, Mercer, Rock Island and Stark counties, the increased demand in these professions is as follows: art directors (35%), multi-media artists and animators (33%), graphic designers (51%) and prepress technicians and workers (39%).

Based on the research, input from our Visual Communication Advisory Board and former and current students, faculty felt it was appropriate to revise the Visual Communication curriculum to remain current with employment trends. The Art Technology certificate consists of the same curriculum as the first year of the Visual Communication program. This certificate may be appealing to students who are only interested or able to attend the College for one year.

In recent years we have had a number of students who may already have a baccalaureate degree in fine art or a related field, but lack the technical expertise to make them employable as a production artist, graphic designer, web designer or photo assistant. By giving them a strong basis in studio art and relevant computer software technology (Adobe Photoshop, InDesign, Illustrator and Flash), they can gain the skills needed for an entry-level position.

Revisions to the two-year Visual Communication degree were developed to give the students a stronger foundation in computer skills and to allow for some flexibility in the type of classes they may focus on. Once core classes are completed they may choose to follow one of three tracks: photography, web design or illustration.

ART 111 and ART 101 were both called Visual Design, which was often confusing to students. Therefore ART 111 is now called 3-D Design and ART 101 2-D Design, which more accurately describes each course. Two courses that were once offered as ART 200 Art Problems are now individual courses: ART 215 Digital Imagery (formerly Photoshop) and ART 217 Digital Drawing (formerly Illustrator). ART 130 Survey of Materials and Methods was removed as a requirement from

2009 ACADEMIC DISCIPLINE PROGRAM REVIEW REPORT

the curriculum, but will remain as a studio elective. It has been replaced by CS 100 Introduction to Computers, which is more relevant to today's students. ENG 132 Technical Writing was also removed as a requirement, as students gain significant writing experience in classes such as ENG 101 Composition, COMM 100 Communication Skills, JOUR 221 Introduction to Mass Communication, ART 100 Art Appreciation and ART 281 and ART 282 Art History. ART 200 Art Problems – Digital Photography, was added to the curriculum, as there is a high demand for skills with a digital camera in nearly all visual communication professions. ART 248 has changed significantly, and is now called Production and Prepress (formerly Commercial Art). Students will focus on the layout and production of a 4-color process art magazine, which involves working closely with a commercial printer and visiting the facilities while the project is being printed.

Lastly, students are now able to select a specific track to focus on including photography, web design or illustration. ART 232 Photography, CIP 170 Web Page Development and CIP 211A Introduction to Flash were added to the curriculum to fulfill these requirements.

New and significantly revised courses have been submitted and approved by both the BHC Curriculum Committee and ICCB. The new curriculum went into affect spring 2009.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify: Advisory Committee Recommendations

SUMMARY REPORT OF REVIEW RESULTS

Welding Certificate

CIP Code 480508

Action: (*Select ONE*)

- Continued with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

The Welding Certificate Program is designed to enable the student to succeed in employment as a welder in industry. The student learns welding skills in the welding areas of arc, MIG and TIG, and oxy-acetylene. The curriculum also includes three support courses: Essentials of Technical Math, Welding Blueprint Reading, and Basic Precision Measurement. The entire program is a 25 credit hour program and can be completed over a three semester period of time.

Over the last five years, many students have been able to secure employment offers once they have completed the MIG portion of the curriculum (which is the second semester). These job offers are often based upon welding proficiencies performed by the students with the employer's equipment and their inspection.

During the past five years, the need for welders within the BHC District and the adjacent Iowa community has been on the increase with a peak in 2008-2009 due to the economic slowdown. During this time period, both the Rock Island Arsenal and John Deere were hiring the best MIG welders they could find. Until the economy turns around, the demand for welders (is there something missing here?) not to continue to grow as fast. Occupation reports estimate that the BHC region will see a 3.18% increase in welding positions over the next ten years. The median hourly wage for these positions was \$18.77 in 2007.

BHC is now offering this program at both campuses. East Campus now has the space and equipment to offer all of the welding courses. The Quad-Cities campus continues to rent the welding lab at the Area Career Center at United Township High School.

In addition, three of district high schools are beginning to offer dual credit for some of the welding instruction that they are doing in their schools.

The welding instructors have a list of student learning outcomes that are based on some recommendations from the American Welding Society. The students demonstrate their level of achievement on these skills by performing the various welds and receiving an individual critique on each piece from the instructor.

The teaching experience of the welding instructor has been perfected by knowing which welds (types and positions) that need special demonstration and discussion on his part. By knowing how students are progressing on a class period

2009 ACADEMIC DISCIPLINE PROGRAM REVIEW REPORT

basis, the instructor is able to determine whether he will teach students one-on-one or to hold a group discussion for instructional purposes.

At this point in time, each of the welding courses has its own list of student learning outcomes. Students demonstrate their proficiency on these via the assigned welds. Students receive the okay to proceed onto the next assignment from the instructor. In the end, the instructor and the student know their employment potential.

The Welding Certificate Program continues to be a cost-effective program. Except for one course, it is taught exclusively by adjunct faculty members. The most senior welding adjunct retired two years ago and was replaced with a well qualified, experienced instructor. The BHC curriculum review report shows revenue-to-cost ratios that are very favorable for the program on both campuses.

Having highly qualified and experienced instructors has been this program's strength! Employers have learned to expect the best from the program graduates. The greatest weakness of the program is that the number of welding stations limits the number of students who can enter the program each semester.

For a period of time, enrollment was handled from a wait list. Now that the registration software is capable of wait listing, the enrollment procedure has become much more efficient.

The most obvious result of this review is that BHC should update the course syllabi for all the courses with a WLD prefix. In addition, thought should be given to renaming MT 114, Basic Precision Measurement, by making it have a welding prefix since it now serves only this curriculum.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

Accounting Specialist, Associate in Applied Science

Accounting Clerk, Certificate

CIP Code: 52302,

Action: (*Select ONE*)

- Continued with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

The program is designed to develop an understanding of, and skills in, the principles of accounting as related to practical use in business with a strong emphasis placed on computer accounting skills.

Aside from the economic recession that began in December 2007, projected employment trends for bookkeeping, accounting, and auditing clerks is expected to grow nationally by 12% from 2006 to 2016. In Illinois, projections are for a 2% growth in this field over the same time period. Enrollment trends have fluctuated but have followed an upward trend since the last program review in FY 2004. From FY 2004 through FY 2008, there has been an increase of 407 credit hours generated per year. Put another way, there are over 2.6 times more credit hours being generated in the AAS and certificate programs compared to FY 2004. The students in these programs tend to be Caucasian females over the age of 25. The majority of the students are economically and/or academically disadvantaged, which has growing implications for student success. The majority of the students are part-time and interested in career preparation.

The majority of the courses in this program are taught by one instructor, which at times can be burdensome. The program seems to have a low completion rate, which can be explained in part by the rigor of the program, and in part by the fact that many students simply wish to take selected courses rather than complete the entire program.

The faculty in the programs should continue what they are doing to increase enrollments. They should also continue to work closely with advisory council members to ensure the programs are meeting the needs of employers.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other please specify:

Statewide Program Issues (if applicable) – None

SUMMARY REPORT OF REVIEW RESULTS

Banking and Finance, Certificate

CIP Code 520803, 521001

Action: (Select ONE)

- Continued with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

Update on 2004 Program Review Opportunities for Improvement

The 2004 Program Review process resulted in three opportunities for Improvement, the first is to develop assessment strategies at the Program Level.

The department has made some effort at attempting to determine the appropriate method of program assessment. However, the department is waiting for a recommendation from the Student Learning Committee and the Faculty Senates on how to proceed with program assessment in career program.

The second 2004 Program Review opportunity for improvement was to actively recruit AIB 100 students from the local banking community. The department worked to increase enrollment in the program through curriculum changes that align this certificate with the Financial Services Management AAS degree. Publicize the availability and benefits of this program to students. Encourage the college to better market its programs. As a result of recruitment strategies from local banking institutions enrollments will increase since the last program review in FY2004, there has been a steady overall pattern of increased credit hours through FY 2007. In FY 2008, credit hours generated by the program fell, as occurred in many programs throughout the college.

FY 2004	Cr Hrs =177
FY 2005	Cr Hrs=186
FY 2006	Cr Hrs=219
FY 2007	Cr Hrs=228
FY 2008	Cr Hrs=117

The third opportunity for improvement as a result of the 2004 Program Review assessment is to review the curricula to ensure relevancy. The program was redesigned effective the 2009-2010 academic year. The changes were approved by the Curriculum Committee and appear in the 2009-2010 Catalog.

2009 Program Review Results

In Illinois, employment in the securities, commodities, and financial services sales area is expected to grow by 12% from 2004 to 2014. Growth in employment among financial managers is expected to grow by 10% over that same time period. Regional data suggests that occupational growth from 2008 to 2015 is expected to grow by 6.41%. Growth is forecast for depository credit institutions, management, collection agencies, and government services.

2009 ACADEMIC DISCIPLINE PROGRAM REVIEW REPORT

Job opportunities in the banking industry have not been expanding at a rapid rate because of technological advances and mergers. The current state of the financial sector is not currently conducive to hiring many new employees. There needs to be greater recruitment efforts from the local banking community.

Assessment of student learning has taken place at the course level to ensure students are mastering stated learning objectives. As yet, there is not a satisfactory program assessment tool, nor is there a standardized evaluative tool from a source external to the college.

The faculty in this program also rely heavily on feedback from advisory council members concerning how well students have mastered the subject matter, as well as information on possible program improvements.

Faculty members teaching the banking courses have extensive prior work experience in the banking industry. Many local banks require entry-level employees to take AIB 100. In this occupation, local employers hire local employees. The curriculum has been revised to better coordinate it with the Financial Services Management AAS degree program.

Recommendations for Opportunities for Improvement

Develop a method of program assessment.

Actively recruit new students.

Market the program, including an emphasis on its relationship to the AAS degree.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

Accounting Transfer, Associate in Arts

CIP Code 52032

Action: (Select ONE)

- X Continued with minor improvements
- Significantly modified
- Discontinued/Eliminated
- Placed on inactive status
- Scheduled for further review
- Other, please specify:

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

The Accounting degree is offered through the Department of Business. Courses are taught to prepare the student to transfer to a four-year college and earn a bachelor's degree in accounting.

Regional growth of jobs for individuals with a four-year accounting degrees expected to rise by 6.3% during the 2008-2015 time periods. The bulk of these jobs will be among accountants and auditors, budget analysts, credit analysts, financial examiners, and tax examiners. Credit hour generation in the accounting transfer program has fluctuated since the last program review in FY 2004. Overall, credit hour generation is about 13% lower than it was that year. This would be consistent with what has occurred elsewhere in the college.

Focusing on the ACCT 101 and ACCT 102 sequence, there was a slight increase in the number of students enrolled in ACCT 101 from FY 2004 to FY 2008, and a slight decline in the number of students enrolled in ACCT 102 over the same time period. The number of students successfully completing those courses has dropped somewhat during the last five years, although the percentage completing has risen.

Students in the program are predominantly Caucasian females under the age of 25. Most are academically and/or economically challenged, a percentage that has steadily risen in the last five years. (This has implications for student success at the college.) Slightly more than half the students in the program are full-time students.

The instructors in these programs utilize course assessment to ensure students have mastered the skills necessary for each course. With most courses building upon earlier coursework, instructors in succeeding classes are able to determine how well students have mastered previous material. In addition, the faculty in this program teach courses that support the accounting certificate and AAS programs. As a result, they also benefit greatly from feedback from advisory council members. This feedback provides instructors information on how well students have mastered the learning objectives. It also gives an indication of potential curriculum changes to ensure students meet the needs of employers.

These courses in themselves are not considered general education courses by the IAI. However, there has been a desire for the faculty in this program to work with other department members regarding learning outcomes.

2009 ACADEMIC DISCIPLINE PROGRAM REVIEW REPORT

In the last five years, the programs have been able to utilize improved accounting lab facilities, which in turn has improved student learning. The accounting faculty will require periodic updates in software and hardware in the labs in order for the program to continue to satisfy learning objectives.

Careful attention has been paid to scheduling matters in order to ensure increased enrollments and efficient use of classroom space. Courses are offered both during the day and in the evening to meet student needs. Some courses are now available online.

Highly qualified faculty teach in the program, which ensures program quality.

Student learning has been enhanced by having lecture classes meet in the same classroom as the corresponding accounting lab, thereby making it possible to fully integrate lecture and lab with computerized accounting practices.

The overall economic climate, combined with declining enrollments college wide, have created concerns among administrators regarding enrollments in many programs. The majority of the courses in this program are taught by two instructors, which at times can be burdensome.

The program may suffer more than many from the rigor of the program, given the number of academically and/or economically challenged students at the college. This may easily explain the greater tendency for students not to complete courses.

The faculty in the program should continue to work with the administration to increase enrollments.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other please specify: Advisory Committee Feedback

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

Transfer- Physical and Life Sciences

Life Sciences including Biological Sciences, Associate in Science

- CIP Codes Biological Science (190504, 260101, 260301, 260501, 260502, 260801, 30019)

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

Based on the enrollment figures shown there is a definite need for the Biology program. Over the last 6 years there has been a 36.8% increase in the number of credit hours generated within the Biology discipline. Although the occupational data for occupations requiring a Bachelor's degree or greater is limited, much of the demand Black Hawk College sees is for the health related curricula. There are also many students taking courses in a pre-professional track (pre-pharmacy, pre-medicine). A significant portion of the discipline's credit hours are generated by health career students.

The Biology faculty has a semi-annual meeting assessing student learning. The majority of faculty use pre-testing/post-testing to assess student learning in general education and other biology courses. Biology faculty also meet with the Nursing Department in which they provide feedback as to areas within Anatomy and Physiology courses and Microbiology that need improvement in coverage and they provide feedback as to the student success rate in those Allied Health courses. The results of the assessment show that within a non-major general education course there was an increase of 60% in the number of questions answered correctly. Within the majors level course there was an increase of 35% and 38%. Other Biology courses also show a significant increase in the number of post test questions answered correctly. This data is discussed in each semesters Biology discipline meeting to continually improve student learning.

The Biology program is very cost effective. Over the last five years the average revenue to cost ratio for biology was 1.60. For every \$1.60 brought in for revenue the cost is \$1.00. The revenue to cost ratio was 1.38 in 2002 and in 2008 the revenue to cost was 1.61. An increase in this number shows that the Biology program has increased in efficiency. This is due to the use of multiple section lectures that contribute to lowering the credit hour costs, retirements, and increased enrollments. In order to sustain program viability the Biology discipline must continue to offer a wide range of courses that either meets the general education or major field requirements. Currently the area offers eleven courses that satisfy the general education requirement and an additional seven courses that may be taken by biology majors. The Biology program has also received grants for equipment. One grant was for two full body skeletons to be used in general education courses along with anatomy & physiology courses. Due to the difficulty in finding qualified part-time faculty members the college will be advertising and hiring a full time faculty member for fall 2010.

The review has shown that Biology courses continue to be offered in a manner that both meets the students' needs and is also profitable to the college. Every semester course offerings are reviewed for that semester and subsequent semesters. The Biology discipline also offers courses in a variety of formats: online, study unlimited, distant learning, and face to face.

An opportunity for improvement will be to monitor the variety of courses offered and times. With both the non-majors and majors level course meeting the general education life sciences requirement, non-major students will enroll in the. Majors level biology course. Those students typically are not prepared for the rigor of the course and have a poor completion rate.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other please specify: Student Feedback after transfer and from faculty members at transfer institutions.

Statewide Program Issues (if applicable) None

A brief description of emerging state-level problems and/or program issues that will eventually affect programs offered by the colleges and cannot be addressed at the local level. Such problems/issues might include licensure changes, trends in occupational demand, and developments in disciplines or modifications to university transfer policies.

SUMMARY REPORT OF REVIEW RESULTS

Transfer- Physical and Life Sciences

Physical Sciences

CIP Codes including:

- Chemistry (260202, 400501, 400502, 400504, 400599)
- Earth Science (260603, 261301, 261305, 300101, 400401, 450701)
- Earth Science Geology (400601, 400602, 400604)

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

Based on the enrollment figures shown there is a definite need for the Physical Sciences. Over the last 2 years there has been a 19.7% increase in the number of credit hours generated within the Physical Sciences. Although the occupational data for occupations requiring a Bachelor's degree or greater is limited, much of the demand Black Hawk College sees is for students taking courses in a pre-professional track (pre-pharmacy, pre-medicine, pre-engineering). A significant portion of the Physical Science's enrollment continues to be for non-majors. It is also anticipated that there will be an increase in the credit hours within the Physical Sciences due to a new transfer agreement with Western Illinois University with Black Hawk College's Pre-engineering students.

The Physical Science faculty has a semiannual meeting assessing student learning. The majority of faculty use pre-testing/post-testing to assess student learning in general education and other Physical Science courses. Faculty members within the Chemistry discipline use the American Chemical Society standardized exams in both the major's level and non-major courses. Those results are compared to the national data collected for those exams. Faculty also submits pre-test and post-test data for general education courses within the Physical Sciences. The data gathered is for four different learning objectives as outlined by ICCB for general education Physical Science courses. This data is discussed in each semesters Physical Science meeting to continually improve student learning.

The Physical Science program is cost effective. Over the last five years the average revenue to cost ratio for Physical science was 1.11. For every \$1.11 brought in for revenue the cost is \$1.00. The revenue to cost ratio was 1.14 for 2008. An increase in this number shows that the Physical Science program is increasing in efficiency. This is due to the increase use of multiple section lectures lowering the credit hour costs, increasing the types of courses taught, and increased enrollments. In order to sustain program viability the Physical Sciences must continue to offer a wide range of courses that either meets the general education or major field requirements.

The review has shown that Physical Science courses continue to be offered in a manner that both meets the students' needs and is also profitable to the college. Every semester course offerings are reviewed for that semester and subsequent semesters. The Physical Sciences also offers courses in a variety of formats such as online, distance learning, and face to face.

An opportunity for improvement will be to monitor the variety of courses offered and times. With the variety of courses offered in the Physical Sciences due to the different disciplines the number of general education courses needs to be monitored. As courses are offered in alternative formats enrollment in face to face courses needs to be monitored along with the student success in the alternative formats.

2009 ACADEMIC DISCIPLINE PROGRAM REVIEW REPORT

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

Pre Engineering Associate in Science

CIP Codes 140101, 141101, 151302

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

Based on the enrollment figures there is a steady enrollment trend. The five year average credit hours generated was 164 credit hours and in 2008 the credit hours generated was 183. The occupational outlook for Engineers is showing an increase in the employment outlook. It is also anticipated that there will be an increase in the credit hours within the Physical Sciences due to a new transfer agreement with Western Illinois University with Black Hawk College's Pre-engineering students

The students who take the GE 201 Analytical Mechanics Statics and GE 202 Analytical Mechanics Dynamics show a high success in completion. Over the last 5 years the student's completion of that sequence of courses has ranged from 75% to 100%.

The faculty who teach Pre-Engineering are within the Physical Science discipline which is effective. Over the last five years the average revenue to cost ratio for Physical Science discipline was 1.11. For every \$1.11 brought in for revenue the cost is \$1.00. The revenue to cost ratio was 1.14 for 2008. An increase in this number shows that the Physical Science program is increasing in efficiency. In order to sustain program viability the Physical Sciences and Pre-Engineering discipline must continue to increase enrollments and utilize adjunct faculty effectively.

The pre-engineering program continues to strengthen relations with four-year institutions to benefit student who desire to transfer. Visits have been made to BHC pre-engineering students by representatives of Iowa State University and Southern Illinois University at Carbondale. A transfer agreement has been made with Western Illinois University, and discussions have started to make an agreement with St. Ambrose University. An engineering club was formed to facilitate student interaction. The BHC Engineering Club has sponsored visits by firms that employ engineers and participated in other educational activities.

One area of weakness is the cost to revenue ratio. Engineering classes are specialized and typically have smaller enrollments than general education classes. Increased marketing and recruitment of students can help increase enrollment. Improved advising will help retain students in the program and help their learning of the material

One opportunity for improvement is the communication with students. Because of limited sections that can be offered, students need to be alerted to the times and semesters that these courses are offered. We will also monitor these times to avoid conflicts between classes and maximize the number of students able to take advantage of the courses.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS**Pre-Chiropractic/Medicine/Pharmacy Associate in Science**

CIP Codes 260403, 260701, 260706

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

Students who complete the pre-medical curriculum at BHC will establish a good foundation upon which to complete their medical school curriculum.

The courses taught in the Pre-Medical programs are from both the Life and Physical Sciences. Both Life and Physical Science faculty have a semiannual meeting assessing student learning. The majority of faculty use pre-testing/post-testing to evaluate student learning. Faculty members within the Chemistry discipline use the American Chemical Society standardized exams in both the major's level and non-major courses. Those results are compared to the national data collected for those exams. The student learning data is discussed in each semesters Physical and Life Science meeting to continually improve student learning. The successful completion of sequence courses linked to the Pre-Medical programs continues to be above 75%.

Both the Life and Physical Science programs are cost effective. Over the last five years the average revenue to cost ratio for Physical science was 1.11 and 1.6 for Life Sciences. For every \$1.11 or \$1.60 in revenue the cost is \$1.00. This is due to the increased use of multiple section lectures lowering the credit hour costs, increasing the types of courses taught, and increased enrollments.

The review has shown that students in Pre-Medical program courses continue to be successful in their completion of the sequence courses at Black Hawk College.

One area of weakness is obtaining feedback regarding the success of our students once they transfer out of Black Hawk College. Another weakness would be finding data on how well Black Hawk College students' do on standardized pre-professional entrance exams such as the PCAT and MCAT.

An opportunity for improvement will be to monitor the success of students once they have successfully completed the courses needed to transfer and have left the program. Many students do not need to finish the AA or AS degree and leave after taking specific courses needed at the transfer institution. An opportunity for improvement would be to analyze the success of student who have completed a specific number of credit hours and transferred.

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify:

Statewide Program Issues (if applicable) None

SUMMARY REPORT OF REVIEW RESULTS

Health, Physical Education, Recreation, and Sports Management, Associate in Arts

CIP Codes: (131307, 310101, 310501, 310504, 500301, 500302)

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

The HPE area is an important curricular area within the College. While HPE has its discreet elements (e.g., P.E. concentration), it also offers curricular support to other programs such as teaching/education, early childhood development, recreation, sports management, criminal justice, nursing, and allied health. For several years, it offered primary support for teaching/education, which was in a decline. However, with the addition of the Sports Management curriculum, enrollments in the HPE cluster have increased 88.58% (e.g., FY06-920 credit hours, FY-07-946, FY08-1,784).

Faculty within the HPE area annually review the retention rates of students within the comprehensive program area. Over the last four years, comparisons between 10th day enrollments and end-of-semester enrollments have been made to see the percentage of completers who pass the course (or demonstrate mastery of concepts through testing/evaluation). The percentage in the last four years has been 82%. The program area would like to move toward 90% in the next program review cycle. In course level assessment for HPE 200 (First Aid), the faculty are compiling baseline data on the number of students who pass the course and also complete requirements for the third-party, Red Cross Certifications. Once the baseline data is compiled, the goal is to meet a benchmark of 90% of the students who pass HPE 200 also attain Red Cross Certification. Faculty are also collecting baseline data on students who participate in the four fitness training courses (HPE 125, 126, 127, and 128) to set program goals. Students are given pre and post-tests to review progress in strength, flexibility, body-fat/ratio, and cardio.

Credit hours generated in HPE have grown 88.58 % , particularly with the addition of this new program area. In order to sustain the growth, there is a need to review the type of faculty available to deliver this program, as well as potential related areas of coaching and officiating (e.g., potential new faculty slot). A dedicated classroom for Sports Management, as well as a renovation of present Fitness Center, walking/running track, pool, and gymnasiums could assist program growth and sustainability.

The review process revealed that the HPE program is integral to the College community due to its support of cross-curricular offerings. Opportunities for internal and external publics to take wellness and physical education courses promotes positive health and fitness outlooks and outcomes. The design and implementation of the new Sports Management program (with options for both face-to-face and on-line delivery) have shown the responsiveness of the College to meet a curricular and

2009 ACADEMIC DISCIPLINE PROGRAM REVIEW REPORT

occupational need locally, in-state, regionally, and nationally. Black Hawk College is also partnering with Western Illinois University to create a pathway for students to continue further in Recreation and Leisure studies.

The following items are noted as recommendations for further improvement and strategies to form an action plan to assist in meeting desired opportunities:

1. Increase retention rates (i.e., number of students not successfully completing course outcomes)

*Require and gather data from program faculty (i.e., 10th day and end of semester)

*Monitor achievement of desired benchmark of 90% retained and mastering course outcomes

2. Improve HPE Facilities

The program area's classroom delivery space and facility needs are growing. Having the opportunity to hire an additional faculty to design and deliver expanded curricular options (e.g., therapeutic recreation, coaching, officiating, other fitness classes) would support new growth possibilities.

*Meet and create/implement strategies with Dean

*Meet and create/implement strategies with Facilities Director

*Leverage internal partnerships with facilities, athletics, BHC Foundation, HR/Wellness to obtain funding and complete needed upgrades to HPE facilities

3. Continue to Expand Curricular Offerings with Needed Staffing

*Use internal resources for program development

*Propose potential hiring options and timeline for submission to FY11 budget process

Principle Assessment Methods Used in Quality Assurance for this Program

Standardized assessments

Certification and licensure examination results

Writing samples

Portfolio evaluation

Course embedded questions

Student surveys

Analysis of enrollment, demographic and cost data

Other, please specify:

Statewide Program Issues (if applicable)

SUMMARY REPORT OF REVIEW RESULTS

Remedial/Developmental Education

Improvements & Rationale for Action

A brief description of the improvements made since the last review or reasons for other program decisions, proposed action plan for future improvements and an estimated timeline.

Developmental education at BHC prepares students for college level work. Based upon research in the field, Black Hawk College has designed these developmental courses to be offered and assessed through the following disciplines (versus as a single combined department): English, Mathematics, English as a Second Language, and Reading. Courses are taught and assessed by dedicated Full-time and Adjunct faculty within the specific disciplines

For the most recent year data is available, 2007, the College has experienced around 16% of its students enrolling in developmental coursework. This has been an approximate flat trend for the past six years and has consistently remained above the Illinois state average.

The Program has two primary goals:

65% of students enrolled in developmental coursework will advance to college level coursework. As of FY 2007, the Advancement to College Level work for Remedial students data tells us that 63.9% of BHC's remedial students advance to college level work. Beginning in FY 2004, statewide policy regarding student eligibility for adult basic education was reconfigured, thereby eliminating instructional opportunities for pre-developmental students (ie. High school graduates that are underprepared for developmental level work). As a result the College experienced a slight spike in the number of students requiring developmental education and has lost the resource of referring internally to what was once a better instructional model for developmental education students.

The second goal is to integrate developmental students into the college community to encourage academic success. This goal is measured through the SENSE survey item "Faculty want me to succeed" SENSE is a survey of entering 1st time students and asks students their perception of their experiences with the College. This is a measure of personnel connection and student engagement with their faculty. Of the entering 1st time students in the fall of 2008, 79% indicated they believed their faculty wanted them to succeed. This exceeded the SENSE survey medium college benchmark of 77% yet is slightly below the BHC returning student cohort (81%)

The College further defines success of its developmental education initiatives by the number of students who successfully complete developmental coursework by attaining an A, B, C, or P letter grade. In these courses the success rate is as follows: In mathematics 54.1%, writing 62.2%, and reading 64.2%. (National Community College Benchmark Form 8- Enrollee Success Rate)

These developmental students who then take their first college-level course in a related discipline have a success rate of: 71.7% for mathematics and 69.8% in English. (National Community College Benchmark Form 9- Enrollee Success Rate in first college level course.

2009 CROSS DISCIPLINATRY PROGRAM REVIEW REPORT

Principle Assessment Methods Used in Quality Assurance for this Program

- Standardized assessments
- Certification and licensure examination results
- Writing samples
- Portfolio evaluation
- Course embedded questions
- Student surveys
- Analysis of enrollment, demographic and cost data
- Other, please specify: Analysis of data sets identifying performance relative to student progression and enrollee success in developmental education coursework.

Statewide Program Issues (if applicable)

A brief description of emerging state-level problems and/or program issues that will eventually affect programs offered by the colleges and cannot be addressed at the local level. Such problems/issues might include licensure changes, trends in occupational demand, and developments in disciplines or modifications to university transfer policies.

High school graduates that are underprepared for developmental level work currently have no opportunities for remediation prior to enrolling. Hence, this student is placed into the developmental course. The College identifies that the state policy to no longer fund high school graduates in Adult Basic Education courses created a hardship for many pre- developmental students who now find themselves unprepared for developmental education coursework.

Best Practice- Linkages Program

Programmatic area Academic

Description of the innovation/best practice (150 word limit):

BHC and WIU have partnered to create three educational opportunities for students in the Nursing, Engineering and Bachelor of Liberal Arts and Sciences degree programs. This partnership is called the Linkage Program and allows students a cost efficient pathway to complete a four year degree by taking courses at BHC and completing at WIU. Engineering and BLAS Linkage courses are courses that are taught by WIU and are woven into the first two years of the degree program in order to provide the WIU cost guarantee and other financial benefits to the student at the very start of their academic program. Nursing students benefit from the financial agreement however complete the Associate Degree Nursing AAS degree at BHC and continue on to complete the Bachelors in Nursing at WIU.

What are the results/measurable outcomes?

The process of creating these educational pathways began spring 2008 as a conversation among BHC and WIU academic administrators. BHC is currently enrolling students for the fall 2009 term.

Contact Information: Bettie Truitt
College: Black Hawk College
Name and Title: Dean of Instruction and Academic Support
Phone Number: 309- 796-5048
Email Address: TruittB@bhc.edu

2009 Best Practice

Calendar

Program Review Schedule