Course Discipline	Code & No: EWA200	Title: Motors and Co	ontrols	Effective Term Fall 2009	
Division Code:	VCT	- 110		Org #: 28200	
Don't publish:	College Catalog	☑Time Schedule	⊠ Web Page	Org #: <u>2, 2, 2, 5</u>	
⊠New course ap ☐Three-year syll ☐Course change	abus review/Assessment re	eport [Reactivation of inactivalion (Submit t	his page only.)	
Change information	on: Note all changes that	t are being made. For	rm applies only to cha	nges noted.	
required. Course disciplin *Must submit i Course title (wa Course descript	ith all departments affected the code & number (wasinactivation form for previousinform for previousinform for previousinform for changes) redits were:))* ous course.	_Distribution of contac lecture: lab _	t	
÷				urses that are being changed.	
Department Rev	nt and divisional signatures view by Chairperson	indicate that all departs New resources neede	ments affected by the co	ourse have been consulted. departments consulted	
Print: Da		•		Date: 2/2/09	
Print:	Department Chair	Signature		Date:	
Division Review	•				
Request for co		Win's/Administrator's Sig	loL mature	2/2/09 Date	
Curriculum Com Recommendation Tabled	Yes No	150 Hast riculum Committee Ch	air's Signature	3/18/09 Date	
	or Instruction Approval Vices No Conditional	President's Signature	Palay.	3/19/09 Date 19/09	
Do not write in shaded Log File <u>2 [17 [09] 2] E</u> Ol Please return completed	copy □ Banner 3/25 C	&A Database 363	C&A Log File 3/33 mail an electronic copy to	Basic skills Contact fee siohn@wccnet.edu for posting on the website.	

EWA200 Credit hours: 3 Comparison of the c	ontact hours per semester: Student Instructor Lecture: 45 45 Lab: Clinical: Cracticum: Other: Totals: 45 45 Reduced Reading/ (Add information at Leveling/Writing:	Are lectures, labs, or clinicals offered as separate sections? Yes - lectures, labs, or clinicals are offered in separate sections No - lectures, labs, or clinicals are offered in the same section Writing Scores	Grading options: P/NP (limited to clinical & practical) S/U (for courses numbered below 100) Letter grades No Basic Skills Prerequisite (College-level Reading and Writing is not required.)
Credit hours: 3 College-level Reading & Writing In addition to Basic Skills in Reading Level I (enforced in Banner)	Student Instructor Lecture: 45 45 Lab: ————————————————————————————————————	clinicals offered as separate sections? Yes - lectures, labs, or clinicals are offered in separate sections No - lectures, labs, or clinicals are offered in the same section Writing Scores	□P/NP (limited to clinical & practical) □S/U (for courses numbered below 100) □Letter grades □No Basic Skills Prerequisite
If variable credit, give range:	Student Instructor Lecture: 45 45 Lab:	clinicals offered as separate sections? Yes - lectures, labs, or clinicals are offered in separate sections No - lectures, labs, or clinicals are offered in the same section Writing Scores	□P/NP (limited to clinical & practical) □S/U (for courses numbered below 100) □Letter grades □No Basic Skills Prerequisite
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Prerequisites. Select one: College-level Reading & Writing In addition to Basic Skills in Readi	Reduced Reading/ (Add information at Leventer) (ing/Writing:	or clinicals are offered in the same section Writing Scores	
College-level Reading & Writing In addition to Basic Skills in Readi Level I (enforced in Banner)	(Add information at Leving/Writing:	· · · ·	
In addition to Basic Skills in Readi	(Add information at Leving/Writing:	· · · ·	
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and orand or		Min. Score Concurre Enrollme Can be taken to	ent Must be enrolled in this class
□ and □ or			
Level II (enforced by instructor on first	t day of class)		
Cour		Grade Test	Min. Score
and or			
Enrollment restrictions (In addition t	o prerequisites, if applicable.)		
and □or Consent required	□and ⊠or Admission t	o program required BEW 252 Apprenticeship	□and □or Other (please specify):
Please send syllabus for transfer e Conditionally approved courses are n Insert course number and title you w	ot sent for evaluation.		
E.M.U. as	The second secon	П	as
U of M as			
as	·	LJ.	as

Course	Course title		
EWA200	Motors and Controls		
Course description State the purpose and content of the course. Please limit to 500 characters.	Students will learn to identify various motor types by their construction and component parts and will learn the operating characteristics of common types of motors that are currently in use most types of buildings. Reading and understanding nameplate data is presented as a fundamental need for the installation and maintenance of motors. Students will learn to develop control circuits using ladder diagrams to construct complex controls incorporating time delay, interlocking, reversing, plugging, jogging and other fundamental control circuits.		
	This course is taught at the IBEW local training center	and is only open to apprentices accepted into a program.	
Course outcomes	Outcomes	Assessment	
List skills and knowledge students will have after taking the course.	(applicable in all sections)	Methods for determining course effectiveness	
Assessment method Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.	After successful completion of this course, the student will be able to: 1. Install, maintain, and troubleshoot motors 2. Demonstrate techniques for reading and drawing schematic drawings 3. Design, install, and troubleshoot motor control circuits	This course is assessed externally by the local's Joint Apprenticeship Training Committee (JATC), consisting of NECA representatives (industry) and IBEW members. The local receives feedback on needed technical updates and apprentice skill performance.	
Course Objectives Indicate the objectives that support the course outcomes given above. Course Evaluations Indicate how instructors will determine the degree to which each objective is	Objectives (applicable in all sections) Objectives and methods of evaluation follow the curriculum set out by the National Joint Apprentice Training Committee (NJATC).	Evaluation Methods for determining level of student performance of objectives	
met for each student.			

List all new resources needed for course, including library materials.

All resources for the pro gram are in place at the Local 252 Training Center.

Student Materials:

List examples of types	All books and supplies provided through the IBEW Local 252 Training Center.	
Texts	1 The provided amough the IDEW Local 232 Training Center.	Estimated costs
Supplemental reading		\$ 0
Supplies		
Uniforms		
Equipment		
Tools		
Software		

Equipment/Facilities: Check all that apply. (All classrooms have overheat Check level only if the specified equipment is peaded for the control of the specified equipment is peaded for the control of the specified equipment is peaded for the control of the specified equipment is peaded for the control of the specified equipment is peaded for the control of the specified equipment is peaded for the control of the specified equipment is peaded for the control of the control of the specified equipment is peaded for the control of the control o	d projectors and a
Check level only if the specified equipment is needed for <u>all</u> sections of a course.	Off-Campus Sites
Level I classroom	Testing Center
Permanent screen & overhead projector	Computer workstations/lab
Level II classroom	ITV
Level I equipment plus TV/VCR	TV/VCR
Level III classroom	Data projector/computer
Level II equipment plus data projector, computer, faculty workstation	Other Local 252 Training Center

Assessment plan:

Learning outcomes to be assessed (list from Page 3)	Assessment tool	When assessment will take place	Course section(s)/other	Number students to
Install, maintain, and troubleshoot motors Demonstrate techniques for reading and drawing schematic	Contractors (employer) provide paper feedback forms for apprentice skill performance reviews.	(semester & year) Fall 2011 and every three years thereafter.	population All	be assessed All
drawings 3. Design, install, and troubleshoot	JATC contractor members provide specifications detailing technical updates.			

Scoring and analysis of assessment:

1.	Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric/scoring guide.
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Apprentice feedback forms filled out by the employing contractor.

2. Indicate the standard of success to be used for this assessment.

The standard of success is set by the local JATC.

3. Indicate who will score and analyze the data (data must be blind-scored).

The data is analyzed by the JATC as a committee.

4. Explain the process for using assessment data to improve the course.

Results are initially shared with the training coordinator for the local. The training coordinator then works with appropriate instructor staff to make needed changes.