S\_23-83



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#### MEMORANDUM

ATTENTION:	: Senate	
FROM:	Elizabeth Elle, Vice-Chair, Senate Committee on Und	ergraduate Studies
RE:	Course Changes (SCUS 23-51)	1
DATE:	May 5, 2023	mabet the

#### For information:

I.

Acting under delegated authority at its meeting of May 4, 2023, SCUS approved the following curriculum revisions effective Spring 2024.

#### a. Faculty of Arts and Social Sciences (SCUS 23-51a)

- 1. Department of English
  - (i) Prerequisite changes for ENGL 418W
- 2. Department of History
  - (i) Description change for HIST 349 and 436
  - (ii) Description, equivalent statement and prerequisite changes for HIST 460
- 3. Department of Indigenous Studies
  - (i) Description changes for INDG 442 and 447
- 4. Labour Studies Program
  - (i) Title change for LBST 301W and 312
- 5. Department of Linguistics
  - (i) Prerequisite change for LING 301W, 321, 322, 324, 330, 362, 408, 431 and 432
- 6. Department of Political Science
  - (i) Title and description change for POL 132
- 7. Department of Psychology
  - (i) Prerequisite change for PSYC 371

#### b. Faculty of Communication, Art and Technology

1. School for the Contemporary Arts (SCUS 23-46b(iii))

(i) Description, units and prerequisite changes for CA 425

#### 2. Faculty of Science (SCUS 23-51b)

1. Department of Biological Sciences

(i) Prerequisite change for BISC 405

#### 2. Department of Mathematics

- (i) Title, description and prerequisite change for MATH 348 (Fall 2024)
- (ii) Title, description, prerequisite and equivalent statement changes for MATH 360 (Fall 2024)

#### 3. Department of Physics

(i) Prerequisite change for PHYS 344

		SCUS 23	-51a
CCLI SENATE COMMITTE	EON	COURSE MODIFICA	TION FORM
SFU SENATE COMMITTE	STUDIES		Page 1 of 1
COURSE SUBJECT ENGI	L NUMBER 418W	TITLE SEMINAR IN CRIT THEORY	ICAL
TYPE OF CHANGES. Please	type 'X' for the appropriate	revision(s):	
Course 🗆 number	Units 🗌	Prerequisite 🛛	
Title	Description	Equivalent 🛛 Statement	
expand. Please review the " specific course components Advanced seminar in liter	Equivalency statements" sec if changing equivalent state cary, critical, and/or cultural		
repeated if a different top English 465W prior to Su	nic is taught, though students mmer 2015 may not take this SNGL 465 may not take this c	who obtained credit for s course for further credit.	

# **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

SPRING 2024

# **RATIONALE** (must be included)

The course is already reserved for English honours, major, joint major and minor students. We do not want to further restrict the class.

SFU SENATE COMMITTEE ON UNDERGRADUATE STUDIES				CO	COURSE MODIFICATION FORM Page 1 of 1		
COURSE SU	BJECT	Hist	NUMBER	349	TITLE	Byzantir	ter Rome: The ne Middle Ages from of Antiquity to the s (4)
TYPE OF CH	ANGES. P	'lease type 'X	' for the app	ropriate revi	sion(s):		
Course number		Un	its		Prere	equisite	
Title		De	scription	$\boxtimes$	-	ivalent tement	

This is a history of Byzantium, Rome's direct heir, that <u>The history of the Medieval</u> <u>Romans and their polity surveys the "other" Middle Ages. The course</u> familiarizes students with the social, political, economic, and cultural history of Byzantium from the rise of the Caliphate in the seventh century to the Carolingians, the Crusades, the emergence of the Italian maritime republics and the ascent of the Seljuk Turks. Prerequisite: 45 units, including 6 units of lower division history. Students with credit for HIST/HS 308, HS/HIST 317, HUM 349 or HS 349 may not take this course for further credit. Breadth-Humanities.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

## **RATIONALE** (must be included)

The course description is proposed to match that of Humanities 349.

SFU		MMITTEE ON DUATE STUDIES		COURSE MODIFICATION FO	
COURSE S	UBJECT	Hist NUMBER	436	<b>TITLE</b> British Columbia (4)	
TYPE OF CH	HANGES.	Please type 'X' for the apj	propriate revi	ision(s):	
Course number		Units		Prerequisite 🗆	
Title		Description	$\boxtimes$	Equivalent 🗆 Statement	
-				nged text using <del>strike through</del> ,	

indicate added or new text using <u>underline</u>. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand. Please review the "Equivalency statements" section under <u>Information about</u> <u>specific course components</u> if changing equivalent statement(s).

Selected problems in the social, cultural, economic and political development of British Columbia. <u>Hist 436 may be repeated for credit only when a different topic is taught.</u> Prerequisite: 45 units including nine units of lower division history. Recommended: <u>HIST 101</u> and <u>102W</u>.

## **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



**RATIONALE** (must be included)

With a new hire, and a new research direction for a faculty member, we now have three or more faculty interested in teaching this course, each choosing a very different theme or focus. We would like this course to align with other "special topics" in History that allow students to repeat for credit only when a different topic is taught.

CELL	SENATE CO	MMITTEE ON	COURSE MODIFICATION FORM				
SFU	U N D E R G R A I	DUATE STUDIES			Page 1 of 2		
COURSE S	SUBJECT	Hist NUMBE	ER 460	<b>TITLE</b> The (4)	mes in Byzantine History		
TYPE OF C	HANGES. 1	Please type 'X' for the a	ppropriate	revision(s):			
Course number		Units		Prerequis	te 🛛		
Title		Description	n 🖂	Equivale Stateme			

Familiarizes the student with the main problemscore questions in the study of Medieval Roman (Byzantine) social, political, economic and intellectual historylife. Students will be exposed to the main primary sources available to the Byzantinist and will read articles and books by the most influential scholars in the field-of Byzantine studies. Content may vary from offering to offering; see course outline for further information Students may repeat this course once for further credit under a different topic. HIST 460 may be repeated for credit only when a different topic is taught. Prerequisite: 45 units including 6 units of lower division history. Students with credit for HS 460 or HUM 460 may take HIST 460 for credit only when a different topic is taught. Breadth-Humanities.

## **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

**RATIONALE** (must be included)

The course description is proposed to match that of Humanities 460. History will retain our requirement of 6 credits of lower division History.

N E I I		MMITTEE ON DUATE STUDIES		COURSE MODIFICATION FORM Page 1 of 1			
COURSE SU	BJECT	INDG NUMBER	<b>R</b> 442	TITLE Directe Indigen	ed Readings in nous Studies		
TYPE OF CH	ANGES. I	Please type 'X' for the ap	propriate	revision(s):			
Course number		Units		Prerequisite			
Title		Description	$\boxtimes$	Equivalent Statement			

Directed readings for upper level students in Indigenous Studies who wish to study selected topics in depth. May be repeated once when topic is different. Variable units: 2, 3, 4, 5. Prerequisite: 15 units in Indigenous (or First Nations) Studies. Corequisite: Permission of an instructor and department.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

**RATIONALE** (must be included)

Department now has sufficient upper division course offerings; more than one directed readings course no longer fits with our curriculum.

CELL	SENATE COL	MMITTEE ON			CO	URSE M	ODIFICATION FORM
SFU		DUATE STUDIES					Page 1 of 1
COURSE SU	JBJECT	INDG	NUMBER	447	TITLE	Directeo Studies	l Studies in Indigenous
TYPE OF CH	ANGES. I	Please type 'X	' for the app	ropriate revi	ision(s):		
Course number		Un	its		Prere	quisite	
Title		De	scription	$\boxtimes$	-	ivalent tement	

Directed study for upper level students in a topic chosen in consultation with a supervisor. Explore Indigenous topics through research. Variable units: 2, 3, 4, 5. This course may be repeated for credit when topic is different. Prerequisite: 15 units of INDG (or FNST) courses; permission of an instructor and department approval. Corequisite: varies depending on topic.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

#### **RATIONALE** (must be included)

Department has sufficient upper division course offerings; more than one directed studies course no longer fits with curriculum.

SFU		MMITTEE ON DUATE STUDIES			CO	URSE M	ODIFICATION FORM Page 1 of 1	
COURSE	SUBJECT	LBST	NUMBER	301W	TITLE		novements: Issues and and popular culture	
TYPE OF	CHANGES. I	Please type 'X	' for the app	ropriate revi	ision(s):			
Course number		Un	its		Prere	quisite		
Title	$\boxtimes$	De	scription		<u> </u>	ivalent tement		

LBST 301W Labour movements: Issues and Images and popular culture Labour, social media, and the news

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

#### **RATIONALE** (must be included)

This change is to the name only, so it better reflects the content of the course. Nothing else is being changed.

	SENATE COMMITTE UNDERGRADUATE S			COURSE MODIFICA	TION FORM Page 1 of 1
COURSE SU	BJECT LBS	Г NUMBEF	<b>R</b> 312	TITLE Global Labour Mi	gration
TYPE OF CH	ANGES. Please	type 'X' for the ap	propriate re	vision(s):	
Course number		Units		Prerequisite 🗌	
Title	$\boxtimes$	Description		Equivalent 🗆 Statement	

LBST 312 Global Labour Migration Migration, Migrants, and Work: A Global Perspective

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

**RATIONALE** (must be included)

This is a name change that serves to better reflect the content of the course. Nothing else is being changed.

SFU	SENATE COMMITTE UNDERGRADUATE S'			COURSE M	ODIFICATION FORM Page 1 of 2
COURSE SU	U <b>BJECT</b> LINC	G NUMBER	301W	<b>TITLE</b> Linguist	tic Argumentation
TYPE OF CH	IANGES. Please	type 'X' for the ap	propriate r	evision(s):	
Course number		Units		Prerequisite	$\boxtimes$
Title		Description		Equivalent Statement	

Prerequisite: LING 282W; or LING 222 and any lower division W course.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



**RATIONALE** (must be included)

Removing LING 222 because it has been cancelled and was last offered in Summer 2018. Removing "any lower division W course" because the current prerequisite course LING282W is already a W course.

N E I I	SENATE COMMITTEE UNDERGRADUATE S'			COURSE MO	ODIFICATION FORM Page 1 of 2
COURSE SU	BJECT LINC	G NUMBER	321	TITLE Phonolo	gy
TYPE OF CH	ANGES. Please	type 'X' for the ap	propriate r	evision(s):	
Course number		Units		Prerequisite	$\boxtimes$
Title		Description		Equivalent Statement	

Prerequisite: LING 282W; or LING 221 and any lower division W course.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



**RATIONALE** (must be included)

Removing LING 221 because it has been cancelled and was last offered in Summer 2018. Removing "any lower division W course" because the current prerequisite course LING282W is already a W course.

N E I I	SENATE COMMITTEE UNDERGRADUATE ST			COURSE MOI	DIFICATION FORM Page 1 of 2
COURSE SU	BJECT LING	NUMBER	322	<b>TITLE</b> Syntax	
TYPE OF CH	ANGES. Please	type 'X' for the ap	propriate r	evision(s):	
Course number		Units		Prerequisite	
Title		Description		Equivalent [ Statement	

Prerequisite: LING 282W; or LING 222 and any lower division W course.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



**RATIONALE** (must be included)

Removing LING 222 because it has been cancelled and was last offered in Summer 2018. Removing "any lower division W course" because the current prerequisite course LING282W is already a W course.

N E I I	SENATE COMMITTE UNDERGRADUATE S			COURSE MODIFIC	CATION FORM Page 1 of 2
COURSE SU	BJECT	G NUMBER	324	<b>TITLE</b> Semantics	
TYPE OF CH	ANGES. Please	type 'X' for the ap	propriate r	evision(s):	
Course number		Units		Prerequisite 🛛	
Title		Description		Equivalent 🗆 Statement	

Prerequisite: LING 282W; or LING 222 and any lower division W course.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



**RATIONALE** (must be included)

Removing LING 222 because it has been cancelled and was last offered in Summer 2018. Removing "any lower division W course" because the current prerequisite course LING282W is already a W course.

N E I I	SENATE COMMITTEE UNDERGRADUATE S'			COURSE MODIFIC	CATION FORM Page 1 of 2
COURSE SU	BJECT LINC	G NUMBER	330	<b>TITLE</b> Phonetics	
TYPE OF CH	ANGES. Please	type 'X' for the ap	propriate rev	rision(s):	
Course number		Units		Prerequisite 🛛	
Title		Description		Equivalent 🗆 Statement	

Prerequisite: LING 282W; or LING 221 and any lower division W course.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



**RATIONALE** (must be included)

Removing LING 221 because it has been cancelled and was last offered in Summer 2018. Removing "any lower division W course" because the current prerequisite course LING282W is already a W course.

CELL	SENATE COM	IMITTEE ON			CO	URSE MO	ODIFICATION FORM	
SFU	U N D E R G R A D	UATE STUDIES					Page 1 of 2	
COURSES	SUBJECT	LING	NUMBER	362	TITLE		ction to Teaching as a Second Language s	
TYPE OF C	HANGES. P	lease type 'X'	for the appr	copriate revi	ision(s):			
Course number		Un	its		Prere	quisite	$\boxtimes$	
Title		De	scription		-	ivalent tement		

Prerequisite: LING 282W; or LING 221 and any lower division W course.

### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



**RATIONALE** (must be included)

Removing LING 221 because it has been cancelled and was last offered in Summer 2018. Removing "any lower division W course" because the current prerequisite course LING282W is already a W course.

SFU	SENATE COMMIT UNDERGRADUATI			COURSE M	ODIFICATION FORM Page 1 of 2
COURSE S	U <b>BJECT</b> LI	NG NUMBER	<b>4</b> 08	<b>TITLE</b> Field Lir	nguistics
TYPE OF CH	IANGES. Pleas	se type 'X' for the ap	propriate	e revision(s):	
Course number		Units		Prerequisite	$\boxtimes$
Title		Description		Equivalent Statement	

Prerequisite: LING 221 or 321; and 222 or 322.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

**RATIONALE** (must be included)

Removing LING 221 and 222 because they have been cancelled and were last offered in Summer 2018.

N E I I	SENATE COMMITT UNDERGRADUATE			COURSE M	ODIFICATION FORM Page 1 of 2
COURSE SU	BJECT LIN	NG NUMBER	431	<b>TITLE</b> Languag	ge Structures I
TYPE OF CH	ANGES. Pleas	e type 'X' for the ap	propriate re	vision(s):	
Course number		Units		Prerequisite	$\boxtimes$
Title		Description		Equivalent Statement	

Prerequisite: LING 282W; or LING 221 and 222.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

**RATIONALE** (must be included)

Removing LING 221 and 222 because they have been cancelled and were last offered in Summer 2018.

SFU	SENATE COMMIT UNDERGRADUATI			COURSE M	ODIFICATION FORM Page 1 of 2
COURSE SU	J <b>BJECT</b>	NG NUMBER	<b>4</b> 32	TITLE Langua	ge Structures II
TYPE OF CH	I <b>ANGES.</b> Pleas	se type 'X' for the ap	propriate	revision(s):	
Course number		Units		Prerequisite	$\boxtimes$
Title		Description		Equivalent Statement	

Prerequisite: LING 282W; or LING 221 and 222.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

**RATIONALE** (must be included)

Removing LING 221 and 222 because they have been cancelled and were last offered in Summer 2018.

CELL	SENATE CO	MMITTEE ON			CO	OURSE MODIFICATION FO	RM
SFU	U N D E R G R A I	DUATE STUDIES				Page 1	of 1
COURSE	SUBJECT	POL	NUMBER	132	TITLE	From Dictatorship to Democracy: Political Regin in the 21 <sup>st</sup> Century	nes
TYPE OF	CHANGES. I	Please type 'X	' for the app	ropriate revi	sion(s):		_
Course number		Un	its		Prere	equisite 🗌	
Title	$\boxtimes$	De	scription	$\boxtimes$	-	uivalent 🗆 ntement	

# From Dictatorship to Democracy <u>in the Global South</u> : Political Regimes in the 21st Century

A firm consensus - at least in the West - has developed in favour of democracy as a means to emancipate ordinary people from the mayhem, conflict, and poor quality of life associated with autocratic rule. Introduces the concepts and tools needed to measure and analyze <u>state formation</u>, democracytization, autocracy, development, and conflict around the worldwide, focusing on the Global South. Breadth-Humanities/Social Sciences.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Spring 2024

#### **RATIONALE** (must be included)

With the arrival of a new faculty member (Dr. Shivaji Mukherjee), there was a need to update this course. Further, in the past few years, the course has focused on democratization in the Global South, and we feel the need to convey this information in the course title and description.

S E L		MMITTEE ON Duate studies		COURSE N	10DIFICATION FORM Page 1 of 2
COURSE SU	BJECT	PSYC NUMBE	ER 371	TITLE Inter Outo	vention: Process and ome
TYPE OF CH	ANGES. I	Please type 'X' for the a	ppropriate	revision(s):	
Course number		Units		Prerequisi	te 🖂
Title		Description	1	Equivale Stateme	

Prerequisite: PSYC 201 and 241. PSYC 270 (or 370) is recommended.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

1241



**RATIONALE** (must be included)

# COURSE MODIFICATION FORM

Page 2 of 2

Updating course prerequisites

						23-46b(iii)	
SFU		MMITTEE ON DUATE STUDIES			CO	URSE MODIFICATION FORM	
		CA	NUMBER	425 (4)	TITLE	Page 1 of 2 Intensive Studies in	٦
COURSE SU	JDJECI	CA	NUMDER	425-(4)	IIILE	Performance: Senior Projects	
TYPE OF CH	IANGES.	Please type 'X	for the app	ropriate revi	ision(s):		
Course number		Un	its	$\boxtimes$	Prere	equisite 🖂	
Title		De	scription	$\boxtimes$	-	ivalent □ tement	
indicate add allows, drag expand. Plea	ed or nev the endp se reviev	w text using <u>ur</u> point of the tex	<u>nderline</u> . If y t box to ma ency statem	vou need to e ke it bigger, a ients" sectior	nter mor as it will r n under <u>Ir</u>	using <del>strike through</del> , e text than the box not automatically <u>nformation about</u>	
Intensive S	Studies ir	n Performance	: Senior Pro	jects – 425-(	<del>4</del> )(5 <b>)</b>		
extended f	inal proj		eloped, mei	ntored by fac	ulty and g	n CA 424. An guests <del>guest artists</del> , <del>sr. Students will</del>	

have the option of working as a choreographer or performer, and or collaborating with students from other disciplines. Fourth year students will focus on choreography; other students will participate as collaborators or performers. Prerequisite: CA 220, 324, 424. This course can be repeated for credit three times.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



# RATIONALE (must be included)

The dance area has prepared this new model for CA 425 to accommodate both choreographers and dancers within the major. As it is required of 4<sup>th</sup> year students, we want to open the course to 2<sup>nd</sup> and third year students who may want to perform in the senior works for credit. The area will increase the workload for dancers in the course through assigning production house for the SCA. Allowing students to repeat the course will make this possible. We are changing the credit weight (from 4 to 5) to account for the extra workload and rehearsal hours that the students require to accomplish material for the showings.

SUIJS	23-51b
3005	23 310

			3003 2	3-210
спи	SENATE COMMITT	EE ON	COURSE MODIFICA	TION FORM
SFU	UNDERGRADUATE	STUDIES		Page 1 of 2
COURSE SU	J <b>BJECT</b> BIS	C NUMBER 40	5 <b>TITLE</b> Neurobiology	
TYPE OF CH	ANGES. Pleas	e type 'X' for the appropri	iate revision(s):	
Course number		Units 🗌	Prerequisite 🛛	
Title		Description	Equivalent 🗆 Statement	
expand. Plea	se review the	"Equivalency statements"	bigger, as it will not automatically section under <u>Information about</u>	
<u>specific cour</u>	<u>'se component</u>	<u>s</u> if changing equivalent	statement(s).	
Prereauisit	e: Students cor	nplete one of: (BISC 205 <del>or</del>	and BPK 205 <b>)</b> and or (BPK 205 and N	ИВВ
		321; <del>both</del> each with a min		

# **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)



The current prerequisites unintentionally exclude students from the Behavioural Neuroscience major, who are not required to take MBB 231. The 4 prereq options expand and provide access to:

- Biological Sciences majors: BISC 205 Principles of Physiology, and MBB 231 Cellular Biology & Biochemistry,
- Biomedical Physiology majors: BPK 205 Introduction to Human Physiology, and MBB 231 Cellular Biology & Biochemistry,
- Kinesiology majors: BPK 306 Human Physiology II (which includes MBB 201 as a builtin pre-requisite),
- Behavioural Neuroscience majors: BPK 306 Human Physiology II (which includes MBB 201 as a built-in pre-requisite),
- Health Sciences majors (Life Sciences Concentration): HSCI 231 Human Pathophysiology (which includes MBB 231 as a built-in pre-requisite).

COURSE SI	JBJECT	MATH NUMBER	348	TITLE Introduction to Probabilis Models
FYPE OF CH	IANGES. P	ease type 'X' for the ap	propriate re	vision(s):
Course number		Units		Prerequisite 🛛
Title	$\boxtimes$	Description	$\boxtimes$	Equivalent 🗆 Statement
		ion to Probabilistic Mo	<del>s sample spa</del>	

Fall 2024



UNDERGRADUATE STUDIES

**RATIONALE** (must be included)

Page 2 of 2

The description is being tightened up to better inform students what application areas to expect and to clarify that simulation is a part of the course.

The previous description was overly vague. There has been very little change to the theoretical aspects of the course content. Over time the focus of the application areas has shifted with changing student needs.

COURSE SU	JBJECT	MATH NUMBER	360	TITLEModeling with OrdinaryDifferential Equations
TYPE OF CH	ANGES.	Please type 'X' for the app	propriate rev	rision(s):
Course number		Units		Prerequisite 🛛
Title	$\boxtimes$	Description	$\boxtimes$	Equivalent 🖂 Statement
indicate add allows, drag expand. Plea specific cour	ed or nev the endp se reviev <u>se compo</u> <u>Modelin</u>	v text using <u>underline</u> . If y oint of the text box to ma	you need to ke it bigger, nents" sectio alent statem	

Applications may be selected from topics in physics, biology, engineering and economics. Key ideas and mathematical methods used in applications of mathematics to various biological, ecological, physiological, and medical problems. The course derives, interprets, solves and simulates models of biological systems. Topics could include population models, evolution from trait and genetic perspectives and qualitative analysis of ODEs.

Prerequisite: <u>MATH 251</u> and <u>MATH 260</u>, with a minimum grade of C-. Students with credit for MATH 461 or <u>MATH 761</u> may not complete this course for further credit. <u>MATH 260 with a minimum grade of C- OR MATH 155 with a minimum</u> grade of A-. Strongly Recommended: Experience with a computing platform such as R, MATLAB, or Python. Quantitative.

#### **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Fall 2024



# **RATIONALE** (must be included)

The previous description was overly vague and there has been very little change to course content. All recent offerings (including with the former number, 461) have focused on models from biology.

The description is being tightened up to better inform students how this class fits into our new biomathematics concentration being developed for Fall 2024.

The prerequisites have been changed to make the course accessible to life science students with a particular interest and strength in mathematics.

SFU COURSE S	SENATE COMMI UNDERGRADUA UBJECT P		E <b>R</b> 344	COURSE MODIFICATIO P TITLE Thermal Physics	N FORM age 1 of 2				
<b>TYPE OF CHANGES.</b> Please type 'X' for the appropriate revision(s):									
Course number		Units		Prerequisite 🛛					
Title		Description	n 🗆	Equivalent 🗆 Statement					
indicate add allows, drag expand. Plea <u>specific cour</u> Heat, temp heat engin transition	led or new te the endpoin ase review th rse compone perature, hea nes, applicatio s. Prerequisit	xt using <u>underline</u> . t of the text box to be e "Equivalency stat <u>nts</u> if changing equ t transfer, kinetic th ons of thermodynar ce: PHYS 121 or PH	If you need make it bigg cements" se ivalent stat heory, laws nics to spec YS 126 or P	of thermodynamics, entropy,					

# EFFECTIVE TERM AND YEAR FOR CHANGES

Fall, Spring, Summer and year (please enter in textbox)



# **RATIONALE** (must be included)

Some Physics programs allow for PHYS 102 instead of PHYS 121 or PHYS 141. The updated prerequisites now allow such students to enroll in PHYS 344.