

NORCO COLLEGE

CURRICULUM COMMITTEE MINUTES

November 28th, 2017 - 2:00 pm
ST 107

Brian Johnson chaired the meeting.

Members Present:

Brian Johnson.....Math
Nicole C. Brown.....Office of the Dean of Instruction
Dr. Samuel Lee..... Interim Vice President of Academic Affairs
Dr. Kevin Fleming..... Dean of Instruction, Career & Technical Education
Rex Beck..... Business, Engineering & Information Technologies
Jeffrey Mulari.....Math
Jeff WarsinskiMath
Mitzi Sloniger.....Communications
Starlene Justice..... Sciences and Kinesiology
Celia Brockenbrough.....Library
Dr. Dominique Hitchcock..... Arts, Humanities and World Languages
Nicholas Franco.....Social and Behavioral Sciences/ Articulation Officer
Marissa Iliscupidez Social and Behavioral Sciences
Amar Elali ASNC

Members Absent:

Dr. Teresa Friedrich FinernSciences and Kinesiology
Dr. Jason Parks.....Interim Dean of Instruction
Quinton Bemiller..... Arts, Humanities & World Languages
Nicole Capps Communications
Glen Graham Business, Engineering & Information Technologies

Guests: Colleen Molko CTE

A. Agenda and Minutes Approval:

Motion to approve November 28th, 2017 Agenda –MSC: R. Beck/ S. Justice.
Motion to approve November 14th, 2017 Minutes –MSC: D. Hitchcock/ N. Franco.

B. New Courses: None.

C. New Stand Alone Courses:

- ~~1. ENE 40 Material Science and Engineering N Fixes not made. No entry skills entered.~~
- ~~2. ENE 41 Engineering Graphics N Fixes not made. No entry skills entered.~~
3. ENE 62 Math for Automated Systems N MSC: M. Sloniger/C. Brockenbrough.
APPROVED

D. Course Inclusions: None

E. Course exclusions:

1. ACC 61 Cost Accounting NR MSC: M. Sloniger/S. Justice Approved
2. ACC 63 Income Tax Accounting MNR MSC: M. Sloniger/S. Justice Approved
3. ~~CIS/CAT 95A Introduction to the Internet MNR Excluded at previous meeting.~~
4. ~~CIS/CSC 14A Web Programming: JavaScript MNR~~
5. CIS/GAM 39 Current Techniques in Game Art MN MSC: M. Sloniger/S. Justice. They want to keep GAM 39. Approved
6. MAG 54 Employee Labor Relations NR MSC: M. Sloniger/S. Justice Approved

F. Course deletions:

1. MAN 59 Computer Aided Manufacturing- GibbsCAM N MSC: R. Beck/M. Sloniger Approved

G. Distance Education:

- ~~1. BUS 14DE Social Media and Online Marketing for Entrepreneurs MNR MSC: M. Sloniger/R.Beck POSTPONED Needs sentence of monitoring taken out.~~
- ~~2. EAR 38DE Adult Supervision and Mentoring in Early Care and Education MNR POSTPONED~~
Need sentence about 'monitoring' taken out and add in language on how it is instructor led. This committee needs clear direction from Distance Education on the language to use.
- ~~3. EAR 45DE Administration II Personnel and Leadership MNR POSTPONED~~

H. Major Course Modifications:

1. ANT 2 Cultural Anthropology MNR MSC: M. Sloniger/R.Beck Approved
2. ANT 3 Prehistoric Cultures MNR MSC: M. Sloniger/R.Beck Approved
3. ANT 4 Native American Cultures MNR MSC: M. Sloniger/R.Beck Approved
4. ANT 6 Introduction to Archaeology MNR MSC: M. Sloniger/R.Beck Approved
5. ANT 7 Anthropology of Religion MNR MSC: M. Sloniger/R.Beck Approved
6. ANT 8 Language and Culture MNR MSC: M. Sloniger/R.Beck Approved
7. ANT 10 Forensic Anthropology NR MSC: M. Sloniger/R.Beck Approved
8. ELE 10 Survey of Electronics N MSC: M. Sloniger/R.Beck Approved
9. ELE 25 Digital Techniques N MSC: M. Sloniger/R.Beck Approved
10. ELE 28 MultiSim CAD & PCB Design/Fab N MSC: S.Justice/R.Beck Approved
11. ELE 77 Electrical Theory for Electricians **N Cross-listed with ELC 77/MAN 77**
MSC: R.Beck/S. Justice Approved
12. ELE 91 Fundamentals of Solar Energy N **Cross-listed with ELC 91/ No Mods done.**
MSC: R.Beck/S. Justice Approved
13. MKT 20 Principles of Marketing MNR MSC: M. Sloniger/S. Justice Approved
14. MKT 40 Advertising MNR MSC: M. Sloniger/ R. Beck Approved

I. New State Approved Certificates/Degrees: None

J. State/Locally Approved Certificate/Degree Modifications:

1. AS/CERT ELC/ELE Electrician (N) MSC: M. Sloniger/ C. Brockenbrough *Approved
2. CERT LN ELC/ELE Green Technician (N) MSC: S. Justice/ C. Brockenbrough *Approved
** Need to add ELC cross-listing
3. AS/CERTN ELC/ELE Industrial Automation (N) MSC: R. Beck/M. Sloniger *Approved
Colleen will ask Glen Graham on the ELE-74 cross-listing issue.
4. AS/CERT ELC/ELE Supply Chain Automation (N) MSC: R. Beck/ S. Justice *Approved

K. State Certificate/Degree Deletions: None

L. New disciplines: None

M. RCCD GE Inclusions (1st Reading): We will be voting on these in the Spring 2018 for our general education.

1. GAM 21 History of Video Games G.E. Area C. Humanities
2. GAM 22 Game Design Principles G.E. Area C. Humanities
3. GAM 50 Introduction to Game Programming G.E. Area C. Humanities
4. GAM 80 Digital Drawing of Game G.E. Area C. Humanities
5. GUI 47 Career Exploration and Life Planning G.E. E2 area 2
6. GUI 48 College Success Strategies G.E. E2 area 2
7. ELE 11 DC Electronics G.E. Area A. Natural sciences
8. ELE 13 AC Electronics G.E. Area A. Natural Sciences
9. GUI 48 College Success Strategies Social and Behavioral Science AOE

N. Information Items:

i. New Courses:

Course	Title	Location	Comment
BUS 101	Business Success Seminar	R	
BUS 102	Solopreneurs: Personal Finance and QuickBooks Quickstart	R	
GEO 4	Earth Science for Educators	R	
GEO 5	Natural Hazards and Disasters	R	
HMS 41	Family Studies - Counseling Victims of Domestic Violence	M	

- ii. New Stand Alone Courses: none
- iii. Course Inclusions: none
- iv. Course Exclusions: none
- v. Course Deletions:

Course	Title	Location	Comment
CUL 40	Professional Waitstaff Training	R	
CUL 45	Cognizant Cuisine: Delicious Decisions for Better Living	R	
HET 82	Phlebotomy Technician	M	
HET 86	Acute Care Nurse Assistant	M	
HET 87	Restorative Nurse Assistant	M	

vi. Distance Education:

Course	Title	Location	Comment
CIS 21A DE	Linux Operating System Administration	R	
CIS 25DE	Information and Communication Technology Essentials	R	

vii. Minor Course Modifications:

Course	Title	Location	Comment
CIS 36	Introduction to Computer Game Design	M	
CIS 37	Beginning Level Design/Computer Games	NM	
CIS 38A	Simulation and Gaming/3D Modeling for Real-Time Interactive Simulations	NM	
CIS 38B	Simulation and Gaming/3D Animation for Real-Time Interactive Simulations	NM	
CIS 38C	Simulation and Gaming/3D Dynamics and Rendering for Real-Time Interactive Simulations	M	

viii. Major Course Modifications:

Course	Title	Location	Comment
GEO 1B	Historical Geology	R	
MAG 72	72 Quantitative Methods for Business	R	

ix. New State/Locally Approved Certificates/Degrees:

Type	Col	Sub	Title
AD-T	R	SOC	Social Justice Studies
AD-T	M	ADJ	Administration of Justice

x. State/Locally Approved Certificate/Degree Modifications: none

xi. State Certificate/Degree Deletions:

Type	Col	Sub	Title
PR DISC	R	CIS	Systems Development Analysis (CE806)
PR DISC	R	CIS	Relational Database Technology (CE816)
PR DISC	R	BUS	E-Commerce (CE807)
PR DISC	R	BUS	Virtual Assistant (CE677)
PR DISC	R	BUS	Banking Operations (CE625)
PR DISC	R	CAT	Computer Applications (AS728/AS728B/AS728C/CE728)
PR DISC	R	BUS	Retail Management/Western Association of Food Chains (WAFC) (AS536/CE536)
PR DISC	R	CAT	Office Fast Track (CE812)

O. Discussion items:

1. New catalog process and submission date. September is the deadline month to get submissions in the catalog. Dr. Lee is working with district on restructuring the course catalog so they can roll the schedule for earlier registration dates. That is why these changes need to be done earlier. Our committee needs clarification on the deadlines so we can inform our faculty chairs and departments. The district curriculum committee needs to request this and Brian Johnson will be making the request.

Next Meeting: February 27, 2018

Statement of Purpose

The curriculum committee, a sub-committee of the academic senate, has two primary purposes: to review and approve new curriculum including new courses, course modifications, new programs and program modifications, and to review and approve the curriculum approval process. The college curriculum committee is the sole approving body for Norco College only curriculum. For district shared curriculum it has one vote in the district curriculum committee. The curriculum committee is also responsible for keeping abreast with state mandated curriculum changes and reporting those changes to faculty. Committee members report on curriculum at their department meetings and solicit suggestions and recommendations when needed.

**RIVERSIDE COMMUNITY COLLEGE DISTRICT
PROGRAM OUTLINE of RECORD**

College: R ___ M ___ N X

Supply Chain ~~Technology~~ Automation

PROGRAM PREREQUISITE:

None

SHORT DESCRIPTION of PROGRAM

Supply Chain ~~Technology~~ Automation is a rapidly-emerging discipline that supports the automated warehousing industry. This program provides students with the skills and hands-on training needed to install, operate, support, upgrade or maintain the ~~software, hardware,~~ automated **material handling** equipment and systems that support the supply chain. This includes complex conveyer systems, robotics, sensors, optics, mechanical drive systems and programmable logic controllers. ~~Upon completion, This certificate prepares students are prepared to successfully enter the field for employment as an electro-mechanical technicians, maintenance mechanic, maintenance Automated System technicians, Industrial Machinery Mechanics, or supply chain technicians.~~

PROGRAM LEARNING OUTCOMES

Upon successful completion of this program, students should be able to:

1. Demonstrate troubleshooting procedures to diagnose and repair hydraulic and pneumatic systems used in automated processes and robotic assemblies.
2. ~~Discuss and demonstrate occupational safety and technical communications related to working in a distribution center.~~
3. **(2)** Demonstrate the installation, maintenance and troubleshooting of Programmable Logic Controllers systems (PLCs) and PLC modules.
4. ~~Establish a systematic approach to recognizing the essential information given on a blueprint.~~
5. **(3)** Solve arithmetic problems and formulas using unknowns that are typical to solving problems in engineering and industrial settings.

Required Courses

Course	Title	Units
SCT/ SCA 1	Introduction to Automated Warehousing	3.0
ELC/ELE 73/ MAN 73	Electric Motors for Electricians and Transformers	4.0
ELC/ELE 74/ MAN 74	Industrial Electrical Automation Wiring and Controls	4.0

ELC/ELE/ELC 77	Electrical Theory for Electricians	3.0
ENE 27/ELE 27	Technical Communications	3.0
ENE 51	Blueprint Reading	2.0
ENE 62	Math for Automated Systems	3.0
ENE 60	Math for Engineering Technology	3.0
Or		
MAT 36	Trigonometry	4.0
MAN 55/ ELE-55	OSHA Standards for General Industry	2.0 1.0
MAN 60	Hydraulic and Pneumatic Systems	3.0
ELE 64/MAN 64	Programmable Logic Controllers	3.0
ELE 26	Microprocessors /Microcontrollers	4.0 3.0
Total		31-32 32-33

Associate of Science Degree

The Associate of Science Degree in Supply Chain Technology **Automation** will be awarded upon completion of the degree requirements, including general education and other graduation requirements as described in the college catalog.

**RIVERSIDE COMMUNITY COLLEGE DISTRICT
PROGRAM OUTLINE of RECORD**

College: R ___ M ___ N X

TOPs Code: 0956.30

INDUSTRIAL AUTOMATION (NAS737/NCE737)

PROGRAM PREREQUISITE:

None

SHORT DESCRIPTION of PROGRAM

Businesses and other organizations depend on complex electronic equipment for a variety of functions. Industrial controls automatically monitor and direct production processes on the factory floor. Transmitters and antennae provide communication links for many organizations. Industry needs well-trained technicians with the knowledge of how to design, repair and implement new equipment. The Industrial Automation program teaches how to use Electronics, Microprocessors, Microcontrollers, Programmable Logic Control and Fluid Power systems to create and program new machinery used in industry. This certificate prepares students for employment as an automated systems technician, maintenance mechanic or general maintenance worker.

PROGRAM LEARNING OUTCOMES

Upon successful completion of this program, students should be able to:

1. Demonstrate the installation, maintenance and troubleshooting of Programmable Logic Control systems (PLCs) and PLC modules.
2. Set-up and operate fluid powered valves, cylinders, controls filters, and actuators.
- ~~3. Establish a systematic approach to recognizing the essential information given on a blueprint.-----~~
4. **(3)** Solve formulas by using unknowns and apply this knowledge to solve problems encountered in technological areas and various fields of engineering.
- ~~5. Write descriptive and operational instructions for nontechnical users of technical information, including occupational safety concerns.-----~~

Required Courses (28-29 23-24 Units)

Units

ELE-10	Survey of Electronics	4
ELE-11	DC Electronics	4
ELE-13	AC Electronics	4
ELE-74	Industrial Wiring and Controls	4
ELE/ENE-27	Technical Communications	3

ENE-51	Blueprint Reading	2
MAN-55/ ELE-55	Occupational Safety and Health Administration Standards for General Industry	2 1
MAN-60	Hydraulic and Pneumatic Systems	3
MAN/ELE-64	Programmable Logic Controllers	3
ENE-62	Math for Automation	3
ENE-60	Math for Engineering Technology	3
or		
MAT-36	Trigonometry	4

44

Total Units:
~~23-24~~

~~28-29~~

Formatted: Strikethrough

Associate of Science Degree
The Associate of Science Degree in Industrial Automation will be awarded upon completion of the degree requirements, including general education and other graduation requirements as described in the college catalog.

RIVERSIDE COMMUNITY COLLEGE DISTRICT PROGRAM OUTLINE of RECORD

College: R___ M___ N_ X

TOPs Code: __0952.20__

Electrician

PROGRAM PREREQUISITE:

None.

SHORT DESCRIPTION of PROGRAM

This program prepares residents to become an entry-level Electrician Trainee and along with California state requirements prepares for careers as an Electrician, Electrical Apprentice, Electrician's Helper, Industrial Electrician, Journeyman Electrician, and Residential Electrician. Courses are aligned with California state standards to prepare students to earn their Electrician Training card (<http://www.dir.ca.gov/dlse/ecu/electricaltrainee.htm>).

PROGRAM LEARNING OUTCOMES

Upon successful completion of this program, students should be able to:

- 1) Demonstrate the installation maintenance and troubleshooting of electrical devices (switches, sensors, motor, controllers, and lights)
- 2) Explain how the electrical grid works, from generation to the end user.
- 3) Solve electrical design criteria by using formula, and tables for proper electrical installation.
- 4) Demonstrate electrical raceway sizing and installation, meeting NEC requirements for sizing, location requirements, distances, supports and bending.
- 5) Demonstrate quantitative analysis of electrical circuits for blueprints.
- 6) Demonstrate electrical wiring of circuits or devices to meet the standards and requirement of the NEC

Required Courses:

	<u>Units</u>
ELC/ELE/MAN-77: Electrical Theory for Electricians	3
CON-66: National Electrical Code	3
ELC/ELE-71: Residential Electrical Wiring	4
ELC/ELE/MAN-73: Electric Motors and Transformers	4
ELC/ELE-75: Solid State Devices and Lighting Controls	3
ELC/ELE/MAN-72: Commercial and Industrial Electrical Wiring	4
ELC/ELE/MAN-74: Industrial Wiring and Controls	4
ELC/ELE-76 Low Voltage Wiring and Alternate Energy Generation	3
ENE-62 Math for Automated Systems	3
Or	
MAT-36 Trigonometry	4

Total Units:

31-32

Associate of Science Degree

The Associate of Science Degree in Electrician will be awarded upon completion of the degree requirements, including general education and other graduation requirements as described in the college catalog.

RIVERSIDE COMMUNITY COLLEGE DISTRICT PROGRAM OUTLINE of RECORD

College: R___ M___ N___ X___

POR Title: Green Technician Certificate (locally-approved)

PROGRAM PREREQUISITE:
None

SHORT DESCRIPTION of PROGRAM

Renewable energy and related sustainability concepts; DC and AC electrical theory; and solar power systems. Design, installation and maintenance issues, along with OSHA safety are included.

PROGRAM LEARNING OUTCOMES

Upon successful completion of this program, students should be able to:

1. Draw and identify all the primary components of a typical, 4-KW, utility-interactive, photo voltaic (PV) system and explain how each part operates in this Grid-Tied configuration.
2. Solve basic, direct current, electronic problems involving resistance, current, voltage, and power, as applied to both simple and complex combinations of series and/or parallel circuit components, comprised of resistors, capacitors and coils, in a given network configuration.
3. Explain the basic principles of sinusoidal sources of Alternating Current (AC) and solve AC network circuit problems, involving resistors, capacitors, inductors and/or transformers.
4. Utilize OSHA standards and regulations to supplement an ongoing safety and health program.
5. Thoroughly explain the typical maintenance requirements for the PV array, and other components, including inverters and batteries of a stand-alone system, to keep a 5-KW, Off-Grid power installation safe and operating at high-efficiency.

Required Courses

ELE-91 Fundamentals of Solar Energy	<u>3</u>
ELE/MAN-55: Occupational Safety and Health Administration (OSHA) Standards for General Industry	<u>1</u>
ELC/MAN/ELE-77 Electrical Theory for Electricians	<u>3</u>
or	
ELE-11 DC Electronics	<u>4</u>
and	
ELE-13 AC Electronics	<u>4</u>
	7 or 12 Units

Elective Courses

None 0 Units

Total Units: **7 or 12 Units**