ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated By Academic Senate Secretary On Canary Color Paper) All proposals MUST have their originating college faculty body (Ex. Nursing, Technical Sciences, Arts & Sciences, Education) approval and must be signed by the submitter and the college chair/dean before being submitted to the academic senate secretary.

- 1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the Academic Senate Secretary.
- 2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): Teacher Education (if applicable), General Education (if applicable), or Curriculum.
- 3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is forwarded to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator when a proposal is disapproved and the proposal is returned to the originator.
- 4. The Academic Senate considers the proposal and approves or disapproves. If approved, the proposal is forwarded to the Full Faculty for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
- 5. The Full Faculty considers academic senate approved proposals. If faculty approve, the proposal will then be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor.
- 7. The Chancellor approves or disapproves the proposal.

Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page --

http://www.msun.edu/admin/provost/asproposals.htm

Documentation and forms for the curriculum process is also available on the web page: <u>http://www.msun.edu/admin/provost/asforms.htm</u>

*****(If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the <u>Chair/Dean of the submitting college who then notifies the originator.)</u>

proposal #07-22 Title: Martmular and a population of the program/degree or course revision form)

Received by ACAD Senate Forwarded to Teacher Ed Council Approved Disapproved Signature Forwarded to Gen Ed Committee Approved Disapproved Signature Date Returned to ACAD Senate Forwarded to Curriculum Committee Approved Disapproved U Signature ${\mathcal K}$ 1.08 Returned to ACAD Senate for Vote Approved Disapproved -01-0 Signature Date Sent to Provost's office for Full Faculty vote Voted on at Full Faculty meeting Approved Disapproved Signature Date Forwarded to Provost for Approval/Disapproval Approved -808 Disapproved 6 m 4 Signature Date Forwarded to Chancellor for Approval/Disapproval pproved Disapproved Signature Copies sent to originating college and

Copies sent to originating college and registrar's office C/data/proposaltracking sheet ACAD 10 10 01

PROGRAM/DEGREE REVISION FORM				
	MAJOR REVISION	FOR INFORMATION ONLY		
College Montana State University - Northern	Program Area	Electrical Technology	Date _	4/15/2008
College of Technical Sciences Submitter Trygve C. Magelssen	Chair/Dean	Ochart	Date _	4/15/2008
Signature	Signiture	indicates "college" level approval)		

Please provide a brief explanation & rationale for the proposed revision(s).

A Certificate of Applied Science in Electrical Technology will enhance and proliferate MSU-Northern program availability without the addition of extra classes or expense due to the curriculum being the same classes already offered in the first year of the Associates of Applied Science degree program. The certificate program will provide a means of learning basic electrical theory, fundamental knowledge, and hands-on skills pertaining to the field of electricity, in one year, to students in other disciplines, graduates of other programs, individuals interested in only a one-year stay or those students interested in staying in school for another year for whatever reason. This program will also supplement a well-rounded knowledge for those pursuing careers in other fields, those interested in industrial technology, business, sales, or employment in the electrical, plumbing, carpentry trades, education, or provide a mechanism for individuals who want a certificate in all four of the COTS trades programs with the possibility of being hired by or becoming a general contractor.

Please provide in the space below a "before and after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

Proposal Title: Departmental Certificate of Applied Science in Electrical Technology

Current Program Listed in 07-08 Catalog

Proposed Program for 08-09 Catalog

Course	Course #	Course Title	Credite	Course	Course #	Course Title	Degree Credits
Prefix				Prefix	401	Electrical Eurodemontols	
<u> </u>		└────────────────────── ──────────────			137	Electrical Draffing	<u></u>
·					106	Electrical Formulas and Calculations	
<u>├</u> ──					103	Electrical Code - Codeology	3
					234	First Aid and CPR	
· · · · ·				FNGI	111	Written Communications	3
└──·──				ELEC	102	Electrical Fundamentals II	3
<u> </u>					133	Basic Wiring	5
<u> </u>					139	Electrical Code Study - Residential	3
				ELEC	111	Meters and Motors	3
				ELEC	236	Conduit, Raceways, and Code Calculations	3
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Additional instructional resources needed (including library materials, special equipment, and facilities).

Please note: approval does not indicate support for new faculty or additional resources.

College: Program Area: Date:	College of Technical Sciences Electrical Technology
Course Prefix & No.:	ELEC 106
Course Title: Credits:	Electrical Formulas and Calculations 3
Required by:	Electrical Technology
Selective in:	n/a
Elective in: General Education:	n/a
Lecture:	x
Contact hours lecture: Contact hours lab:	3

Current Catalog Description (include all prerequisites):

This course covers the basic formulas needed to determine electrical values in typical electrical installations including power, current, and voltage. Basic methods of calculation for both DC and AC quantities will be discussed and demonstrated as well as the use of modern calculators and computer software to determine necessary values.

Course Outcome Objectives:

The student will be able to:

- Articulate the basic electrical principles including ohms law and the basic power equation
- Identify the source of more complicated electrical formulae needed to calculate AC power, power factor and phase angle, voltage drop, conductor ampacity, etc.
- Utilize a general purpose calculator to compute necessary values
- Use modern computer hardware to perform detailed analysis of AC and DC electrical systems
- Math formulas applying to job invoicing & estimating cost

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

COTS Review Date: 06/2007

COURSE REVISION FORM

NEW DROPPED	_ MAJOR REVISION FOI	R INFORMATION ONLY
College Technical Science	es_ Program Area	Date
Submitter	Dean	Date
Signature	Signature (indicate	es "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

The use of the National Electrical Code requires communication and interaction with various Authorities Having Jurisdiction (AHJ), (e.g., electrical inspectors, state and local representatives,), engineers, architects, employers, owners, and customers). Classroom instruction should include interpersonal communications and relations with said authorities.

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Electrical Technology
Date:	
Course Prefix & No.:	ELEC 103
Course Title:	Electric Code Study/Codeology
Credits:	3
Required by:	Electrical Technology
Selective in:	n/a
Elective in:	n/a
General Education:	
Lecture:	x
Lecture/Lab:	
Contact hours lecture:	3
Contact hours lab:	

Current Catalog Description (include all prerequisites):

This course is a preliminary study of the National Electrical Code (NEC). Wiring design and protection, wiring methods and materials, and equipment for general use are covered.

Proposed or New Catalog Description (include all prerequisites):

This course is a preliminary study of the National Electrical Code (NEC). Wiring design and protection, wiring methods and materials, and equipment for general use are covered. Interaction and personal communications with Authorities Having Jurisdiction (i.e., inspectors, engineers, architects, employers, etc.) as well as customers and owners will be addressed.

Course Outcome Objectives:

The student will be able to:

- Understand the origins and importance of the National Electrical Code (NEC)
- Locate and interpret the NEC requirements for basic electrical circuits and connections
- Evaluate electrical installations for compliance with basic NEC requirements
- Identify approved mechanical electrical connecting equipment and devices
- Understand the basic grounding and bonding requirements for residential electrical service connections
- Wiring Methods
- Specialty occupancy code
- Interact and communicate with contractors, inspectors, owners, employers, and customers

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

COTS Review Date: 06/2007