

The Instructional (Academic Affairs) Program Review Narrative Report

1. College: *Laney College*

Discipline, Department or Program: *Carpentry*

Date: *11/12/12*

Members of the Instructional Program Review Team:

Cynthia Correia Dept Chair, Marie Kline P/Tfaculty

2. Narrative Description of the Discipline, Department or Program:

The mission of the Carpentry Department at Laney College is to train and prepare students for careers in the construction industry, either as employees or as General Contractors. Our students are trained in Green Building methods and technologies as well as weatherization and energy efficiency. Our program is designed to allow entry-level students and people already working in the industry to learn the fundamental and upgrade their skills in the construction of new residential homes and in the remodeling of existing homes. Our goal is to prepare students for advancement within the building sector such as advanced manufacturing and 3D modeling.

Our off campus program is a partnership with The City of Oakland and The Oakland Rotary to builds energy efficient green homes in the Oakland community which are sold to low or moderate income families.

See Attachment A for the overview of the Priorities and Goals of Laney College.

3. Curriculum:

- a. Is the curriculum current and effective? Have course outlines been updated within the last three years?

Currently the curriculum is not as current as it needs to be. We are currently revamping the degree and the certificate program. The content is being shifted and reevaluated to address changes and future predictions of the industry.

Course names and descriptions are being redrafted to be more marketable and descriptive of the actual content.

- b. Please indicate how many active courses are in the department inventory.

17

- c. How many of those have been updated in the last 6 years?

3 but we are currently updating 5 others, as well as writing 2 new courses.

- d. If courses have not been updated within the last 6 years, what plans are in place to remedy this?

The entire curriculum is being upgraded.

- e. Has your department conducted a curriculum review of course outlines? If not, what are the plans to remedy this?

We are currently conducting curriculum review.

- f. What are the department's plans for curriculum improvement (i.e., courses to be developed, updated, enhanced, or deactivated)? Have prerequisites, co-requisites, and advisories been validated? Is the date of validation on the course outline?

We are requiring prerequisites CARP 207 for both Stairs 230 and roofs 231

We are requiring co-requisites for Safety 203 that applies to all courses

We are adding Sketch-up for the building trades

We are adding Alternative Building Methods

We are adding Kitchen Design and Remodeling to replace Construction Rehab 240A

We are adding Bath Design and Remodeling to replace Construction Rehab 240B

- g. What steps has the department taken to incorporate student learning outcomes (SLOs) in the curriculum? Are outcomes set for each course? If not, which courses do not have outcomes?

All courses have SLO's aligned and outcomes are set for each course.

- h. If applicable, describe the efforts to develop outcomes at the program level. In which ways do these outcomes align with the institutional outcomes? (Note: if your department has no certificate or degree offerings and does not offer a course as part of one of the College's associate degree programs, then skip questions 3.h.

- i. and 3.i.)

The goals of the program align with the ILO's for CTE (paste CTE ILO)

Laney College CTE Institutional Learning Outcomes (ILOs)

Career Technical Education

Students will demonstrate technical skills in keeping with the demands of their field of study.

Global Awareness, Ethics and Civic Responsibility

Students will be prepared to practice community engagement that addresses one or more of the following: environmental responsibility, social justice and cultural diversity.

Personal and Professional Development

Students will develop their knowledge, skills and abilities for personal and/or professional growth, health and well being.

- j. Provide one program level outcome (PLOs), and the assessment tool that will be used to measure the program level outcome this fall 2012 and spring 2013.

Students will communicate effectively in the technical language of the construction trades including written verbal and math computation skills.

This is assessed utilizing a rubric used to analyze planning documents and skills

- k. How are the SLOs and PLOs, if applicable, mapped to the college's Institutional Learning Outcomes? (See Attachment B for copy of the Laney College Institutional Learning Outcomes (ILOs))

They are currently aligned with the ILO's and will soon to be mapped

- l. Recommendations and priorities.

See Attachment C for listing of the courses in your discipline/department. If applicable, this document also lists the certificate and degree programs offered. Be sure to check the appropriate boxes and submit completed forms as part of this Program Review.

4. Instruction:

- a. Describe effective and innovative strategies used by faculty to involve students in the learning process. How has new technology been used by the department to improve student learning?

We have been utilizing 3D models from sketch up to allow students to further understand building projects.

We are also teaching how to build a cottage on a trailer, called the Dandelion Project. Students are involved in the entire process from the design and the specifying of materials to the construction of the project. By teaching on such a small scale, students are able to understand the entire process of a construction project.

- b. How does the department maintain the integrity and consistency of academic standards within the discipline?

Instructors are continually observed by other instructors in the department to ensure that we maintain continuity throughout our discipline and that construction standards are maintained. Department meetings are held to discuss the needs, concerns and outcomes in the department. Students needs and SLO's are addressed.

- c. Discuss the enrollment trends of your department. What is the student demand for specific courses? How do you know? Identify factors that are affecting enrollments.

We have seen a spike in enrollment in 2011 due to a series of grant funded programs, if we are to remove the added student enrollment from the grants, our enrollment numbers have only dropped slightly. This is in large part due to the current economic environment and the downturn in the construction industry. Additionally at the beginning of the last semester we had discovered that the counseling department was informing students that our classes were full when that was not the case. This led to a number of students being turned away from our department.

We are currently revamping our program curriculum to address ambiguous titles. An example of this is Elements of Construction 211, this course will be called Beginning Carpentry. Advanced Elements will become Finish Carpentry. This will clearly lead new students to the proper courses.

We will be adding new courses that reflect the type of hiring in the construction industry

**Kitchen Remodeling and Design*

**Bathroom Remodeling and design*

**Advanced Building Technology (energy efficiency, materials and methods of construction*

**Sketch up for the Building trades (3- d modeling to be used cross curriculum with wood tech, welding, Architecture and Machine Tech)*

**Math for the building Trades*

**Construction Safety*

We are currently revamping the names of our classes as well as the course descriptions to better explain the content of the courses. We anticipate that this will increase enrollment numbers. Students have been asking for these classes for the past three years.

Students have requested a basic construction math course to get them ready to take the A.S required math. The certificate will only require the basic math course Industry has approached the Carpentry department to teach fundamentals of advanced building manufacturing and we will look into developing a course in this area to train an existing and new work force that will create jobs for developing West Oakland with Advanced Building practices.

- d. Are courses scheduled in a manner that meets student needs and demand? Please describe the criteria and considerations used in the scheduling process.

We believe that our courses are scheduled to meet the student needs and demands.

In the future we may add more night courses to meet demand. We will outline the semester sequence of class offerings.

Recommendations and priorities.

Pre-requisites were assigned to some classes, The Safety course was made a co-requisite to our curriculum.

5. Student Success:

- a. Describe student retention and program completion (degrees, certificates, persistence rates) trends in the department. What initiatives can the department take to improve retention and completion rates?

The figures say that we have lost students over the last few years but this drop is due to grant related student populations that are short term. In relation to the regulars student population are numbers reflect the down turn in the economy.

We have decided to require Math for the construction trades as a certificate requirement. This will give our students the necessary math skills to complete the math 201 A.S requirement for the A.S degree.

- b. Identify common challenges to learning among your students? What services are needed for these students to improve their learning? Describe the department's efforts to access these services. What are your department's instructional support needs?

Students were only completing the certificate and not as many were completing the degree. We believe that this is due to the long amount of time and accessibility to math 201 a-h requirement for the A.S degree. We have spoken to the Math department and have asked that they develop a lecture Math 201 that can be completed in one semester rather than in 2 years (lab only self paced and not offered as much because of cuts) rather than in 8 separated self driven labs. This class would be cross curriculum for the Welding, Wood Tech and Carpentry programs. Mostly students getting their degree usually can test out of the Math 210 component with higher math, this shortens the length of time needed to finish their degree.

Describe the department's effort to assess student learning at the course level. Describe the efforts to assess student learning at the program level. In which ways has the department used student learning assessment results for improvement?

Instructors give examination

- c. Recommendations and priority
-

Embedded safety test used for assessment in all department courses. All student must pass .

Carpentry Department Safety Test

True and False:

- T F 1. Hard hats must be worn whenever students are working out at the site or in the yard at school.
- T F 2. Most power tools do not reach high enough decibels to damage hearing.
- T F 3. It OK to wear gloves while using power tools.
- T F 4. Always wear gloves when using chemicals.
- T F 5. Because the ozone is depleting, it is wise to protect your skin form the sun to avoid getting skin cancer.
- T F 6. Construction workers are never exposed to toxic chemicals.
- T F 7. Sandals are acceptable footwear in the construction industry.
- T F 8. Paper dust masks will protect you from fumes and dust.
- T F 9. It not necessary to wear any safety gear that you feel un-cool wearing.
- T F 10. Wood dust is carcinogenic (causes cancer)
- T F 11. If you wear a back brace you can lift a lot heavier load with out injury.
- T F 12. It is unsafe to use power tools while wearing bracelets, rings, watches, necklaces, hoodie ties, other dangling objects and long uncontained hair.
- T F 13. Baggy clothes are more comfortable and therefore safer to wear while doing construction work.
- T F 14. Kickback is caused by the back of the blade getting pinched or by it rubbing the wood.
- T F 15. The use of alcohol and drugs is dangerous on a job site.
- T F 16. Not getting enough sleep is a work hazard.
- T F 17. To keep yourself and those working around you safe it is important to stay focused on your work and not allow anger or frustration to get the best of you.
- T F 18. Always stand out of the path of the kickback.
- T F 19. Always unplug a power tool to make adjustments.
- T F 20. Safety glasses/ goggles should always be worn when using power tools.
- T F 21. Sawzall blades get dull, but never break.
- T F 22. The minimum distance your fingers may be from the tablesaw blade, without a push stick, is 2"
- T F 23. When using a nail gun, you and anyone within 10 ft should be wearing safety glasses.
- T F 24. The safety guard on a nail gun makes it so that it is not possible to fire a nail by accident.

T F 25. If an electrical breaker has been turned off on a job, go ahead and turn it back on, just don't plug too many tools in on that circuit.

Matching:

- 26. Hard hats
- 27. Safety glasses/goggles
- 28. Prescription glasses that are ANSI Z87.1 approved

b. Protect your head from falling objects and bumping your head.

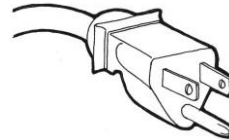
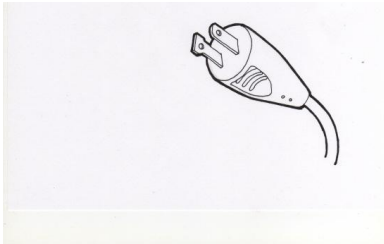
c. Protect your vision from flying wood & metal chunk

Circle the correct answer:

29. Circle the picture of correct lifting technique.



30. Circle the picture of the plug with a ground prong



31. The safe Ratio for the angle of a ladder leaning against a wall is:

- 1:2 1:3 1:4 1:5 (circle one)



Short answer:

- 32. How many decibels are allowed before hearing protection should be worn?
- 33. List 2 ways to protect your skin from the sun:
- 34. What 2 power tools, in carpentry, have the most danger from Kickback?
- 35. With a skill saw how much below the work piece is it safe to have the blade protrude?
- 36. When using a table saw, how much is the blade permitted to stick up above the work piece?
- 37. What is the # 1 Rule of electrical safety?

Outcome of assessment sample.

100% of students have passed with 3 or fewer missed problems.

Please either embed or attach data that you will be referencing. Use the Program Review data applicable to your department supplied by your Dean. In addition, the following link, (<http://web.peralta.edu/indev/research-data/documents/>), will take you to more data that you may find helpful as you study the overall efforts and impact of your unit. See the appropriate tab in attachment C referencing the assessment data.

6. Human and Physical Resources (including equipment and facilities)

- a. Describe your current level of staff, including full-time and part-time faculty, classified staff, and other categories of employment.

**We have (1) full time position with another one that will be filled by Fall 2013.*

**We currently have (6) part time staff, which will drop dramatically once the vacant full time position is filled.*

**P/T staff for Fall 2013 - 3*

**We have (1) part time support staff position funded by Perkins Funds that assists in the management of both onsite and offsite projects, managing ordering and deliveries and providing technical assistance to all faculty. We plan to continue in our next Perkins Grant*

- b. Describe your current use of facilities and equipment.

We have our lab space, (1) classroom and the outdoor carpentry canopy. The classroom is strictly used as a lecture space. The lab is used for both lecture and lab instruction and the outdoor carpentry canopy is used for multiple hands on construction projects for all of our classes.

- c. Are the human and physical resources, including equipment and location, adequate for all the courses offered by your department (or program)? What are your key staffing and facilities needs for the next three years? Why?

Currently our human resources are adequate, but once our new full time position is filled, we will lose some of the value that is provided by having a diverse faculty. We are exploring the possibility of teaching advanced manufacturing as it relates to the built environment. This will require either new training for our existing faculty or the need to bring on new part time faculty to teach these techniques.

In order to grow in the direction of advanced building manufacturing, we will need to acquire new robotic manufacturing equipment as well as a space large enough to house this equipment and teach these skills.

- d. If your department experienced a reduction in resources, describe the impact of that reduction on the overall educational quality of your unit and the College.

Every year for the past few years our operating budget has been cut. Since our department is very focused on hands on learning, we require quite a bit of material resources. Even though we have been able to adapt to fewer funds being available, it makes the learning experience less rich for students.

- e. How does the department plan to sustain the quality of instruction and/or services offered through your department in the current environment of reduced resources?

We currently partner with outside companies and organizations and are seeking new opportunities to expand this type of arrangement.

- f. What does the department recommend that the college do to maintain quality educational programs and services?

We would like to encourage the college to focus on cross departmental relationships, as this collaborative learning environment helps students to gain a much more valuable experience.

- g. Please provide any other recommendations and priorities. (Use the appropriate request forms within Attachment D.)

7. Community Outreach and Articulation

For Career and Technical Education Programs:

- a. Describe the department's connection with industry. Is there an Advisory Board or Advisory Committee for the program? If so, how often does it meet? Is the program adequately preparing students for careers in the field? How are you assessing this?

The Advisory Committee meets on a monthly basis we will be adding members to this committee in the areas of future growth. Each time a employer call or emails regarding a position we ask for a minimum and maximum qualification guideline. We feel that our program meets industry demands and qualification because we our student meet these qualifications for these jobs and getting hired.

- b. Have students completing the program attained a foundation of technical and career skills? How do you know? What are the completion rates in your program?

Our completion rates are 63%. They are skewed because almost 50% of students graded of were in cohorts that were not part of the A.S program. Therefore it makes our success rate look average when actually we are doing better.

Yes students completing our program have attained a foundation of technical and career skills because they are capable of building and repairing residential homes using healthy and sustainable practices that conserve energy and maintain efficiency. We are able to test air leakage and indoor air quality many of our students have gone on to get contractor licenses. Our program has a great reputation for training student in a broad spectrum of up to date construction practices.

- c. What are the employment placement rates? Include a description of job titles and salaries. What is the relationship between completion rates and employment rates?

<i>Carpenter</i>	<i>\$27-\$35 hrly</i>
<i>Foundation / Exterior Contractor</i>	<i>\$75-\$125 hrly</i>
<i>Building and Finish Contractor</i>	<i>\$75-\$125</i>
<i>Roofing Contractor</i>	<i>\$75-\$125</i>
<i>Specialty Contractors</i>	<i>\$75-\$125</i>
<i>Building Inspector</i>	<i>\$35 hrly</i>
<i>Construction Manager</i>	<i>\$53 hrly</i>
<i>Construction Superintendant</i>	<i>\$36 hrly</i>

Finally, this year the construction rates are going up with the prospect of our economy strengthening and changing for the better. According to bay area Grubb Real Estate Company residential property is now selling over asking price and the real estate market is recovering steadily.

What are the employment projections (numbers of replacement and new positions) for these job titles over the next 10 years using the California Employment Development Department Labor Market Information? (<http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1004> , and <http://www.laney.edu/wp/educational-master-plan/2010-educational-master-plan/> for the Laney College Educational Master Plan, Chapter II, pps. 18-30.)

Construction employment is expected to rise by 16%. Work in the residential and in the commercial sector will need a better trained workforce to ensure sustainable environmental and energy demands. We are seeing a push for advanced manufacturing in the building trades. We were approached by a Swiss Advanced Manufacturer of commercial buildings regarding teaching courses in advanced building manufacturing. They plan on partnering with the West Oakland Redevelopment Agency to build in West Oakland and will need a trained workforce in order to do so.

- d. What industry trends are most critical for the future viability of the program? What are the implications of these trends for curriculum development and improvement?

Industry trends are for healthier and more sustainable construction along with energy efficiency. Passive House building of airtight homes and high efficiency are becoming more popular in the United States. The PH East coast is teaching craftsmen how to build homes with these high energy savings. They are looking for a West coast PH Craftsman training and have asked Laney Carpentry to consider this option. We are currently studying the viability of this and have included it in our Perkins grant. This week we will be meeting with industry leaders at the Green Build Conference in San Francisco. We plan on building the first Passive house in Oakland, Ca starting Spring of 2013. Advanced Building manufacturers will be meeting with the City of Oakland and Laney College in the new year to discuss training and education for the building industry. We are discussing developing an advanced building manufacturing class and we will be designing a 3-d sketch up computer class this spring. It will be offered cross curriculum for the building trades at Laney.

For all instructional programs:

- e. Describe the department's efforts to ensure that the curriculum responds to the needs of the constituencies that it serves.

The Carpentry Department is in constant discussions and planning of curriculum in order to build our first passive house. We are writing new courses in 2012-2013 and are trying to stay ahead of the building trends in the United States as far as education of the work force.

- f. Please indicate how many of the full and part time faculty have been evaluated in the last three years. For faculty that have not been evaluated in the last three years, what are your plans to become current.

*No full time faculty were evaluated in the last three years.
Once we get our new hire (Fall 2013) we will conduct a evaluation.
1 Full time faculty was busy doing 4 Part time evaluations*

- g. Recommendations and priorities.

Fall 2013 evaluate full time faculty/(Dept Chair and new F/T instructor)