

ELECTRICITY AND ELECTRONICS TECHNOLOGY

Instructional Program Review

10 - 29 - 2012

College: Laney College

Program Title: Electricity and Electronics Technology

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

Electricity and Electronics offerings are designed to provide a knowledge-base and practical skills necessary to many careers. A fundamental knowledge of electricity and electronics are part of what drives all technology of the 21st century. The Electricity and Electronics department is one of the original technical programs that started at Laney College. In the beginning it was one of the largest programs in northern California. With the technical programs being phased out in the 80s and the transfer of the whole program from Laney to Merritt College, the Laney Electrical Program was effectively eliminated. One of the faculty members managed to keep some of the core courses at Laney and maintained the course offerings without a certificate or a degree in place.

Four years ago the department hired a fulltime instructor. Since then the existing courses have been updated and new courses were created, such as Photovoltaics, Motors and Drives, Advanced Lighting and Controls, Security and Fire Alarm Systems Customer Service for the Skill Trades, National

Electrical Code and 30-Hour OSHA Safety. The Department is now working on new courses and three different certificates and a degree program pending. Certainly the biggest addition to the Laney College CTE offerings will be this December when the State of California Community Colleges Chancellors Office officially recognizes and lists Laney College as a Journeyman Electricians Trainee School Site through the California Department of Apprenticeship Standards. This will make Laney the only Community College in this part of California with a full-curriculum program allowing trainees to enroll and take the required courses over the years while building up the required 4,000-hours of field experience to qualify for the State of California Journeyman Electrician Certification (in lieu of completing an accredited apprenticeship program). This will bring a large number of new students into the electrical program as the industry requires more journeymen to replenish the ranks now dwindling due to retiring babyboomers.

2. Curriculum

Is the curriculum current and effective? Have course outlines been updated within the last three years? If not, what plans are in place to remedy this?

Yes. The department has updated all of the existing Electrical courses and developed new courses such as, Photovoltaics, National Electrical Code, Customer Service for Skilled Trades, Motors and Drives, Sound and Communication, Security and Fire Alarm, 30-Hour OSHA Safety, Introduction to DDC Hardware for Building Automation, Introduction to Networking for Building Automation and Introduction to Computer Programming for Building Automation and working on developing new courses on Energy Efficient Lighting and Controls, Programmable Logic Controls, Electronics and Industrial Controls to better serve our students and the industry.

Also, the department is planning to develop a new Certificate in Nano-technology.

In addition, the department is developing new certificates (the degree program was accepted by the state last December and our first graduate received his diploma last May), Photovoltaic Installers and Service Technicians and Industrial Controls Maintenance Technician.

Student Learning Outcomes have been developed and updated for all existing courses and all new courses.

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

Yes. The E/ET program has added new courses and deepened, broadened, and has been reformulated into more specific courses and certificates leading to clear career paths. New courses were added to the existing program between 2008 and 2010, including Technical Mathematics for Electricians, Photovoltaics, National Electrical Code, Customer Service for Skilled Trades, Motors and Drives, Sound and Communication, Security and Fire Alarm, 30-Hour OSHA Safety, Introduction to DDC Hardware for Building Automation, Introduction to Networking for Building Automation and Introduction to Computer Programming for Building Automation and working on developing new courses on Energy Efficient Lighting and Controls, Electronics, Programmable Logic Controls and Industrial Controls. The Department currently is working on a Certificate and a Degree Program for state approval.

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?

See above. With the pending certificate (stalled at the state level with the new laws in effect as of last January) the above requirements will be assigned to proper courses.

Yes. All the new courses have been validated.

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

All new and existing courses have student learning outcomes. Yes.

Describe the efforts to develop outcomes at the program level. In which ways do these outcomes align with the institutional outcomes?

The department has developed outcomes for the existing and new courses. The department also has developed program learning outcomes. The department is planning to define institutional outcomes.

Institutional Learning Outcomes (ILOs)

Communication

Students will effectively express and exchange ideas through various modes of communication.

Communication skills are imbedded in very courses and in some courses that we use PBL; students are required to do Public Speaking and proper communication skills.

Critical Thinking and Problem Solving

Students will be able to think critically and solve problems by identifying relevant information, evaluating alternatives, synthesizing findings and implementing effective solutions.

Critical thinking is part of the function of the Program. Students could not function, touch and troubleshoot any electrical mechanical devices without the ability to use the critical thinking skills.

Career Technical Education

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

In the Technical Education, students learn the theory and practice on real equipment.

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.

Students in the program learn about Energy Management and Efficiency, working and interacting with diverse student body.

Personal and Professional Development

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

Students have to interact with each other working in groups during class and outside class time.

Recommendations and priorities

- Completion of the Certificate for state approval
- Create lesson plans for each new course. (They are being developed as an on-going project by the staff, several courses at a time.)
- Update and document work projects for each course. (As new trainers are being acquired the nature of the courses are becoming more sophisticated to match industry progress in materials offered.)

- Create problem-based learning scenarios for each course.

3. Instruction

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?

The E/ET program consistently applies new technology and innovative learning strategies to improve student learning. Strategies include:

- Extensive emphasis on hands-on learning with real-life devices and components
- Encourage students to help install new equipment using various installation techniques.
- New mock walls for students (up to 48 at a time at 24 work-stations) to practice on installing switches, receptacles, junction boxes, breaker boxes and pulling electrical wire.
- The test-bench lab allows students to learn the basics of wiring, programming, and integrating controls.
- Workbenches have been created and are continually updated for residential/light commercial and commercial electricity.
- An extensive selection of instrumentation and measuring devices has been acquired to support courses.
- Allowing students to work in groups to interact and think critically for troubleshooting electrical. (Problem-based learning)
- Make students research through the Internet, library, books and industry to find answers to problems, so that they learn to independently gather information.

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

- The first method is prerequisites. All new students are required to take first the Basic Electricity, and Basic Skills (English, Math) courses.
- All our programs are continually vetted with industry and adapted to innovations in technology.
- New programs have been based on demand data from the CCC Centers of Excellence, the California Public Utility Commission, and regional and national labor market studies on green workforce development trends.
- Create more interactive and problem solving methods for teaching and improving student learning.
- Use interactive computer-based software for students to practice problem solving and complex systems thinking skills.

Discuss the enrollment trends of your department. What is the student demand for specific courses? How do you know? What do you think are the salient trends affecting enrollments?

Enrollment figures have spiked in the last three years. For example, the total enrollment for 04-05 year was 161, in 05-06, dropped to 138, in 06-07 jumped to 244, 07-08 jumped to 263 and in 08-09 the numbers tripled to 701 students. 434 in fall 2009, 391 in fall 2010 and 510 in fall 2011. Along with increased student demand, the department is experiencing staff shortage, lab and classroom space and resource shortages, hobbling full deployment of the planned revised program.

Are courses scheduled in a manner that meets student needs and demand? How do you know?

The evening schedule is heavily attended by both working and fulltime students. The day classes are more frequently used by increasing numbers of student cohorts paid for by outside funding (grants etc.). Student feedback on the courses and their hours offered are noted by staff and taken into consideration when scheduling. And continued applicant demand far exceeds enrollment capacity for these courses.

4. Student Success

Describe student retention and program completion (degrees, certificates, persistence

Rates) trends in the department. What initiatives can the department take to improve the retention and completion rates?

Since the program has been State-accepted more students are availing themselves of it with the majority of students taking numerous courses over several years

While not showing up as completed degrees, many students have used Laney as a spring-board to the IBEW as apprentice inside-journeyman electricians. There are currently ten IBEW Local 595 apprentices that came through Laney's electrical courses with stellar letters of recommendation from the teaching staff to the Joint Apprenticeship Training Committee members whom are very familiar with Laney's excellent courses and students. Laney staff has also helped other students gain employment in other related industry.

More instructional assistants and instructor availability would ensure smoother operation of classroom, increased safety, and higher quality of teaching, leading to higher completion and retention rates once the degree program and certificate programs are in place.

What are the key needs of students that affect their learning? 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 need a better and safer environment in the class and laboratory. This includes an urgent need for instructional assistants and another full-time faculty member. It also includes addressing basic safety and indoor air quality concerns that are affecting student learning, and addressing classroom capacity shortages:

- B-120. The E/ET Program needs additional classroom/lab space dedicated for teaching photovoltaic installation. The course requires floor-mounted and angled mock roofs for student hands-on learning. Additional space is needed for the rail mount PV arrays where students learn flat roof and pad-mount installations.
- B-120. The commercial wiring and motor control courses need permanent space for motor work stations and transformer instruction requires new 480-volt, three-phase power.
- In addition, career & technical education students need tutorial services accessible to them at nights. The department is also trying to address this issue by attending the Basic Skills Initiative meetings.

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?

Students are assessed for project completion, through tests, peer review of role playing (Customer Service for the Skilled Trades). Overall, the courses offered are experiencing a high level of student satisfaction (student surveys). Typical student suggestions for improvement include: more hands-on work, need instructional assistant and smaller classes, instructors are more overloaded now than at any time in the past.

Recommendations and priorities

Hire one more fulltime faculty or lower the number of students and have an instructional assistant in the lab to be able to teach students more safely and effectively.

First priority: Hire one more fulltime faculty.

Second Priority: Hire an Instructional Assistant

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

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

Currently, the Department has one full-time instructor, and four part-time instructors. Presently, there is a temporary student aid assisting in the Photovoltaic classes to help monitor safe work practices.

Describe your current utilization of facilities and equipment.

Residential, Commercial, Photovoltaic, Cabling, Basic Electric, and Motors and Drives Lab (Room B-120)

The 5000 square foot Electrical/Electronics Technology (E/ET) Lab contains multiple work benches in the middle and around the perimeter of the room. All have limited electrical power for hands-on powered experiments and power-tool use. A floor area is used for both classroom and photovoltaic roof and rail installations.

Classroom, room B-130

This classroom is presently shared with other departments even though it is being used more and more by the expanding Electrical Department (See growth trends above). This room must be dedicated to E/ET classes only, to be used as a lecture class and as a computer lab to be able to offer students to use the different types of software as the program uses more state of the art technology.

Classroom, room B-123A

While located inside the E/ET area this room is used exclusively by ECT department in teaching the DDC course due to its high security measures (behind two locks from the outside). This room could be used by the electrical department for teaching classes such as PLC, Electronics and Programming Motors and Drives.

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?

Key Staffing Needs

Due to the expansion of the program, the E/ET department urgently needs another full-time instructor to better serve the department, design, teach, and assess courses, maintain and improve teaching laboratories and materials, and represent Laney as a Bay Area model in advanced electrical technology education. Part-time faculty is not available for the program and curriculum development work needed. Generally, part-time faculty in the E/ET program work full-time during the day. The department's urgent needs for a full-time faculty cannot be met by bringing in on new part-time faculty.

Staff:

The E/ET department has grown to a degree and gained so much visibility that an instructional and an administrative assistant are now needed to help with day-to-day administrative and clerical support.

Equipment Needs:

The department needs full height framed walls where both cable and conduit installation may be practiced.

The department has very few transformers for teaching power distribution and needs at least a dozen more transformers to meet the growing class sizes. Additionally, the department only has one type of PV array and to be more comprehensive the course will require more different types of PV arrays and mounting systems materials.

To keep up with industry needs, students need access to PLC's to learn programming for industrial and process control.

Facilities Needs

The department needs permanent areas where both single-phase and three-phase meter/main electrical services may be installed and serviced (electrically dead).

A permanent exterior area with sun exposure is needed to fully teach photovoltaic electrical power generation.

A new lighting efficiency lab is required to meet industry needs. The lab must have accessible ceilings and the ability for students to mount and dismount different types of lighting fixtures and monitoring and control equipment as well. The department has obtained some of the latest light sources (fixtures and lamps) but has not yet installed them while waiting for the new lab space.

Design/build and showcase sustainable residential/commercial structure

- Demonstration site for energy efficient and renewable energy efficient technology
- Accessible by community as a demonstration site
- Living laboratory for hands-on learning
- Teaching site for community-based classes, and in partnership with the utilities
- 40000 – 70000 sqft, preferably two-story
- The building needs to be in close proximity to the ECT and E/ET departments
- Significant industry donations can be expected
- Cross-departmental project: involve architectural department in design, carpentry and welding department in construction. All of the above departments have expressed a great interest in collaborating on this important project. Architectural department did a design contest for this type of building. Several viable design scenarios are available.

Technology Needs

Since the department has expanded significantly, it needs additional computers, LCD projectors, and large screen TVs for videos and DVDs.

Recommendations and priorities

1. Hire another fulltime instructor and an Instructional Assistant to better serve our students.
2. Build showcase instructional facility for sustainable building operations
3. Provide additional classroom and more hands-on lab space
4. Upgrade equipment as specified above
5. Create more workstations in the lab for students to work on motors, transformers, and full-height walls.

6. Community Outreach and Articulation

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 do you know?

The department has a Degree Program completed and accepted and Certificate programs pending and also has an Advisory Committee in place.

Members so far include IBEW Local 595 (Alameda County local electricians union), a photovoltaic contractor from Berkeley, a representative from one of the areas largest wholesale electrical material suppliers, with potential members coming from the City of Oakland Electrical Inspection Department, the Oakland Fire Marshal's Office, and PG&E Service planning Department. So far, only one Advisory Committee meeting has been held due to the time limitation of the one full time staff, however informal discussions have taken place with individual members. The core fulltime instructor has vast

recent experience in the local electrical industry as well (40 years in electrical installation, design, estimating, sales, and code interpretation.) Students every semester are being employed by the industry.

For transfer programs:

Describe the department's efforts in meeting with and collaborating with local 4-year institutions. Is the program adequately preparing students for upper division course work? How do you know?

While the E/ET program is not primarily designed as a transfer program, the Basic Electricity course, E/ET 203 could become transferable with the creation of our new A.S. Degree program (pending).

E/ET courses are increasingly attracting college graduates with engineering degrees who have not been exposed to the hands-on, real-life learning opportunities we provide in the EE/T program. Every semester, at least several classes are attended by graduate engineering students looking to gain education and hands on learning in disciplines other than those they were originally trained in.

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?

Yes. Students are getting jobs in industry as employers find out that they have taken electrical courses at Laney College. Other students are using the Electrical Program to make career advances within their existing company's. And again, many past students have been accepted into IBEW apprenticeships (595 & 551 that we know of) and other electrical jobs. Also, please look at the data section.

What industry trends are most critical for the future viability of the program? How do you know? What are the implications of these trends for curriculum development and improvement?

The Unionized electrical industry is instituting a small-work agreement to recapture that lost segment of the market (as mandated by the IBEW International President). The present Union apprenticeships and JATC training facilities are not yet prepared to train or supply workers and/or apprentices for this work (IBEW Local #595 Alameda County is meeting April 8, 2010 for a roll-out of the new program). Laney is already acting as a feeder for Inside Journeyman apprenticeship candidates and will be even more attractive as a supplier of candidates for the new electrical worker classification. Laney is already teaching all of the classes required for the scope of work these workers will need to know.

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

With the past experience of the full time instructor plus the experience of one of the part time instructors (almost 40-years in the IBEW as an electrician and over the past 10-years a trainer for both the IBEW JATC and outside electrical industry, and with input from local electrical constructors, the courses have been developed and applied. The Advisory Committee will insure that the focus and development of additional courses will be on providing industry-relevant curriculum material.

Recommendations and priorities

- Expand partnership opportunities with high schools and four year colleges and universities, including articulation opportunities
- Add more building managers, company owners, and alums from the program to the fledgling Advisory Committee
- Dedicate additional staff time to program outreach and representation at regional meetings.
- Develop stronger ties with industry associations.

SUMMARY OF DATA

Laney College Program Review Data

Subject: E/ET

Section II Student Data

Department Overview

Dimension	Fall 2009	Fall 2010	Fall 2011
Census Enrollment	434	391	510
Sections	11	10	17
Total FTES	61.22	50.75	69.18
Total FTEF	5.22	4.86	7.96
FTES/FTEF	23.49	20.91	17.39

Student Retention

Dimension	Fall 2009	Fall 2010	Fall 2011
Census Enrollment	523	470	531
Retained	415	371	471
Retention Rate	79%	79%	89%

Student Success

Dimension	Fall 2009	Fall 2010	Fall 2011
TOTAL GRADED	502	423	514
Success Grades	357	321	379
Success Rate	71%	76%	74%

Section III Faculty Data

Dimension	Fall 2009	Fall 2010	Fall 2011
Contract FTEF	1	1	1
Hourly FTEF	1.33	1.35	2.63
Extra Service FTEF	0.28	0.08	0.35
% Contract/Total	0.38	0.41	0.25

Section IV Faculty Data Comparable Fall 2011

Dimension	Alameda	Berkeley	Laney	Merritt
Contract FTEF	0	0	1	0
Hourly FTEF	0	0	2.63	0
Extra Service FTEF	0	0	0.35	0
Total FTEF	0	0	7.96	0
% Contract/Total	0	0	0.25	0

Duplicated Enrollment by Time of Day

Day_Eve	F09	F 09	F10	F 10	F11	F 11
Day	193	37%	141	30%	139	26%
Evening	330	63%	328	70%	392	74%
Total	523	100%	469	100%	531	100%

Headcount by Gender

Gender	F09	F 09	F10	F 10	F11	F 11
Female	27	8%	27	8%	31	8%
Male	301	84%	273	81%	310	79%
Unknown	31	9%	35	10%	49	13%
Total	359	100%	335	100%	390	100%

Headcount by Ethnicity

Ethnic Group Desc	F09	F 09	F10	F 10	F11	F 11
American Indian/Alaskan Native	1	0%	4	1%	1	0%
Asian	59	16%	53	16%	56	14%
Black/African American	88	25%	79	24%	120	31%
Filipino	9	3%	11	3%	7	2%
Hispanic	53	15%	40	12%	61	16%
Pacific Islander	2	1%	4	1%	2	1%
White Non Hispanic	38	11%	87	26%	68	17%
Multiple	3	1%	21	6%	38	10%
Other Non white	6	2%	1	0%	1	0%
Unknown/Non Respondent	100	28%	35	10%	36	9%
Total	359	100%	335	100%	390	100%

Headcount by Age Group

AGE	F09	F 09	F10	F 10	F11	F 11
16 and under		0%		0%		0%
16-18	6	2%	7	2%	5	1%
19-24	87	24%	61	18%	93	24%
25-29	55	15%	56	17%	52	13%
30-34	49	14%	47	14%	55	14%
35-54	136	38%	122	36%	161	41%
55-64	23	6%	35	10%	20	5%
65 & Above	3	1%	7	2%	4	1%
Total	359	100%	335	100%	390	100%

Grade Distribution

Grade	Fall 2009	Fall 2010	Fall 2011
A'	157	178	243
B'	125	86	83
C'	75	55	53
D'	20	18	11
F'	37	31	57
I'	0	1	24
NP'	1	0	0
P'	0	2	0
W'	87	52	43
Total	502	423	514

Fall to Spring Persistence Rates

F09	F09 to S10 Persistence		F10	F10 to S11 Persistence		F11	S12	F11 to S12 Persistence	
	S10	Rate		S11	Rate			Rate	
359	193	54%	335	183	55%	390	198	51%	

Awards by Gender and Type

Gender	2011-12				2010-11				2009-10			
	AA	AS	CA	CP	AA	AS	CA	CP	AA	AS	CA	CP
Male			1									
Total			1									

Awards by Ethnicity and Type

Ethnicity	2011-12				2010-11				2009-10			
	AA	AS	CA	CP	AA	AS	CA	CP	AA	AS	CA	CP
Unknown/Non Respondent			1									
Total			1									

LANEY COLLEGE: FALL TERM DEMOGRAPHICS									
ETHNICITY BY DEPARTMENT (UNDUPLICATED COUNT)									
DEPT	ETHNICITY	2005-06		2006-07		2007-08		2008-09	
		#	%	#	%	#	%	#	%
E/ET	ASIAN	7	14.9%	28	26.4%	30	27.3%	33	22.8%
	AFRICAN AMERICAN	13	27.7%	23	21.7%	17	15.5%	34	23.4%
	FILIPINO	1	2.1%	5	4.7%	4	3.6%	2	1.4%
	HISPANIC/LATINO	17	36.2%	31	29.2%	33	30.0%	34	23.4%
	NATIVE AMERICAN	0	0.0%	0	0.0%	1	0.9%	3	2.1%
	OTHER NON WHITE	0	0.0%	1	0.9%	1	0.9%	3	2.1%
	WHITE NON HISPANIC	6	12.8%	11	10.4%	19	17.3%	21	14.5%
	UNKNOWN	3	6.4%	7	6.6%	5	4.5%	15	10.3%
	Total	47		106		110		145	

LANEY COLLEGE: FALL TERM DEMOGRAPHICS									
GENDER BY DEPARTMENT (UNDUPLICATED COUNT)									
DEPT	GENDER	2005-06		2006-07		2007-08		2008-09	
		#	%	#	%	#	%	#	%
E/ET	FEMALE	4	8.5%	2	1.9%	2	1.8%	5	3.4%
	MALE	43	91.5%	104	98.1%	108	98.2%	117	80.7%
	UNKNOWN	0	0.0%	0	0.0%	0	0.0%	23	15.9%
	Total	47		106		110		145	

LANEY COLLEGE: FALL TERM DEMOGRAPHICS									
AGE BY DEPARTMENT (UNDUPLICATED COUNT)									
DEPT	AGE	2005-06		2006-07		2007-08		2008-09	
		#	%	#	%	#	%	#	%
E/ET	16-18	7	14.9%	3	2.8%	7	6.4%	8	5.5%
	19-24	14	29.8%	16	15.1%	19	17.3%	24	16.6%
	25-29	6	12.8%	17	16.0%	20	18.2%	21	14.5%
	30-34	6	12.8%	16	15.1%	21	19.1%	29	20.0%
	35-54	14	29.8%	45	42.5%	35	31.8%	55	37.9%

55-64	0	0.0%	7	6.6%	8	7.3%	8	5.5%
65 AND OVER	0	0.0%	2	1.9%	0	0.0%	0	0.0%
Total	47		106		110		145	

LANEY COLLEGE: FALL TERM DEMOGRAPHICS									
MATRICULATION STATUS BY DEPARTMENT (UNDUPLICATED COUNT)									
DEPT	MATRICULATION	2005-06		2006-07		2007-08		2008-09	
		#	%	#	%	#	%	#	%
E/ET	EXEMPT	12	25.5%	30	28.3%	39	35.5%	20	13.8%
	MATRICULATING	35	74.5%	75	70.8%	71	64.5%	125	86.2%
	UNKNOWN	0	0.0%	1	0.9%	0	0.0%	0	0.0%
	Total	47		106		110		145	

LANEY COLLEGE: GRADE DISTRIBUTION BY DEPARTMENT									
DEPT	GRADE	2005-06		2006-07		2007-08		2008-09	
		#	%	#	%	#	%	#	%
E/ET	A	62	46.6%	109	46.0%	79	30.6%	234	33.8%
	B	16	12.0%	38	16.0%	50	19.4%	162	23.4%
	C	17	12.8%	29	12.2%	66	25.6%	86	12.4%
	CR	0	0.0%	0	0.0%	0	0.0%	1	0.1%
	D	8	6.0%	7	3.0%	5	1.9%	38	5.5%
	F	10	7.5%	11	4.6%	9	3.5%	54	7.8%
	IN	0	0.0%	4	1.7%	0	0.0%	30	4.3%
	W	20	15.0%	39	16.5%	49	19.0%	88	12.7%
	Total	133		237		258		693	

LANEY COLLEGE: SUCCESSFUL COURSE COMPLETION RATES BY DEPARTMENT USING TOTAL LETTER GRADES								
DEPT	2005-06		2006-07		2007-08		2008-09	
E/ET	ATT	SCSS	ATT	SCSS	ATT	SCSS	ATT	SCSS
	140	67.9%	244	72.1%	264	73.9%	697	69.3%

LANEY COLLEGE: COURSE RETENTION RATES BY DEPARTMENT USING TOTAL CENSUS ENROLLMENTS								
DEPT	2005-06		2006-07		2007-08		2008-09	
E/ET	CW1	RTN	CW1	RTN	CW1	RTN	CW1	RTN
	140	80.7%	244	81.1%	265	78.9%	728	83.1%

LANEY COLLEGE: FALL TO SPRING PERSISTENCE RATES BY DEPARTMENT USING CW1 ENROLLMENT: UNDUPLICATED BY DEPARTMENT												
DEPT	2005-06			2006-07			2007-08			2008-09		
E/ET	CW1	PERS	RATE	CW1	PERS	RATE	CW1	PERS	RATE	CW1	PERS	RATE
	47	23	48.9%	106	58	54.7%	110	61	55.5%	144	88	61.1%

FTES FTEF Productivity Enrolment by Department

Subject	Term Type	Year 04-05					Year 05-06					Year 06-07					Year 07-08					Year 08-09				
		CEN ENR	Sect	FTEF	FTES	FTES/FTEF	CEN ENR	Sect	FTEF	FTES	FTES/FTEF	CEN ENR	Sect	FTEF	FTES	FTES/FTEF	CEN ENR	Sect	FTEF	FTES	FTES/FTEF	CEN ENR	Sect	FTEF	FTES	FTES/FTEF
E/ET	Fall	72	2	0.72	17.28	24	55	3	1.08	13.2	12.22	113	3	0.72	19.8	27.5	116	4	1.08	21.72	20.1	152	4	1.08	24.12	22.33
	Spring	89	3	1.17	20.07	17.1	83	2	0.72	18.28	25.39	131	4	1.08	23.64	21.89	147	5	1.44	26.52	18.5	549	14	3.62	83.55	23.09
Total		161	5	1.89	37.35	19.73	138	5	1.8	31.48	17.49	244	7	1.8	43.44	24.13	263	9	2.52	48.24	19.2	701	18	4.7	107.67	22.91

Laney College Facilities Needs Table

Please list needs in order of priority within a particular category.

Maintenance

Deferred	Preventative	Ongoing	Emergency
	Roof leaks		

Reconstruction

Refurbish	Remodel	Renovate
Refurbish the existing benches in Room B120 and B123 with new electrical outlets.	New HVAC system for healthier and more productive students.	

New Construction

Short Term 1-2 years	Mid Term 2-3 years	Long Term 3-5 years
New small buildings to be built on the tennis court behind the EET Department.		The large 40-60 thousand square foot building to be built on the tennis court.

**Laney College
Instructional Program Review
Resource Needs Reporting Template**

Division: Vocational Technology		Department/Program: EET		Contact: Nick Kyriakokpedi	
Item Identified in Program Review (justification)	Human Resources (Staffing)	Physical Resources (Facilities)	Technology and/or Equipment	Supplies Budget	Curriculum
Teach courses, revise and document curriculum, involve external resources in instruction (speakers, donations, internships, field trips)	A second full time instructor One part-time instructional assistant One IT person to fully control the computers		Install twenty computers in Room B123 for students to work on different types of software on Electricity and Electronics.	-For Computers : 18,000 USD - Power supply: 1,200 USD -For Installation : 600 USD	Create Lesson Plan, Written Lab Projects, Lab Hand-on Trainers for students to work on, Assessments tests and PBL
Create a cleaner and safer environment for students		Renovate lab (see section 6, page 8-9 for specific measures needed)	See section 6, page 8-9 for a list of equipment needs		
Tutorial services for students at night					

