

# Western Student Learning Results (Program Outcomes) for 2011

Source: Student

# of Grads: 7

# of Responses: 4

Program: Air Cond, Heat, & Refrig Tech

| Outcome                                   | Yes       | No | Unk | NA | Result | Feedback  |
|---|-----------|----|-----|----|--------|---|
| What did you like about this program?     | 4 100.00% | 0  | 0   | 0  |        |   |
|   |           |    |     |    | Yes    | I liked the hands on labs. I thought the troubleshooting portions were realistic, and beneficial. The program is up to date with the industry.  |
|   |           |    |     |    | Yes    | It was great the wide range of hands on material that is in the HVAC lab. The class scheduling (Fridays and Mondays off during certian semesters) was beneficial to me with work and other things in life. The classes were good and informational, without being overwhelming.   |
|   |           |    |     |    | Yes    | I liked just about everything about the program   |
|   |           |    |     |    | Yes    | I appreciated the level of expertise that each instructor was able to bring to the program. I believe this allowed them to develop a well structured curriculum.<br>Though the classroom work was absolutely essential, being able to put classroom knowledge to work with hands-on training in the labs was the most beneficial.<br>As a whole, I enjoyed the program very much; especially the instructors' positive attitudes toward training and their continual concern for our success. |
| What would you change about this program? | 4 100.00% | 0  | 0   | 0  |        |   |
|   |           |    |     |    | Yes    | more time to study the information its alot to take in  |
|   |           |    |     |    | Yes    | Some classes in the final semester needed more structure. We were not experienced enough to just run with certain subjects. We would gain more if there was more structure.   |
|   |           |    |     |    | Yes    | Near the end of this last semester, there was too many projects going on at once. There was too much too do in lab, without enough guidelines to keep me on the correct track. It was too easy to get behind in the projects, confused or lost.   |
|   |           |    |     |    | Yes    | With the larger amount of students, it was sometimes difficult for everyone to complete all projects in a timely manner. Also, it was indicated that program changes were recently being made and time appeared to be an issue.<br>Some of the equipment appeared to be a little outdated. The ability to work on updated equipment in those ares of the labs would have been beneficial.   |
| Use effective communication skills.       | 4 100.00% | 0  | 0   | 0  |        |   |
|   |           |    |     |    | Yes    | I think yes   |
|   |           |    |     |    | Yes    | The knowledge and skills I have gained from the program will allow me to effectively communicate with others in my field.   |
|   |           |    |     |    | Yes    | I feel I have learned alot, and have developed better communication skills in the HVAC field as well as the rest of life.   |
| Apply mathematical concepts.              | 4 100.00% | 0  | 0   | 0  |        |   |
|   |           |    |     |    | Yes    | the math was hard but nessary   |

| <b>Outcome</b>  | <b>Yes</b> | <b>No</b> | <b>Unk</b> | <b>NA</b> | <b>Result</b> | <b>Feedback</b>   |
|---|------------|-----------|------------|-----------|---------------|---|
| Transfer social and natural science theories into practical applications.                 | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | Teamwork is an essential skill as well as practical applications such as troubleshooting. Both were stressed throughout the entire curriculum.  |
|   |            |           |            |           | Yes           | Taught me to think of the consequences that everything has on society as well as nature.  |
|   |            |           |            |           | Yes           | very much so  |
| Demonstrate ability to think critically.  | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | This is something that has helped me alot. I have learned to think critically and to really focus as well as thinking through problems instead of giving up on them or getting assistance right away. |
|   |            |           |            |           | Yes           | yes thinking on your feet is big part of doing a good job   |
| Demonstrate ability to value self and work ethically with others in a diverse population. | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | yes I met alot of good people in this corse   |
|   |            |           |            |           | Yes           | There were alot of different personalities in the classes, and had to work with all of them. It helped to build patience as well as respecting others ideas.  |
| Use technology effectively.   | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | Great lab excersises, many different equipment to work on and familiarize myself with.  |
|   |            |           |            |           | Yes           | The skills gained will allow us to use current technology, though in some applications updated equipment would be beneficial.   |
|   |            |           |            |           | Yes           | still working on that   |
| Make decisions that incorporate the importance of sustainability                          | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | Ithink this is a must in todays job market  |
|   |            |           |            |           | Yes           | Work with nature, not against it.   |
| Install HVACR systems.  | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | More practice and applications may be necessary, but the skills gained in the program will give us a good basis to better grasp installation once in the field.                                       |
|   |            |           |            |           | Yes           | I learned alot I didn't know about installing equipment.  |
|   |            |           |            |           | Yes           | need more lab time  |
| Service HVACR systems.  | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | I learned much about servicing systems.   |
|   |            |           |            |           | Yes           | need more lab time  |
| Repair HVACR equipment  | 4 100.00%  | 0         | 0          | 0         |               |   |
|   |            |           |            |           | Yes           | I knew zero about HVAC systems before this program, and I feel very confident on working with them.   |
|   |            |           |            |           | Yes           | more lab would be good  |

| <b>Outcome</b>                             | <b>Yes</b>        | <b>No</b> | <b>Unk</b>   | <b>NA</b> | <b>Result</b> | <b>Feedback</b>   |
|--|-------------------|-----------|--------------|-----------|---------------|---|
| Troubleshoot HVACR systems.                | 4 100.00%         | 0         | 0            | 0         | Yes           | same more lab time in 2nd year  |
| Analyze HVACR systems.                     | 4 100.00%         | 0         | 0            | 0         | Yes           | some but not enough   |
| Evaluate building systems and plans.       | 4 100.00%         | 0         | 0            | 0         | Yes           | enough for entery level work  |
| Design HVACR systems.                      | 4 100.00%         | 0         | 0            | 0         | Yes           | The design portion needed more structure to allow students to take more knowledge away from it. |
|  |                   |           |              |           | Yes           | Designing was something that was hard to keep on track with all the work.                       |
|  |                   |           |              |           | Yes           | We have developed a strong base in which to grow from once in the design field.                 |
|  |                   |           |              |           | Yes           | the basics  |
| <b>Aggregate Assessment of Achievement</b> | <b>64 100.00%</b> | <b>0</b>  | <b>0.00%</b> | <b>0</b>  | <b>0</b>      |   |