JEFFERSON DAVIS COMMUNITY COLLEGE
FIVE-YEAR PROGRAM REVIEW PORTFOLIO

PROGRAM: AIR CONDITIONING AND REFRIGERATION

DIVISION: TECHNICAL

CIP CODE: 15.0501

TYPE DEGREE AND/OR CERTIFICATE: C-26

CREDIT HOURS REQUIRED: DEGREE: _______ CERTIFICATE: 27

DATE OF THIS REPORT: February 2007


I. Overview of the Program

A. Description of the program purpose.

The program prepares the student to service, and install air conditioning, refrigeration, and heating equipment for residential and commercial users. The curriculum includes a study of basic electricity, design, repair and servicing of equipment as well as employability skills.

B. How is the JDCC Expanded Statement of Purpose reflected in your program?

The air conditioning and refrigeration purpose supports the JDCC college goal statement of providing: Technical, vocational, and career education to prepare students for employment, retrain existing employees, and promote local and state economic development and competitiveness.
II. Program Enrollment

A. Compare the student enrollment over the last five years. Please discuss any significant changes – increases or decreases.
The ACR "Student Profile by Night Class" is listed in Section 2 of the Program Review Portfolio. This program is an evening program only. The program reviewer will note a drop in the average yearly number of students for the 2004-2005 academic year.

During the five years that this review covers, the ACR program underwent several changes. The instructor that taught 2001 through spring of 2004 was replaced in summer of 2004. The current instructor does not offer courses in the summer semester. This could have an affect on the numbers.

B. Enrollment Limitations

1. Does your program have a limit on number of students due to faculty, facilities, equipment, etc.? _______ Yes ___X___ No

Is the program at maximum capacity: _______ Yes ___X___ No

The program is not at full capacity at this time. The instructor has worked as a recruiter for the program since starting at JDCC. The college is sending recruiters into the high schools as well as having open house at least twice a year inviting schools from all over Escambia and Baldwin counties. The focus has been on eight, eleventh, and twelfth grades. The Vocational/Technical programs have been highlighted in local newspapers in Escambia county over the past five years and will certainly be in upcoming editions as well. The Assistant Dean of Instruction, through her efforts with Tech Prep, is always advertising and promoting the ACR program as well as all other technical programs on the Atmore campus. New brochures that describe the ACR program are being developed at this time.
2. How can your program address new audiences? (Example: evening students, distance learning, continuing education for credit, etc.) Discuss room for growth in number of students and ideas for recruitment.

The ACR program is open to all that are interested in the field of ACR. The program is taught in the evenings only and this restricts the number of students. Distance learning is not an option because ACR is primarily hands-on. The area that should be investigated would be “non-traditional” students. There have been only a few female students in the years that the ACR program has been in operation. Focus on “non-traditional” and “second career” students should be initiated. This action should come from the college recruiter and public relations personnel.

**GOAL(s):**

- Increase the number of students per term to 20.
- Increase the number of female students per class by 10%.
- Offer a day program for ACR. The hours could be flexible to accommodate work hours. (i.e., Mon-Thurs 2pm-10pm and Fri. 7pm-10pm)
### Student Profile by Day Classes

<table>
<thead>
<tr>
<th>Items Reviewed</th>
<th>Year of Review</th>
<th>Year of Review</th>
<th>Year of Review</th>
<th>Year of Review</th>
<th>Year of Review</th>
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</thead>
<tbody>
<tr>
<td>Total # Students</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Male</td>
<td></td>
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<tr>
<td>Female</td>
<td></td>
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<tr>
<td>White</td>
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<tr>
<td>Black</td>
<td></td>
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<td></td>
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<tr>
<td>Native American</td>
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<tr>
<td>Hispanic</td>
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<tr>
<td>Asian</td>
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<td></td>
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<tr>
<td>Other</td>
<td></td>
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</tbody>
</table>

### Student Profile by Night Classes

<table>
<thead>
<tr>
<th>Items Reviewed</th>
<th>Year of Review</th>
<th>Year of Review</th>
<th>Year of Review</th>
<th>Year of Review</th>
<th>Year of Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # Students</td>
<td>38</td>
<td>31</td>
<td>28</td>
<td>24^{\text{10%}}</td>
<td>31</td>
</tr>
<tr>
<td>Male</td>
<td>37</td>
<td>30</td>
<td>27</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White</td>
<td>29</td>
<td>18</td>
<td>16</td>
<td>10</td>
<td>21</td>
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<td>Black</td>
<td>4</td>
<td>9</td>
<td>11</td>
<td>8</td>
<td>8</td>
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<tr>
<td>Native American</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Asian</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Other</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
III. Focus on Support

A. Technology

[Hardware and software, technical issues and/or support, instructional issues and/or support, training for faculty, ...]
*List all technology acquired since last Program Review

The ACR program has three computers in its classroom with two ACR Software programs loaded on their hard drives.

There have been limited technology purchases for the ACR program during this review cycle due to funding constraints. (See Planning Unit 3.3: Air Conditioning and Refrigeration PSLO’s 2003-2004)

However, approximately $20,000 worth of purchase orders for ACR technology and equipment has been submitted for the 2006-2007 academic year. These purchases will be secured through Federal Vocational Funding. A copy of the purchase orders submitted is contained in Section 3 of the Program Review Portfolio.

B. Facilities and Equipment

[Cycles for replacement or refurbishment of equipment, classroom spaces, labs, furniture, concerns, needs.]

The ACR classroom has sufficient space to meet the needs of the program. There have been limited equipment purchases for the program during this review cycle due to funding constraints. The program reviewer will note that equipment purchases are included in the $20,000 purchase orders noted above.
C. **Learning Resources**

[Collection of books, databases, journals, videos, ...; learning assistance or tutoring, ...]

*List all learning resources acquired since last Program Review*

- Section 3 of the Program Review Portfolio contains a list of the texts available to the ACR students in the Atmore library.

The ACR instructor supplements these holdings by providing students' access to "ACR Today", a monthly Warner Publication journal, in the classroom.

The following periodicals are received by the college and distributed to the ACR students:

- ESCO Institute (Certification Agency)
- HVAC News (Bi-monthly newspaper)

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**GOAL(s):**

- Add a computer lab to the program with a minimum of 10 computers
- Purchase additional ARC software programs. (See list of software ACR program would like to acquire in Section 3 of Program Review Portfolio)
D. Marketing and Public Relations
[Brochures, print materials, website, special events, recruitment effort]

1. Review all printed information about your program (course catalog, brochures, etc.)
   a. Is it appropriate and current for your target audience?
   b. Does the appearance of the document represent the College in a professional manner?

Program information contained in the 2006-2007 JDCC catalog was reviewed as part of the self-study process and was found current and accurate. Information on these pages includes program description, degree plan, and course descriptions.

The program brochure was reviewed as part of the self-study process and was found to be outdated. These brochures were removed and destroyed. A new brochure is in the production process.

2. Review of Web Site Developed for Your Program
   a. Is it appropriate and current for your target audience?
   b. Does the appearance of the web site represent the College in a professional manner?

The ACR program does not currently have a web page.

**GOAL:**

Develop an ACR program web page to become both a students' information source and recruitment resource.
E. Support Services
[Advisement, assessment, testing, job placement, ...]

The ACR program has the full support of the student services department before and during registration. A counselor is available for the student on both the Atmore and Brewton campus. WorkKeys testing is provided in a timely and professional manner for the student. Asset testing is also provided in the same professional manner.

F. Resources, Budget
[Staffing, operating and capital budgets, grants, ...]

The program has material and supply money throughout the year. Federal Vocational funds are periodically given to the program and these monies are spent primarily on equipment and technology. A copy of all the budgets, Federal Vocational Funds, and inventory is attached.

G. What additional data that is currently not available would have been helpful to effectively evaluate this area of the program?

None
# Air Conditioning & Refrigeration Titles

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Call#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Althouse, Andrew</td>
<td>Modern refrigeration and air conditioning</td>
<td>TP 492 .A43 1988</td>
</tr>
<tr>
<td>Langley, Billy</td>
<td>Heating, ventilating, air conditioning, and refrigeration</td>
<td>TP 492 .L354 1990</td>
</tr>
<tr>
<td>Whitman, William</td>
<td>Refrigeration and air conditioning technology</td>
<td>TP 492 .W6 1988</td>
</tr>
<tr>
<td>Whitman, William</td>
<td>Refrigeration and air conditioning technology</td>
<td>(ATM) TP 492 .W6 1995</td>
</tr>
<tr>
<td>Althouse, Andrew</td>
<td>Modern refrigeration and air conditioning</td>
<td>(ATM) TP 492 .A43 1996</td>
</tr>
<tr>
<td>Puzio, Henry</td>
<td>Practical heating, ventilation, air conditioning, and, refrigeration</td>
<td>TH 7012 .P89 1996</td>
</tr>
</tbody>
</table>
List of Software on the computers in the ACR lab:

- CATRX Refrigeration and Electricity.
- John Stone’s Refrigeration

Software the ACR program would like to acquire:

- Introduction to Thermodynamics
- How to read basic electrical schematics
- Training for the EPA test 608
- HVAC super tech diagnostic software
- Residential heating and gas software
- Mechanical refrigeration troubleshooting software
- Refrigerant management software
- Nate core test refresher
IV. Learning Outcomes Assessments

[Documented outcomes, degree of faculty participation in regular assessment activities, results of assessments, what has been learned from assessments, what has changed as a result of assessments, what plans are there for changes in the future, are there appropriate feedback loops to improve student learning, ...]

During this 5-year review cycle (2001-2006) the ARC program has participated in a college wide endeavor to move program outcomes from being process oriented to student learning oriented.

Beginning with the 2003-2004 academic year JDCC adopted a 5-column model to record Program Student Learning Outcomes. The ARC outcomes are written in student learning outcome format and contain a means of assessment including a metric benchmark for success. The program has documented use of results in the appropriate column.

The Director of Administration and Personnel was unable to provide the ACR program with documentation of the 2002-2003 cycle.
## 2005-2006 Program Student Learning Outcomes

### Air Conditioning/Refrigeration

**Mission Statement:** Jefferson Davis Community College seeks to provide accessible quality educational opportunities, promote economic growth, and enhance the quality of life for the people of the State of Alabama.

**Goal Statement:** Technical, vocational, and career education to prepare students for immediate employment, retrain existing employees, and promote local and state economic development and competitiveness.

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<tbody>
<tr>
<td>1. Graduates will utilize proper safety procedures when handling hazardous materials.</td>
<td>1a. Using a given task list, 100% of the graduates will demonstrate proper safety procedures when handling hazardous materials with 100% accuracy based on OSHA, state, and local standards.</td>
<td>This program is taught by an adjunct. No data was acquired for the 2005-06 academic year.</td>
<td>The Division Chair has met with the adjunct instructor and emphasized the importance of the assessment of SLOs and the importance of keeping documentation to show that students have achieved those outcomes. The Division Chair has met with the adjunct instructor and helped develop a task list that will be used for grading the student's ability to utilize proper safety procedures.</td>
<td>1. Graduates will utilize proper safety procedures when handling hazardous materials.</td>
<td>1a. Using a task list, 100% of the graduates will demonstrate safety procedures when handling hazardous materials with 100% accuracy based on the ESCO (Educational Standards Corporation) EPA (Environmental Protection Agency) approved safety exam. 1b. Using an instructor developed observation checklist, 100% of the graduates will demonstrate safety procedures when handling hazardous materials with 100% accuracy.</td>
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<tr>
<td></td>
<td>2. Graduates will troubleshoot mechanical problems.</td>
<td>2a. 100% of the graduates will demonstrate the ability to troubleshoot mechanical problems with 80% accuracy when presented with a mechanical problem simulation.</td>
<td>3. Graduates will demonstrate the ability to identify and correct mechanical problems.</td>
<td>4. Graduates will be prepared to enter the work force.</td>
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<td></td>
<td>2b. 100% of the graduates will demonstrate the ability to troubleshoot mechanical problems with 80% accuracy when measured by observations utilizing a checklist.</td>
<td>This program is taught by an adjunct. No data was acquired for the 2005-06 academic year.</td>
<td>3a. 100% of the graduates will demonstrate the ability to identify and correct mechanical problems with 80% accuracy by completing an electrical/refrigerant project.</td>
<td>4a. 85% of graduates will indicate on the Graduating Student Survey that they “agree” or “strongly agree” with the statement, “I am prepared to enter the work force.”</td>
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<td></td>
<td>2c. The Division Chair has met with the instructor to develop a mechanical problem simulation to measure the student’s ability to troubleshoot mechanical problems.</td>
<td>The Division Chair met with the adjunct instructor to develop an observation checklist to assess the student’s ability to troubleshoot mechanical problems.</td>
<td>3b. 100% of the graduates will demonstrate the ability to identify and correct mechanical problems with 80% accuracy as measured by observations utilizing a checklist.</td>
<td></td>
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<tr>
<td></td>
<td>2d. 100% of the graduates will demonstrate the ability to troubleshoot a mechanical problem with 80% accuracy when presented with a mechanical problem simulation.</td>
<td></td>
<td>3c. 100% of the ACR graduates will identify and correct mechanical problems with 80% accuracy by completing a project.</td>
<td></td>
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<tr>
<td></td>
<td>2e. 100% of the graduates will demonstrate the ability to troubleshoot a mechanical problem with 80% accuracy when measured by observations utilizing a checklist.</td>
<td></td>
<td>3d. 100% of the ACR graduates will identify and correct mechanical problems with 80% accuracy as measured by observations utilizing a checklist.</td>
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</table>
4b. 85% of the respondents to an employer written or telephone survey will rate the graduate as "average" to "above average" for the quality of their entry-level occupational skill possessed upon graduation.
TROUBLESHOOTING TASK-LIST

Type of mechanical problem: Shorted compressor

• ____ Shut off power source
• ____ Use volt meter to verify power is off
• ____ Remove wires from compressor
• ____ Take leads from meter and check terminals from compressor to grounds
• ____ Check resistance
• ____ Identify if compressor is shorted
2004-2005 Student Learning Outcomes

Air Conditioning/Refrigeration

Mission Statement: Jefferson Davis Community College seeks to provide accessible quality educational opportunities, promote economic growth, and enhance the quality of life for the people of the State of Alabama.

Goal Statement: Technical, vocational, and career education to prepare students for immediate employment, retrain existing employees, and promote local and state economic development and competitiveness.

<table>
<thead>
<tr>
<th>Program Intended Educational Outcomes</th>
<th>Means of Program Assessment and Criteria for Success</th>
<th>Summary of Data Collected</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates of the air conditioning/ refrigeration program will utilize proper safety procedures when handling hazardous materials.</td>
<td>80% of the graduates will demonstrate proper safety procedures when handling hazardous materials with 100% accuracy according to a given task list based on OSHA, state and local standards.</td>
<td>100% of the graduate students demonstrated proper safety procedures when handling hazardous materials with 100% accuracy.</td>
<td>Continue to measure accuracy using OSHA, state, and local standards.</td>
</tr>
<tr>
<td>Graduates of the air conditioning/ refrigeration program will be technically proficient.</td>
<td>Upon completion of program, utilizing a given task list, 80% of graduates will be able to identify and correct within a given period of time all of the mechanical problems in an assigned electrical/refrigerant project that has been prepared for the students by the instructor with 80% accuracy.</td>
<td>85% of the graduates were able to identify all mechanical problems with 80% accuracy.</td>
<td>Continue to test the graduates with a variety of mechanical problems prepared by the instructor.</td>
</tr>
<tr>
<td>Graduates of the air conditioning/ refrigeration program will be prepared to enter the workforce.</td>
<td>a) 80% of graduates will indicate on the Graduating Student Survey that they “agree” or “strongly agree” with the statement “I am prepared to enter the work force”. b) 80% of the respondents to an employer written or telephone survey will rate the graduate as “average” to “above average” for the quality of their entry-level occupational skill possessed upon graduation.</td>
<td>According to student surveys and employer telephone surveys, 100% of the graduates agreed or strongly agreed that they were prepared to enter the workforce, and 100% employers rated the graduate as average or above average for entry level employment proficiency.</td>
<td>Surveys for graduates and employers will continue to be used as tools to determine if the ACR program is preparing students for entry level employment.</td>
</tr>
</tbody>
</table>
Planning Unit 3.3: Air Conditioning and Refrigeration

Unit Mission Statement: The mission is to provide learning opportunities that lead to entry-level employment.

Institutional Mission/Goal Reference: Technical, vocational, and career education that prepares students for immediate employment, retrains existing employees, and promotes local and state economic development and competitiveness.

<table>
<thead>
<tr>
<th>Administrative Objectives</th>
<th>Means of Assessment and Criteria for Success</th>
<th>Summary of Data Collected</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>To work with the committee in finalizing the new competency based curriculum for ACR.</td>
<td>A review of the curriculum indicates revision completed by the beginning of Fall Semester 2004.</td>
<td>The curriculum has been completed and the process of implementation is underway.</td>
<td>All students will be enrolled under the new curriculum by the end of Summer Semester 2005.</td>
</tr>
<tr>
<td>Add a minimum of three computers to the ACR lab.</td>
<td>By mid-term Summer Semester 2004, computers will be installed and operational.</td>
<td>Computers were not purchased due to funding constraints.</td>
<td>Continue to seek funds for computers in the ACR lab.</td>
</tr>
<tr>
<td>Purchase much needed HVAC tools and equipment for the program.</td>
<td>By Fall 2004, tools and equipment will be purchased.</td>
<td>Some tools have been purchased and others will be purchased as funds are made available.</td>
<td>The new tools are being used in the ACR lab.</td>
</tr>
</tbody>
</table>

Other Improvements:
4.2.3: Air Conditioning and Refrigeration

Goal 4.2.3a
To prepare students for entry level employment in the air conditioning and refrigeration field.

Objective:
Student successfully completing the air conditioning/refrigeration program will be able to:

To apply shop safety rule and procedures

To bend, fit, soft solder and braze the type of tubing

To repair and service basic compression refrigeration

To troubleshoot and perform basic electric and repair/replace electrical components

To draw basic schematic wiring diagrams

To adjust, test, install, service and repair window air conditioners

Effectiveness Standard: 80% of the graduates will attain entry level employment

Performance Measure: Practical application, oral and written exams

Assessment Results: 80% are employed in the field of air conditioning or a related field.

Use of Results: Placement of graduates will become a priority. A closer relationship with employers will be priority as well.

Goal 4.2.3b. To provide an ACR program that enables students to acquire advanced skills that will enhance employment opportunities.

Objectives:
The student will be able to:

To install, service and repair residential, commercial and industrial air conditioners.

To install, service and repair electrical and gas heating.

To install, service and repair heat pumps, solar and hydroponics.

To install, service and repair special systems (ice machines, water coolers, and dehumidifiers).

Effectiveness Standard: 80% will demonstrate that they have acquired the necessary skills to perform advance operations.

Performance Measure: On-the-job training, practical application, written and oral exams

Assessment Results: 100% of the graduates demonstrated advanced skills.

Use of Results: To continue with the same instructional methods.
V. Student Success

A. List graduate and completer rates for last five years

See listing in Section 4 of Program Review portfolio.

B. Survey Results

During the self-study process it was noted that the program files only contain the 2002-2003 graduate survey results.

C. Graduate Performance

Graduate performance surveys have been done on an informal basis by phone and at craft committee meetings. Both graduates and completers have found employment in the ACR industry.

D. What additional data that is currently not available would have been helpful to effectively evaluate this area of the program?

Results of all graduate surveys for program review cycle.

**GOAL:**

- Immediately take steps to assure that graduate surveys are completed, analyzed on a timely and consistent basis, and results maintained for the entire program review cycle.
V. Student Success

The program will use profiles received from the Registrar and information maintained by the program to evaluate the success rates of its students.

A. Graduates and Completers

List graduate and completer rates for last five years
(Use information obtained by reviewing program records and official information from the Registrar’s office.)

Student Profile for Graduates, positive leavers, alternate completers

<table>
<thead>
<tr>
<th>Year of Review</th>
<th>Total Students</th>
<th># Graduates*</th>
<th>#Positive Leavers**</th>
<th>#Alternate Completers***</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>38</td>
<td>2</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>2002-03</td>
<td>31</td>
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<td>2003-04</td>
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<tr>
<td>2004-05</td>
<td>24</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2005-06</td>
<td>31</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Graduate – individual who exits a career/technical program having successfully completed all requirements for program graduation or completion.

** Positive Leaver – leaver who has accomplished his or her goal for program enrollment.

*** Alternate completer – individual who meets alternate completer criteria established in program viability legislation (complete 15 semester hours in-field and working full-time in field.)
**Air Conditioning and Refrigeration**

**Total - 8**

This survey is being conducted in an effort to evaluate the educational programs and services provided by JDCC. Please indicate your responses by checking one of the following options: **A = Agree**  **D = Disagree**  **O = Not applicable or do not have an opinion**

<table>
<thead>
<tr>
<th>Statement</th>
<th>A</th>
<th>D</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>The college helped you meet your original educational goal.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>I am satisfied with the quality of instruction received.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>My academic advisor was available to assist me with scheduling of appropriate courses during pre-registration, registration and drop/add.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I am satisfied with the quality of advising received.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The Student Affairs personnel provide prompt, efficient courteous service.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>After applying for admission, I received information from the Registrar’s office concerning student orientation, registration and Asset placement testing.</td>
<td>87.5%</td>
<td>12.5%</td>
<td>0%</td>
</tr>
<tr>
<td>I used the services of the Financial Aid office and found the personnel to be efficient and helpful.</td>
<td>75%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Use of technology has improved my learning.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>My vocational/technical program’s facilities and equipment were acceptable to prepare me to enter the workforce.</td>
<td>87.5%</td>
<td>12.5%</td>
<td>0%</td>
</tr>
<tr>
<td>My vocational/technical program activities and labs helped me to achieve my educational goals.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>After completing my vocational/technical program, I am prepared to enter the workforce.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I have appropriate technology skills needed for transfer or for the workforce.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>My instructor has offered assistance with job placement.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>New Student Orientation was informative, helpful and appropriate in introducing me to college policies, procedures, personnel and activities.</td>
<td>75%</td>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td>My academic advisor was available to assist me with scheduling of appropriate courses during pre-registration, registration, and drop/add.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>College facilities are comfortable, pleasant, and conducive to learning.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>The library has sufficient materials to support the curriculum.</td>
<td>62.5%</td>
<td>0%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Pre-registration/registration procedures are satisfactory.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Materials/supplies in the College’s bookstore are adequate.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>I felt the developmental class(es) that I took prepared me for my upper level courses.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>The Counselor helped meet the needs of students.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>The opportunity to participate in a variety of extracurricular activities is available.</td>
<td>75%</td>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td>Student activity offerings (programs, clubs, and athletic events) are satisfactory.</td>
<td>37.5%</td>
<td>0%</td>
<td>62.5%</td>
</tr>
<tr>
<td>College administrators are accessible to and supportive of students.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The class schedule provided courses I needed at convenient times.</td>
<td>87.5%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>I have reached the educational goal(s) I desired due to the instruction and assistance I have received from faculty and staff.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The College provides adequate assistance to students requiring help outside the classroom setting. (tutoring, career awareness activities, etc.)</td>
<td>62.5%</td>
<td>0%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Overall, I am satisfied with the services provided by the student affairs personnel. (Registrar’s office, financial aid, counseling, testing, dean’s office.)</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall, I am satisfied with the instruction provided</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I would recommend JDCC to a friend or family member.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Recommendations for improving services to future students in your program major:** See attached recommendations

**Additional Comments:** See attached comments

Thank you for your participation in this survey.
We wish you every success in your future endeavors!
VI. Focus on Faculty and Staff

A. Demographics
   [Demographics of faculty and staff, full-time and part-time, faculty]

   See Section 6 of Program Review Portfolio.

B. Professional Activities
   [Special projects, reassigned time, professional organizations, grants, partnerships, publications, presentations, other contributions for last five years]

   The ACR instructor is an adjunct who is self employed in the ACR industry. His company is recognized as one of the fastest growing and dependable new ACR companies in the state. Their resume is included in Section 6 of the Program Review Portfolio.
VI. Focus on Faculty and Staff

The program will use the table below to record the number of faculty employed by the college for the program. Documentation may also be obtained from the business office for this purpose.

A. Demographics

[Demographics of faculty and staff, full-time and part-time, faculty]

<table>
<thead>
<tr>
<th>Year of Review</th>
<th>Full-time Faculty</th>
<th>Part-time Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2002-03</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2003-04</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2004-05</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
VII. Focus on Curriculum

A. Summary of Program Curriculum
   [Degrees, certificates, sequences of courses]

   (Attach a copy of the degree plan obtained from the Registrar's office)

B. Curricular Issues
   [Articulation, program development, course development, syllabi of
   courses with embedded speech and computer – may not be applicable to
   all programs, four additional syllabi]

   The ACR program utilizes the postsecondary preferred POIs. The
   student is given a copy of the POI at the beginning of the semester. The
   POI contains an outline of what the student will be doing in class and in
   lab for the entire semester. Of course, the POI is modified as needed.
   Each POI has a cover letter with the following information:
   - Name of course
   - Dates and times of class
   - Instructors name, telephone number, and e-mail address
   - Grading scale

C. Scheduling
   [Enrollment patterns and trends; time and date issues such as day,
   afternoon, evening, or weekend, format issues such as self-paced, distance,
   or short-term; …]

   The ACR program, like other short certificate programs, would like to
   offer more courses. The maximum for a short certificate program is 29
   cr. hrs. and this is a very short time to produce quality technicians. It
   would be good to make this a full-time program offering both short and
   long certificate.

D. Innovations or Changes in Last Five Years

   The program will emphasize any innovations and/or changes made since the last
   program review.

   [New issues, significant changes, improved methodologies, …]
1. Innovations made to meet industry standards.

*The curriculum has undergone a major overhaul. ACR instructors from across the state developed a curriculum that is industry based. The program has an adjunct instructor that is academically and professionally qualified to teach.*

2. Changes made because of a past review

*The catalog is accurate concerning credit hrs. and contact hrs. Closer contact with the advisory committee. The program now has internet access.*

3. Other: *The addition of a classroom outside of the lab.*
VIII. Focus on Community

A. Craft/Advisory Council

[Craft/Advisory Councils’ composition and input, number of Advisory Council meetings during the last five years, degree to which the Advisory Council reviews the competencies of the degree or certificates and program courses, timeframes for last reviews, other functions or activities of the Advisory Council, …]

The advisory committee for ACR meets formally one time per year and informally by way of telephone, e-mail, etc., as needed. The former adjunct instructor kept the minutes of the meetings for years 2001-02, 2002-03, 2003-04. The only documentation we can acquire would be for 2004-05, 2005-06.

B. Community Groups

[High school connections, community agency connections, other forms of community involvement, …]

As an adjunct, the instructor has little involvement outside the classroom. The program is open for tours during Tech Prep focus on technical education. The program is also open and a representative of the technical division is available for questions on the day eighth graders tour the Atmore campus.
C. Community Issues Related to Program

[Trends, employment trends or projections, transportation, funding]

The ACR industry remains a growing industry with a high demand for skilled technicians

D. External Requirements or Considerations

[Certifications, accreditations, licensures, professional organization status or involvement,]

Non-applicable

E. What additional data that is currently not available would have been helpful to effectively evaluate this area of the program?

None
ACR CRAFT COMMITTEE MEMBERS

- Daryl Chunn (South Alabama Gas)
- Wade Guess (Wittichen Supply Representative)
- Brandon Snider (Business Owner)
- Dion Williams (Subway Franchise Owner)
SUBJ: Craft Committee Meeting

Met with Mr. Williams and Mr. Chunn at Subway in Atmore

Old business
- Mr. Shaughnessy stated that he had received quotes from Climatic, Whitichen and M and A supply on equipment for the classroom.
- Mr. Shaughnessy stated that he had not implemented the 410a topic into the program yet.
- Mr. Shaughnessy stated that a recruiter for the college was handling all the ACR recruiting.
- No more old business at this time

New business
- Mr. Williams wanted to know what test equipment we had to introduce to the students.
- Mr. Shaughnessy stated that we were limited on the test equipment that the class had but he would look into it and get some quotes.
- Mr. Chunn asked if we were currently using the newest addition of text book.
- Mr. Shaughnessy stated that we were still using the older addition because he still had students with that addition and would change over when they are gone.
- Mr. Shaughnessy also made a comment about the class project. Which was the installation of a system and ductwork in the classroom. He said that it went very well and that the students really came away with a lot of understanding on how the equipment worked in conjunction with the duct work
- Mr. Chunn suggested that we have more practical models. Have different parts of the system laid out on plywood
- No further new business at this time
SUBJ: Craft Committee Meeting

Made contact with Mr. Williams by phone

Old business
   - No old business

New business
   - Mr. Williams recommended that we look at getting some split units in the classroom for hands-on experience.
   - Mr. Shaughnessy suggested that we get a variety including heat pumps, gas furnaces, and straight cool systems.
   - Mr. Shaughnessy and Mr. Williams discussed adding a 410a topic to the program.
   - Mr. Williams wanted to know about recruiting new students to the ACR program.
   - No further new business at this time
ADVISORY COMMITTEE MEETING

NOV. 15, 2005

A division wide advisory committee meeting was held on the Atmore campus. ACR advisory committee members, Mr. Chunn and Mr. Williams attended. Guest speaker Ms. Marshall Rogers spoke on civic action and being involved with your community. The committee met separately and discussed the textbooks, software, curriculum, and how all of it related to preparing the student for entry level employment. The members all felt like new and more modern equipment was needed in the program to keep up-to-date with changes in the ACR field. The members all promised to help with recruiting and employment once the student graduates. Meeting adjourned at 8:15 pm.
IX. Summary

The program is required to submit a list of recommendations or commendation from the last program review with the completed portfolio.

A. Program Achievements, Progress Made Since Last Review

1. Major achievements, changes, implementations, progress made since the time of the last review

*Updated curriculum*

*Internet access*

2. Discuss the recommendations if any from the previous program review and the action that has been taken

*The catalog program description and credit hour/contact hour ratio has been corrected. The students have internet access through use of the Aitmore library. The instructor has internet access in his office. The advisory committee is meeting and is involved in the program.*

B. Strengths

[Unique characteristics, special capacities, …]

*The instructor is well qualified to teach.*

*The program is available to students that work during the day.*

*A certificate can possibly be earned in three semesters.*

C. Challenges

[Concerns, difficulties, areas for improvement, …]

*More training equipment such as ac units, heat units, heat pumps, etc. are needed.*

*Full time classes would be a plus.*

D. Celebration and Recognition

[Awards, honors, special recognitions, …]

*None at this time.*
X. Future Direction

A. Long and Short Term Planning and Recommendations

Recommendations and plan for improving student learning/program. Non-fiscal (Plan for making improvements that does not involve budgetary decision-making.) If additional faculty or staff is recommended, please include a detailed analysis of cost, FTE information, and justification. If a report includes recommendations that involve budget decisions, the program must be responsible for taking the request through the appropriate budget process during the following year.

a. Short Term (1 to 2 years)

*The lab on the Atmore campus could house several heat pump units if the funds to acquire them were made available. This could happen through Federal Vocational Funds. Outside AC compressor units to accommodate the inside units would also be needed. These too could be obtained through the courtesy of Mr. Carl Perkins.*

b. Long Term (Estimated time?)

*In the next five years, the ACR program should be ready to be offered full time. This would mean the addition of a full-time instructor. The program then would be offered to conventional, 7:30 AM-3:00 PM students, as well as the non-conventional, evening student.*
Additional supporting documentation is included in this program review. Program Review can be viewed in the Dean of Instruction's Office.