SAULT COLLEGE OF APPLIED ARTS % TECHNOLOGY

COURSE OUILINE

C^oIlT-seTitle* HATHEMAT1CS < Caleulus >

Code No*I HTW 208-4 (Old Code *HTH 278"4)

•i-Q^T 3 m UATER RESOURCES ~ PULP AND PAPER TECHNOLOGY

Semester* THIRD ~ UATER RESOURCES THIRD - PULP S PAPER

Date: JUNE. :I.9B4

Ai.rthor*I K. CLARKE

Newt_____ReVis1onJ

APPROMEDt

Chai rperson Date

HATHEHATICS (Calculus) HTH 20S-4

Course Name Course Humber

When the studer-it has successfully completed this course? he will have demonstrated an acceptable ability to pass tests based uPon the course topics as listed elsewhere* If? after completing the course? the studeni tsk.es fuT^ther courses (or employment) iri which he is reauir^ed to apply ti" itiaterial > he should then? through practice be able to develop a siood cQitmandinthissfjbJectfita11er*

i^EIblQD QE ^BBESSMEfcll. .CGEAOING HEIHDD.).t

Thestuderltswil U. beass*jiessedbywrittentestsjincludinginaJorperiodic teii>ts based ijPon 1arL^e b!Lock.s of the subject matter and some unannounced short ouiszes on current work? the latter bein^ siven at the discretion (•lJie inst TMjctor « A final test on the whole course may also be included* letter ^rade will be based upon a student's weighted average of all his test results* See also the mathematics department's annual publication ' THE HATHEHATICS STUDENT" for further details* This publication is made ijVai13b1e to the studerits early irt eac;h academic year*

lEXIBQQKISl^

"Basic Technical Hathematics with Calculus" ~ Uashin^^ton

GBJECIIUES?

The basic objective is for the student to develop sn understanding of th methods studied? knowledge of the facts presented and sn ability to use these *iri* the so1<jtion of problems* For this purpose e>?ercises are sssisined*- Tests will reflect the sort of work contained in the assign- ments* The level of competency demanded is the level required to obtain overall PsssinsS averasie on the tests* The material to be covered is lis on the followins*. *PB^e**

TOPIC NUHBER	PEFaODS	TOPIC DESCRIPTION	REFEPENC
	IB	Ibe Deriyatiye	Text? Ch
		I… .imxts? slope? deriv3tive? Delta Method? derivatives of pcj1yno(Tiia1s?Prod<jetRule? Quotient Rule? Chain Rule	Exercise 22-1 to 22--9 <ps
	10	^B&iicstiQDs of the Dejciyatiwe	Te>it?Ch^
		Teni^ents *andi* normals *C*urVesketc\)*in*^ Ha;iimum and miniirtum	EKercise;: 23-1? 23- 23-6? 23- (part)
	1,^	Ipte^ratioD	Text? Ch.
		Differentials? antiderivatives? indefinite inte*^ral? *a res* under a curve? definite inte£{T^a1	E>iercises 24-1 to 2 24-7 (par
		^EslicatioDS of iDte^ratioD	Text? Ch.
		Applications of indefinite intei^ral? *BreB9* volumes Pressure on a submerged plate? work? flow over a weir	EXercises 25-1 to *2\ 25-6* (pari 25-7 (pari Printed S^