

#### **DEPARTMENT OF ARTS & EDUCATION**

COURSE OUTLINE – Summer session August 20 - 24, 2012

# **EDCT 210; TEACHING POWER TOOLS and PROCESSES**

<u>INSTRUCTOR:</u> <u>PHONE:</u> 780 – 532- 6258 res

**C.Hildebrandt** 780 – 539 – 2995 GPRC office

OFFICE: <u>E-MAIL:</u>

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**OFFICE HOURS:** 

# PREREQUISITE(S)/COREQUISITE:

Teaching certificate; letter of authority, or candidates for letter of authority; audit; attendance by permission of instructor.

# **REQUIRED TEXT/RESOURCE MATERIALS:**

Variety of instruction manuals, Ab. Ed. CTS program of studies. Instructional videos.

<u>Recommended Resource</u>. "Managing the occupational Education Laboratory", second edition, by 'George Storm'; (Prakken Publications, Inc.

### **CALENDAR DESCRIPTION:**

This course covers the very basic skills required to teach introductory and intermediate level machines and processes in the materials areas specifically woodworking and other non-ferrous materials. A comprehensive review of teaching and learning resources and practices as well as project development and assessment will be undertaken. Emphasis will be on hazard identification,

safe use and skill development as well as teaching strategies and safety instruction record keeping.

A project incorporating the use of nine stationary and five portable power tools will be the focal point along with hands-on tool and equipment maintenance.

# **CREDIT/CONTACT HOURS:**

40 Hours, 3 credits (U of A transfer)

# **DELIVERY MODE(S):**

Videos; Demonstrations; Discussion; Sketching / drawing; blue-print reading.

Hands on machine, tool, material usage.

#### **OBJECTIVES:**

After competing this course the student will have acquired the basic skills and knowledge required to make safety hazard assessment, demonstrate the safety and normal operations of nine stationary power machines and five portable power tools. The knowledge and skills gained will result in proper instructional theory and project planning to meet curricular requirements, as well as materials management and equipment maintenance.

#### TRANSFERABILITY:

\*\* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

#### **EXAMINATIONS:**

The final examination will be based on the assimilation of the understanding of safety, instruction, project planning, and program delivery in the use of power equipment in the classroom.

Course evaluation will also include the on-going evaluation of the progress and completion of the instructional project, as well as the ability and understanding of machine tool maintenance

#### **GRADING CRITERIA:**

GRANDE PRAIRIE REGIONAL COLLEGE							
GRADING CONVERSION CHART							
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation				
$\mathbf{A}^{^{+}}$	4.0	90 – 100	EVERUENT				
Α	4.0	85 – 89	EXCELLENT				
A <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING				
$B^{\dagger}$	3.3	77 – 79					
В	3.0	73 – 76	COOD				
В_	2.7	70 – 72	GOOD				
C <sup>†</sup>	2.3	67 – 69	SATISFACTORY				
С	2.0	63 – 66					
C <sup>-</sup>	1.7	60 – 62					
D <sup>†</sup>	1.3	55 – 59	MINIMAL PASS				
D	1.0	50 – 54					
F	0.0	0 – 49	FAIL				
WF	0.0	0	FAIL, withdrawal after the deadline				

## **STUDENT RESPONSIBILITIES:**

The student will undertake to follow all construction procedures as outlined in the project plans and perform all related work in a craftsman like manner.

## **STATEMENT ON PLAGIARISM AND CHEATING:**

Please refer to pages 49-50 of the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

# **COURSE SCHEDULE/TENTATIVE TIMELINE:**

EDCT 210 Teaching Power Tools and Processes Week Schedule Aug. 20 - 24 2012

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	1] Preliminaries	1] Stationary power	Stationary p.t. con't.	1] Wood Lathe	1] student
/	GPRC rm. D208	tools		Demo & hands	demonstration of
9:45	a. Overview of	Introduction &	g. Drill press	on	instruction
	course.	place in CTS			
	b. Addendums	programs. Intro of	h. Sanders –	Assignment # 2 b	
	c. Introduction to	instructional	spindle, belt & disc,		
	assignments	template.	panel		
		a. Band saw.			
		b. Table Saw .			
	2] Power Hand			2] Equipment	2] Project swap
10:00	tools	-c. Panel saws		maintenance	
/	[generic]		2] Continue on	a. Discussion &	
11.45	a. Introduction to		assignment # 2	intro to	Q & A
	the variety and				
	their place in a CTS	d. Jointer		Assignment # 3	
	program.			b. Hands on.	
	b. Care &				
	maintenance				
	Comp. B. Const.	e. Thickness	Assignment # 2,		Hands on /
12:30	Shop OH door #1	planner	continued	Assignment # 3	equipment
/	3.Orientation of			continued	maintenance
2:15	Comp				completion
	a] Demos. & hands	f. RA saw; Mitre &			
	– 0n practice	Sld'g cmp'd saws			Assignment
	b] Proper use,				completion &
	hazards, safety &				evaluation
	operations				
	c] Project planning				
	& demo to				
	students.				
	4. Intro to	2] Intro. & planning	Assignment # 2,	Continue on	3] Discussion on
2;30	Assignment #1.	of major hands – on	confinued	assignments	assignments
/	a. Activity time	Assignment. #2a			
4;15					a. Course &
		a. Materials dist.			assignment
					evaluation
					b. Wrap- up
					c. Final exam
	5] Tutorial	3] Tutorial	4) Tutorial	4) Tutorial	4] shop clean-up
4;15	a. Open activity	a. Open activity	a. Open activity	a. Open activity	
/	time	time	time	time	
5:15			= 40 class hours. [8 hr.		

Instructional time: 7 hr. + 1 hr. Tutorial= 8 hr. / day X 5 = 40 class hours. [8 hr. Of instruction + `1 hr. - 15min. in breaks = 9 hr. - 15 min. day schedule]