

FORMAT 1

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).

See http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/ for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

Department	Veterinary 1	Medicine	Colleg	e/School				CNSM
Prepared by	Aaron Kalla	S	Phone		907-474-1928			
Email Contact	Contact ajkallas@alaska.edu		Facult	Faculty Contact		Arleigh Reynold		
1. ACTION DE	SIRED (CHECK ON	V E):	l Course		New C	Course	X	
2. COURSE ID	ENTIFICATION:	Dept	BMSC	Course #	214	No. of C	redits	2
status & num	nber of credits:	providing stude opportunities activities in a objective is for in pursuing reon, and through	to learn about low stress, sm r seminar part search metho ghout their un	, discuss, an nall group se ticipants to d ds courses dergraduate	nd conduction of the conductio	et ethical ting. The elf-efficac rch oppo	researd ultima by and i	ch te nterest
B. PROPOSED	COURSE TITLE:	Beginning I	Research: Disco	vering Oursel	ves as Rese	archers		
4. To be CROSS	YES/NO	NO	If yes, Dept:		Cours			
NOTE: Cross-l signatures		roval of both depart	ments and deans	involved. Add	lines at end	of form for	additiona	ıl required
5. To be STACK	ED? YES/NO	NO	If yes, Dept.		Со	urse #		
		els differ from eac t at the appropria level	te					
Advising Committ of what are suppo (i.e. is there under being undertaxed?	ee. Creating two di sed to be two differ graduate and gradu In this context, th	freed by the (Undergottern syllabi—under the courses. The course the course the course the committees are look. More info online—	ergraduate and gr emmittees will det eing offered); 2) a ooking out for the	raduate versions ermine: 1) whe re undergraduat interests of the	s—will help ther the two tes being ove	emphasize versions are ertaxed?; 3)	the differ e sufficier are gradu	ent qualitie ntly differen uate student
S. FREQUENCY	OF OFFERING:	Fall each yea	r					
		Fall, Spring,	Summer (Every, o		ed Years, or Warrants	Odd-numb	ered Yea	rs) — or As
				Demand	vvariants			

must be approved by the Core Rev COURSE FORMAT: (check all that apply)	1		2		3		4		5	X	6 weeks semester	
OTHER FORMAT (specify)												
Mode of delivery (specify lecture, field trips, labs, etc)	Lecture, Blac	kbo	ard			Ly.						
9. CONTACT HOURS PER WEI	EK:	2		CTURE urs/weel	ks	0	100000	LAB nours	/week	0	PRACTI hours /v	
Note: # of credits are based on co 1600 minutes in non-science lab= This must match with the syllabus for-computing-/ for more informat	1 credit. 2400-4 . See <u>http://www.</u>	800 uaf.e	minut edu/ua	es of pra	cticur	n=1 cre	dit.	. 240	0-8000 m	inutes of	internship=	1 credi
OTHER HOURS (specify type)												
<u>COMPLETE</u> CATALOG DESCR stacking (50 words or less if		ng c	иери.,	numbe	er, uu	e, cred	iits,	, cred	ait aistrit	oution, c	ross-iistin	gs and
H F487 W, O Fisheries Manag												
H F487 W, O Fisheries Manag 3 Credits Offered Spring	ement		• • •						·:: 16			
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe	ement ries manageme	nt, v	with a	ın empl	hasis (on stra	teg	gies u	tilized fo	r the ma	anagemen	t of
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe	ement ries manageme ries. <i>Prerequisi</i> t	tes:	COM	IM F131	1X or	COM	M F	F141)	K; ENGL	F111X;	ENGL F21	t of 1X or
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F	ement ries manageme ries. Prerequisit ISH F425; or pe	tes: erm	COM ission	IM F131 of inst	1X or tructo	COMI r. Cro	M F ss-l	F141) listed	K; ENGL I with NI	F111X;	ENGL F21	t of 1X or
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re	ement ries manageme ries. Prerequisit ISH F425; or pe	tes: erm	COM ission	IM F131 of inst	1X or tructo	COMI r. Cro	M F ss-l	F141) listed	K; ENGL I with NI	F111X;	ENGL F21	t of 1X or
1 F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re 2 Credits Offered Fall	ement ries manageme ries. <i>Prerequisit</i> <i>ISH F425; or p</i> search: Disc	tes: ermi ove	COM ission ering	of inst	1X or tructo elves	COMI r. Cro s as R	M F ss-l	listed	K; ENGL with NE chers	F111X; RM F487	ENGL F21 . (3+0)	1X or
1 F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re 2 Credits Offered Fall This seminar aims to introduce	ries manageme ries. Prerequisit (ISH F425; or po search: Disco	tes: ermi ove	COM ission ering	IM F131 of inst Ourse arch m	1X or tructo elves netho	COMM r. Cro s as R ds by	es pro	listed eard	K; ENGL I with NE chers ng stud	F111X; RM F487 ents wh	ENGL F21 (. (3+0)	1X or
A F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re- 2 Credits Offered Fall This seminar aims to introduces	ries management ries. Prerequisit (ISH F425; or posearch: Disco duce students thods opportu	tes: ermi ove to i	comission ering resea	of instance of ins	1X or tructo elves netho abou	r. Cro s as R ds by	es procus	listed listed eard ovidi	K; ENGL With NE Chers Ing studend cond	F111X; RM F487 ents wh	r. (3+0)	1X or
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re- 2 Credits Offered Fall This seminar aims to introduce research and research me activities in a low stress, si	ries managemeries. Prerequisit FISH F425; or posearch: Discontinuous duce students thods opportumall group ser	tes: ermi ove to i	resea es to ar se	of instance of ins	IX or tructo elves netho abou The u	r. Cro as R ds by at, disc	es procus	listed searce ovidings, a objection	x; ENGL I with NE chers ng stud nd cond ctive is t	ents who uct eth	r. (3+0) no are ne ical resea	ew to
A F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re- 2 Credits Offered Fall This seminar aims to introduce research and research me activities in a low stress, si participants to develop self	ries managemeries. Prerequisit FISH F425; or posearch: Disconditional disconditional group serf-efficacy and	to inition	researes to ar se	of instance of ins	IX or tructor elves netho abou	com/ r. Cro s as R ds by at, disc altimat	es procus	listed searce ovidi ss, a objectical	x; ENGL I with NI chers ng stud nd cond ctive is f researc	ents who uct eth	no are ne ical researinar ods cours	ew to arch
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re- 2 Credits Offered Fall This seminar aims to introduce research and research me activities in a low stress, si participants to develop self- and research opportunities	ries managemeries. Prerequisit FISH F425; or posearch: Disconditional disconditional group serf-efficacy and	to inition	researes to ar se	of instance of ins	IX or tructor elves netho abou	com/ r. Cro s as R ds by at, disc altimat	es procus	listed searce ovidi ss, a objectical	x; ENGL I with NI chers ng stud nd cond ctive is f researc	ents who uct eth	no are ne ical researinar ods cours	ew to arch
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re- 2 Credits Offered Fall This seminar aims to introduce research and research me activities in a low stress, si participants to develop self	ries managemeries. Prerequisit FISH F425; or posearch: Disconditional disconditional group serf-efficacy and	to inition	researes to ar se	of instance of ins	IX or tructor elves netho abou	com/ r. Cro s as R ds by at, disc altimat	es procus	listed searce ovidi ss, a objectical	x; ENGL I with NI chers ng stud nd cond ctive is f researc	ents who uct eth	no are ne ical researinar ods cours	ew to arch
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re- 2 Credits Offered Fall This seminar aims to introduce research and research me activities in a low stress, si participants to develop self- and research opportunities	ries managemeries. Prerequisit FISH F425; or posearch: Disconditional disconditional group serf-efficacy and	to inition	researes to ar se	of instance of ins	IX or tructor elves netho abou	com/ r. Cro s as R ds by at, disc altimat	es procus	listed searce ovidi ss, a objectical	x; ENGL I with NI chers ng stud nd cond ctive is f researc	ents who uct eth	no are ne ical researinar ods cours	ew to arch
Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Received This seminar aims to introcresearch and research me activities in a low stress, so participants to develop self-and research opportunities	ries managemeries. Prerequisit FISH F425; or posearch: Disconditional disconditional group serf-efficacy and	to inition	researes to ar se	of instance of ins	IX or tructor elves netho abou	com/ r. Cro s as R ds by at, disc altimat	es procus	listed searce ovidi ss, a objectical	x; ENGL I with NI chers ng stud nd cond ctive is f researc	ents who uct eth	no are ne ical researinar ods cours	ew to arch
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re 2 Credits Offered Fall This seminar aims to introc research and research me activities in a low stress, si participants to develop self and research opportunities 2+0+0	ries managemer ries. Prerequisit FISH F425; or po search: Disco duce students thods opporturnall group ser f-efficacy and s early on, and	to inition	researes to ar seerest rough	MM F131 of inst Ourse arch m learn etting. I in purs hout th	atructo elves netho abou The u suing neir u	commer. Cross as R ds by ut, discoultimate up biom nderg	procuste of ed	listed searce ovidi ss, a objectical duate	x; ENGL I with NI chers ng stud nd cond ctive is t researc e studie	ents when the control of the control	no are ne ical researinar ods coursequisites:	ew to arch ses
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fisher freshwater and marine fisher ENGL F213X; ENGL F414; F BMSC 214 Beginning Received 2 Credits Offered Fall This seminar aims to introcresearch and research meactivities in a low stress, signarticipants to develop self and research opportunities 2+0+0	ries managemer ries. Prerequisit FISH F425; or posearch: Disco duce students thods opporturnall group ser f-efficacy and s early on, and	to unition inte	researes to ar searest rough	and F131 of inst Ourse arch m b learn etting. T in purs hout th	atructo elves netho abou The u suing neir u	commer. Cross as R ds by ut, discoultimate up biom nderg	procuste of ed	listed searce ovidi ss, a objectical duate	x; ENGL I with NI chers ng stud nd cond ctive is t researc e studie	ents when the control of the control	no are ne ical researinar ods coursequisites:	ew to arch ses
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Received 2 Credits Offered Fall This seminar aims to introcresearch and research me activities in a low stress, so participants to develop self and research opportunities 2+0+0 COURSE CLASSIFICATIONS: classification appropriately; Course Classification appropriat	ries managemer ries. Prerequisit FISH F425; or posearch: Disco duce students thods opporturnall group ser f-efficacy and s early on, and	to unition inte	researes to ar searest rough	and F131 of inst Ourse arch m b learn etting. T in purs hout th	atructo elves netho abou The u suing neir u	commer. Cross as R ds by ut, discultimate up biom nderg	procus te ded rac	listed searce ovidings, a objectical duate	x; ENGL I with NE chers ng stud nd cond ctive is t researc e studie	ents when the control of the control	no are ne ical researinar ods coursequisites:	ew to arch ses
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fisher freshwater and marine fisher ENGL F213X; ENGL F414; F BMSC 214 Beginning Received 2 Credits Offered Fall This seminar aims to introcresearch and research meactivities in a low stress, signarticipants to develop self and research opportunities 2+0+0	ries managemer ries. Prerequisit FISH F425; or posearch: Disco duce students thods opporturnall group ser f-efficacy and s early on, and	to unition inte	researes to ar searest rough	and F131 of inst Ourse arch m b learn etting. T in purs hout th	atructo elves netho abou The u suing neir u	commer. Cross as R ds by ut, discoultimate up biom nderg	procus te ded rac	listed searce ovidings, a objectical duate	x; ENGL I with NE chers ng stud nd cond ctive is t researc e studie	ents when the control of the control	no are ne ical researinar ods coursequisites:	ew to arch ses
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fishe freshwater and marine fishe ENGL F213X; ENGL F414; F BMSC 214 Beginning Re 2 Credits Offered Fall This seminar aims to introc research and research me activities in a low stress, si participants to develop self and research opportunities 2+0+0 COURSE CLASSIFICATIONS: classification appropriately; of H = Humanities	ries managemeries. Prerequisit FISH F425; or posearch: Disconduce students thods opporturnall group serf-efficacy and searly on, and	to inition integral of the countries of	comission researes to ar see recest rough	and F131 of inst Ourse arch m b learn etting. T in purs hout th	atructo elves netho abou The u suing neir u	commer. Cross as R ds by ut, discultimate up biom nderg	procus te ded rac	listed searce ovidings, a objectical duate	my student of the stu	ents whuct ethors embands. Prere	no are ne ical researinar ods coursequisites:	ew to arch ses
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fisher freshwater and marine fisher ENGL F213X; ENGL F414; F BMSC 214 Beginning Received 2 Credits Offered Fall This seminar aims to introcresearch and research meactivities in a low stress, so participants to develop self and research opportunities 2+0+0 COURSE CLASSIFICATIONS: classification appropriately; Course Classification appropria	ries managemeries. Prerequisit FISH F425; or posearch: Disconduce students thods opporturnall group serf-efficacy and searly on, and	to inition integral that the countries of the countries o	comission research to the community of t	and F131 of inst Ourse arch m b learn etting. T in purs hout th	atructo elves netho abou The u suing neir u	commer. Cross as R ds by ut, discultimate up biom nderg	procus te ded rac	listed searce ovidings, a objectical duate	x; ENGL I with NE chers ng stud nd cond ctive is f researc e studie	ents whuct ethors embands. Prere	no are ne ical researinar ods coursequisites:	ew to arch ses
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fisher freshwater and marine fisher ENGL F213X; ENGL F414; F BMSC 214 Beginning Received This seminar aims to introcresearch and research meactivities in a low stress, signarticipants to develop self and research opportunities 2+0+0 COURSE CLASSIFICATIONS: classification appropriately; of H = Humanities Will this course be used to for the baccalaureate core	ries managemeries. Prerequisit FISH F425; or posearch: Disconduce students thods opportunall group serf-efficacy and searly on, and Undergraduate otherwise leave of fulfill a require of fulfill a re	to integrate to integrate the country of the countr	reseases to ar see reseases to ar see reseases to ar see reseases to a see resease to a	and F131 of instance of instan	netho about The united about Seives	commerce com	procus te ded rac	listed searce ovidings, a objectical duate	my student of the stu	ents whuct ethors embands. Prere	no are ne ical researinar ods coursequisites:	w to arch ses : None
H F487 W, O Fisheries Manag 3 Credits Offered Spring Theory and practice of fisher freshwater and marine fisher ENGL F213X; ENGL F414; F BMSC 214 Beginning Received 2 Credits Offered Fall This seminar aims to introcresearch and research meactivities in a low stress, suparticipants to develop self and research opportunities 2+0+0 COURSE CLASSIFICATIONS: classification appropriately; of H = Humanities [Will this course be used to the strength of the strength	ries managemeries. Prerequisit FISH F425; or posearch: Disconduce students thods opportunall group serf-efficacy and searly on, and Undergraduate otherwise leave of fulfill a require of fif YES, attachequirements it contains a search of the	to inition interior in the country of the country o	comission researces to ar see reset rough	and F131 of instance of instan	tructo elves elves etho abou The u suing eir u fulfill	commer. Cross as R ds by ut, discultimate up biom nderg with (= Social	procuste ded	listed searce ovidings, a objectical duate	riculum	ents where the control of the contro	no are ne ical researinar ods coursequisites:	w to arch

Is this course repeatable for cr	eans	La Tes Joedania	YES			NO x				
Justification: Indicate why the example, the course follows	ne course can a different th	be repea eme each	ted (for time).							
How many times may the co									TIMES	
If the course can be repeated may be earned for this cours		hat is the	maxim	num numb	per of ci	redit hou	rs that		CREDITS	
RESTRICTIONS ON ENROL	LMENT (if ar	ny)								
14. PREREQUISITES	None									
					These	e will be	required	before the	student is	allowed
15. SPECIAL RESTRICTION	NS, CONDIT	IONS								
16. PROPOSED COURSE		NONE								
Has a	memo been		throug	gh your de	ean to t	he Provo	st for fee		No	
If the course can be repeated	ا ا ـ : ـ ـ ـ طهار د ا	o aug-l:r	ubat!	th o m'			-u	Yes/No		
LETTER: X I	PASS/FAIL: [cs or trial				or a cour		on constitu	tes a majo	or
REVIOUS HISTORY Has the course been offered a Yes/No	PASS/FAIL: [s special topi	i basikanya	course g 2016	previousl	['] y?					
REVIOUS HISTORY Has the course been offered a Yes/No If yes, give semester, year, countries the course been offered a Yes/No If yes, give semester, year, countries the countries the countries the countries the countries that it is a second of the countries that it is	PASS/FAIL: [s special topi urse #, etc.:	Spring (7883	course 3 2016 8)	<i>previousl</i> 5 URSA F	/y? 5388 (3	5166), F	Fall 201	Yes 6 BMSC 29		
REVIOUS HISTORY Has the course been offered a Yes/No If yes, give semester, year, country ETIMATED IMPACT WHAT IMPACT, IF ANY, WILL None BRARY COLLECTIONS lave you contacted the library dequacy of library/media collections	PASS/FAIL: [s special topi urse #, etc.: L THIS HAVE collection de ections, equip	Spring (7883 ON BUD velopmen	course g 2016 8) GET, F.	previousl URSA F ACILITIES	'y? 5388 (3 5/SPACE n@alask	5166), F E, FACUL ka.edu, 4	TY, ETC.	Yes 6 BMSC 29	93 rd to the	
REVIOUS HISTORY Has the course been offered a Yes/No If yes, give semester, year, county of the course been offered a Yes/No If yes, give semester, year, county of year, year, county of year, year, year, county of year,	es special topi s special topi urse #, etc.: L THIS HAVE collection de ections, equip explain why n	Spring (7883 ON BUD velopmen	course g 2016 8) GET, F.	previousl URSA F ACILITIES	'y? 5388 (3 5/SPACE n@alask	5166), F E, FACUL ka.edu, 4	TY, ETC.	Yes 6 BMSC 29	93 rd to the	
REVIOUS HISTORY Has the course been offered a Yes/No If yes, give semester, year, countries the course been offered a Yes/No If yes, give semester, year, countries the course been offered a Yes/No TIMATED IMPACT WHAT IMPACT, IF ANY, WILL None BRARY COLLECTIONS Have you contacted the library dequacy of library/media collection and resolution. If not, expended a yes a	es special topi Irse #, etc.: L THIS HAVE collection de ections, equip explain why n	Spring (7883 ON BUD velopmen ment, and oot.	course 3 2016 8) GET, F. et office tl service	previousl URSA F ACILITIES er (kljenser es availab	388 (3 5/SPACE n@alask ple for th	5166), F E, FACUL ka.edu, 4	TY, ETC.	Yes 6 BMSC 29	93 rd to the	
REVIOUS HISTORY Has the course been offered a Yes/No If yes, give semester, year, country TIMATED IMPACT WHAT IMPACT, IF ANY, WILL None BRARY COLLECTIONS Is ye you contacted the library dequacy of library/media collection and resolution. If not, expending the contact and resolution. If not, expending the programs/departments clude information on the Programs	s special topi Irse #, etc.: THIS HAVE collection de ections, equip explain why n PTS will be affe s/Departments	Spring (7883) ON BUD evelopment, and enot. cted by to secontacted	course g 2016 8) GET, F. et office d service	previousl URSA F ACILITIES er (kljenser es availab	388 (3 5/SPACE n@alask ple for th	5166), F E, FACUL ka.edu, 4	TY, ETC.	Yes 6 BMSC 29	93 rd to the	
REVIOUS HISTORY Has the course been offered a Yes/No If yes, give semester, year, country STIMATED IMPACT WHAT IMPACT, IF ANY, WILL None BRARY COLLECTIONS lave you contacted the library dequacy of library/media collections. If not, events the seminary of	es special topi I THIS HAVE Collection de extions, equip explain why nexplain which is not nexplain which is not nexplain why nexplai	Spring (7883 ON BUD evelopment, and the second sected by the second sected sected second sected second sected second sected section sected section sected section sected section section section section sected section sectio	course g 2016 8) GET, F, t office d service his pro	previousl 5 URSA F 5 ACILITIES er (kljense, es availab pposed a mail, mem	S/SPACE ole for the ction?	5166), F	TY, ETC. 74-6695 sed cour	Yes 6 BMSC 29 9 with regarse? If so, gi	93 ord to the ve date of	

JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

This course is for all students who are interested in understanding biomedical research methodology or are in the primary steps of establishing a project idea and proposal concept. Students who are considering applying for BLaST funding in the future may be encouraged to attend but this is not a mandatory condition of that funding and will not be a factor into the evaluation for funding. The course will be open to any UAF undergraduate student who may be interested.

BLaST Undergraduate Scholarship recipients(Scholars) are required to attend and participate if they previously have had no mentored research experience. Participants in this course may or may not be currently involved in research activities.

Beginning Research will be the first course in a sequence of courses (BMSC 214, BMSC 224, BMSC 314, BMSC 324) designed to support students in the development of a fundable research proposal leading to independent mentored research projects. Beginning Research can be a stand alone course and does not require students to participate in subsequent courses, but does establish a foundational proposal idea that is further refined throughout the duration of the course sequence.

This course has run twice (spring '16 and fall'16) as a special topics course, URSA F388 and BMSC 293, and total enrollment between the two sections has been 19 BLaST Scholars. It has gone extremely well from both the instructor and student perspectives and has greatly helped in developing our student's ability to create independent project proposals and understand the methodology of biomedical research. Many students appreciated the structure of the course that lead them through an intimidating process by breaking it down in simple steps that where both realistic and student centered. Students felt more confident in the process of research and were better prepared to pursue independent project ideas. We have also been able to use the opportunity to assess student research ambitions and suggest mentoring partnerships between graduate student and faculty mentors.

Docusigned by:		Date	February 6, 2017
igraturo fair, Program/Department of:	<u>Veterinary Medicine</u>		
Patricia Doale		Date	February 6, 2017
Signature Ghair, College/School Curricului	m Council for: CNSM		
Landw Layer		Date	February 6, 2017
Signature, Dean, College/School of:	CNSM		

	Date	
Signature, Chair		
Faculty Senate Review Committee:Curriculum Review	GAAC	
C D : CADAC		
Core ReviewSADAC		
ODITIONAL SIGNATURES: (As needed for cross-listing and	(or stacking)	
ODITIONAL SIGNATURES: (As needed for cross-listing and/	or stacking)	
ODITIONAL SIGNATURES: (As needed for cross-listing and/		
· ·	(or stacking) Date	
· ·		
· ·	Date	
Signature, Chair, Program/Department of:		
Signature, Chair, Program/Department of:	Date	
Signature, Chair, Program/Department of: Signature, Chair, College/School Curriculum Council for:	Date	

Beginning Research: Discovering Ourselves as Researchers

1. Course Information

Title:

Beginning Research: Discovering Ourselves as Researchers

Number:

BMSC 214 (CRN)

Credit:

2

Prerequisites:

No prerequisites.

This course is intended for students who are currently participating in research activities.

Location:

AHRB 186

Meeting Time:

Wednesday 3:30 - 5:30

2. Course Director Contact:

Co-Instructor: Arleigh Reynolds

E-mail: ajreynolds@alaska.edu **Phone:** 474-1928

Office: 182 AHRB
Hours: By appointment

Co-Instructor: Aaron Kallas

E-mail: ajkallas@alaska.edu

Phone: 907-903-3360
Office: Murie 130
Hours: By appointment

3. Reading Materials:

Committee on Science, Engineering and Public Policy (2009): *On Being a Scientist:* Responsible Conduct in Research, 3nd edition. National Academy Press, Washington, DC. Downloadable from: http://www.nap.edu/catalog/12192/on-being-a-scientist-a-guide-to-responsible-conduct-in

All session specific readings will be provided in class or via email or Blackboard.

4. Course Description

BMSC 214 Beginning Research: Discovering Ourselves as Researchers 2 Credits Offered Fall

This seminar aims to introduce students to research methods by providing students who are new to research and research methods opportunities to learn about, discuss, and conduct ethical research activities in a low stress, small group seminar setting. The ultimate objective is for seminar participants to develop self-efficacy and interest in pursuing research methods courses and research opportunities early on, and throughout their undergraduate studies. Prerequisites: None. 2+0+0

6

5. Course Objectives:

- a) Present qualitative and quantitative research methods
- b) Identify, describe, and perform diverse research methods that can be used to explore, explain, and address important issues.
- c) Define, understand, and demystify terminology used when discussing research
- d) Discuss how culture, world views, and prior experiences with research can impact topics and methods used in research
- e) Discuss important ethical considerations involved in conducting research.

6. Student Learning Outcomes

- a) Recognize themselves as researchers
- b) Conduct small-scale qualitative and quantitative research activities
- c) Present research and experiences to others
- d) Identify undergraduate research funding and experiential opportunities
- e) Gain confidence in their ability to pursue further research training and experiences
- f) Identify research issues of interest to themselves
- **7. Instructional Methods:** Group discussions, activities, speakers, readings, videos, lectures, assignments will comprise the class.

8. Course Calendar

7

Week	Topic	Assignments/Readings (to prepare for this session)	OBS Reading Alignment
Why's a	nd Considerations of Research		
1	We are all researchers Class/Training overview Review CITI training Website How our culture and world views impact the research we do, how we ask questions, & what we expect Activity: My first impressions of you – and then paired interviews Activity: To people in my community, research is? Review Assignment: Stories of Self - as researcher Ethics	For session: Sign up for CITI Profile	Introduction to the Responsible Conduct of Research (pg 1-3)
2	 What is research/Why do we do it? Activity: Have you ever Discuss: Stories of Self Discussion: Define "research" Discussion: What we want to know more about – developing research questions about the world around us Review assignment: What kind of researcher are you? 	For session: Complete Assignment 1: Story of Self OBS – Case Study: A Change of Plans (pg. 5 Q's 1-4)	Advising and Mentoring (pg 4-7)
How /Tv	pes of Research Methods)		
3	How can we find out? ~ using both Qualitative and Quantitative methods Discuss: What kind of researcher are you? Presentation & Discussion: Using qualitative and quantitative methods Review Assignment: Observation Ethics	For session: Complete Assignment 2: What is Qualitative Research? OBS – Case Study: Discovering and Error (pg. 14 Q's 1-3)	Mistakes and Negligence (pg 12- 14)
4	How can we find out? Observation Presentation & Discussion: Participant & Non-participant Observation Ethics	For session: Complete Assignment 3: Observation OBS – Case Study: Fabrication in a Grant Proposal (pg. 17 Q's 1-4)	Research Misconduct (pg 15-18)

5	How can we find out? Interviews/Stories Presentation & Discussion: Conducting in-depth interviews Review: Interview Assignment Ethics	For session: Complete Assignment 4: Develop topic for interviews & 4-5 open- ended questions OBS – Case Study: A Conflict of Commitment (pg. 45 Q's 1-2)	Competing Interests and Values (pg 43- 47)
6	How can we find out? Interviews/Stories (continued) Presentation & Discussion: Conducting in-depth interviews Review: Interview Assignment Ethics	For session: Complete Assignment 5: Interviews OBS – Case Study: A Career in the Balance (pg. 22 Q's 1-3)	Violation of Professional Standards and Whistleblower protections (pg 19-23)
7	How can we find out? Surveys Presentation & Discussion: Survey methods & Questions Activity: Class develops idea & questions for survey Ethics	For session: Review Sample Survey OBS - Case Study: The Selection of Data (pg. 10 Q's 1-4)	Treatment of Data (pg 8-11)
8	How can we find out? Surveys (continued) Activity: Input and analyze survey data using SPSS Ethics	For session: Complete Assignment 6: Survey OBS – Case Study: Tests on Students (pg. 25 Q's 1-2). Case Study: A change of Protocol (pg. 26 Q's 1-3)	Human Participants and Animal Subjects in Research
Elements	of Project Proposal Design	(pg/20 gg ; 0)	
9	Developing Research Questions, Statements and Hypotheses Developing Fundable Research Questions Elements of a Research Statement Hypothesis building Ethics	For session: Complete Assignment 7: Develop a list of 4-5 possible project ideas. OBS – Case Study: Who gets Credit? (pg. 36 Q's 1-3)	Authorship, Credit and Allocation of Credit (pg 35-38)
10	Reviewing the Literature Annotating Reviewed literature Citations Project Introduction Ethics	For session: Develop a research question Start Research Statement	N/A
11	Reviewing the Literature (continued) Student Annotations	For session: Complete Research	Intellectual Property (pg 39-42

	Presentations Research Statements Ethics	 Article Annotations Be prepared to present your article annotations Finish Research Statement OBS – Case Study: A Commercial Opportunity (pg. 42 Q's 1-3) 	
12	Presenting our results/findings	For session: • Start Proposal Poster • OBS – Case Study: Publication Practices (pg. 32 Q's 1-6)	Sharing of Research Results (pg 29-34)
13	Poster development Digital Poster Proposal Elements Ethics	For session: Last day to complete CITI training Complete Proposal Poster OBS – Case Study: Ending the Use of Agent Orange (pg. 49 Questions provided on Blackboard)	The Researcher in Society (pg 48-50)
14	Application to other topics – your world – Developing your ideas URSA BLaST, & other Proposals Poster presentations & peer feedback Ethics	For session: Be prepared to present your poster OBS – Case Study and questions to be provided on Blackboard.	Laboratory Safety in Research (pg 28)
15	Poster Session Poster presentations & peer feedback Last day celebration!	For session: • Be prepared to present your poster	N/A

9. Course Policies

Participation: Participation during class is important. Please feel free to ask questions as they occur to you, and to offer your opinions during discussions. It is strongly recommended that you visit the instructor during office hours should you have questions or difficulty understanding the material. We are here to help!

1

Attendance: You are expected to attend all classes. If you miss a class, you are responsible for obtaining the information covered from another student. It is strongly recommended that you exchange contact information with another student in this course in the event that you must miss a class. Information covered in class will not be reiterated during office hours. Please do your best to arrive for class on time.

Technology in the Classroom: Please quiet your cell phones during class and refrain from text messaging and chatting with your classmates during lectures (see Technology in the Classroom). Please use your laptops, notebooks, and electronic tablets for class purposes only.

Ethics: Academic integrity is vitally important to the mission of the university. If you are caught cheating or plagiarizing in any way, you will receive a grade of "F" on that assignment. There will be no exceptions. If you are unsure about what constitutes plagiarism, they are encouraged to contact the instructor(s) for assistance.

10. Evaluation

Graded Aspects of the Course include the following:

Session Activities (140 points total):

Most sessions will involve in- and out-of-class assignments and activities. These activities will allow real-world experience of concepts covered in class. Students should be prepared to discuss and turn in assignments/activities as requested. Assignments include the following:

- 1. Story of Self
- 2. Researcher Questionnaire
- 3. Observation
- 4. Develop Interview Questions
- 5. Interviews
- 6. Surveys
- 7. Research Topic Development

CITI Ethics Trainings (100 points total):

Most sessions will include a 30-45 minute discussion concerning ethical research practices. Students will complete a web-based training program in Responsible Conduct of Research https://www.citiprogram.org/ A total of 10 module quizzes are available through CITI. Information on how to access these quizzes will be given on the first day of the course.

2

OBS (On Being A Scientist) Chapter "Think About It" Case Study Questions.

(10 points each, Total = 120 pts). For the 12 research ethics topics we will cover in class, you are asked to respond to critical thinking questions associated with the assigned case study for that section or questions that are provided by the instructor. The hope is that these questions will trigger insightful discussion and exploration that includes and goes beyond the information presented in each topic and case study.

Please submit your completed questions on Blackboard before the session in which the topic will be covered so that classroom discussions are productive.

Research Article Annotation and Class Presentation (60 points total)

Reading and knowing the literature that informs your research is very important! For this assignment you will select **three to five** research articles that you find particularly interesting. Using an abstracting form (available on Blackboard) you will identify key information the articles. During class each student will briefly present the papers they reviewed and participate in discussions highlighting strategies and challenges associated with scientific literature reviews.

Digital Proposal Poster (100 points total)

Each student will prepare a digital proposal poster to present that will act as a culminating exercise for this course. Several elements created during sessions will be blended into this presentation. (For more details, please see assignment handout on Blackboard and Grading Rubric)

Grading:

The grading for the course will be based on the components outlined below. Final letter grades will be assigned as follows:

Points

3

11. Student Resources and Support Services

We are here to help you enjoy and succeed in this class. Take advantage of our office hours or make an appointment if you have concerns or questions.

Disability Services provided through The Office of Disability Services at UAF (203 Whitaker/Fire Station, 474-7043) implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. Your instructor(s) will work with the Office of Disabilities Services to provide reasonable accommodations to students with documented disabilities. If applicable, please make arrangements with your instructor(s) within the first few weeks of classes. If you have not already done so, you will also need to contact UAF's Office of Disability Services by email at uaf-disabilityservices@alaska.edu, by phone at (907)474-5655, or by TTY at (907)474-1827.

The Writing Center (Gruening 8th floor, 474-5314) will help you prepare and print your papers.

Student Support Services (http://www.uaf.edu/sssp/) (Gruening 5th floor, 474-6844) are available to students who meet federal TRIO guidelines: low-income OR first-generation college OR have a documented disability. Services include: 1) free tutorial services; 2) small study groups; 3) academic advising, mentoring, and personal support; 4) direct financial assistance to qualified Pell Grant recipients; 5) use of laptop computers, labs, and other technology resources; and 6) cultural and social engagement.

The Student Health and Counseling Center (2nd floor of the Whitiker Building/Fire Station, 474-7043, open Monday – Friday 8 am – 5 pm). Students enrolled for at least nine credits can receive up to six free counseling sessions.

Veterans Services/Veterans Resource Center (111 Eielson, 474-2475). VA certifying officials in Financial Aid, as well as military and veteran points of contact in the offices of Admissions and the Registrar and Career Services. These services are here to foster a smooth transition from military to civilian life. pchokenson@alaska.edu or visit Veterans Services on the web http://www.uaf.edu/veterans/ or http://www.tacebook.com/UAFVA

Speaking Center (email <u>fyspeak@gmail.com</u> or call 907-474-5470) offers students help in conceiving, organizing, writing, delivering, and refining an individual or group presentation. Student may have their presentations digitally recorded for their own viewing.

University of Alaska Board of Regents have clearly stated in BOR Policy that discrimination, harassment and violence will not be tolerated on any campus of the University of Alaska. If you believe you are experiencing discrimination or any form of harassment including sexual harassment/ misconduct/assault, you are encouraged to report that behavior. If you report to a faculty member or any university employee, they must notify the UAF Title IX Coordinator about the basic facts of the incident. Your choices for reporting include:

- 1. You may access confidential counseling by contacting the UAF Health & Counseling Center at 474-7043;
- 2. You may access support and file a Title IX report by contacting the UAF Title IX Coordinator at 474-6600:
- 3. You may file a criminal complaint by contacting the University Police Department at 474-7721.

4

in
36
Ñ
F2
20D33EF
3
9
\vdash
\approx
\rightarrow
1
8
7
>
1
4
7
4
36
738
1
til
9
LL
190
0
3F
D3
$\ddot{\Box}$
=
Φ
ō
0
Ф
2
ıΠ
_
5
:0
4
ರ
0

Student Name:	Beginning Research Digital Project Proposal Rubric						
Category	20 Points (Exceptional)	15 Points (Developing)	10 Points (Satisfactory)	5 Points (Emerging)			
Research Statement	Statement is inclusive of all major aspects and is exceptional in depth and quality. Statement is very well crafted ad communicates the project intentions. This could be an example for others.	Statement is inclusive of most or all major aspects and may or may not be exceptional in depth and quality. Statement may or may not be well crafted or communicate the project intentions.	Statement is not inclusive of most or all major aspects and is satisfactory in depth and quality. Statement may not be well crafted or communicate the project intentions.	Statement is void of most aspects and may be shallow in depth and quality. Statement may not be well crafted or not communicate the project intentions.			
Experimental Methods	Lays out a plan that is realistic and within accepted methods given the project scope. Incudes relevant tools and equipment needed and approach is well communicated. This could be an example for others.	Lays out a plan that is somewhat realistic and within accepted methods given the project scope. Includes most of the relevant tools and equipment needed. Approach is generally well communicated	Lays out a plan that may be unrealistic or not within accepted methods given the project scope. May lack relevant tools and equipment needed. Approach may not be well communicated.	Lays out a plan that is unrealistic and not within accepted methods given the project scope. Lacks relevant tools and equipment needed. Approach may be unclear.			
Data Analysis Plan	Data plan is realistic and includes a plan for data collection. Includes a suggested statistical model and mentions what the data may look like. This could be an example for others.	Data plan may be realistic and includes a plan for data collection. Includes a suggested statistical model and may or may not mention what the data may look like.	Data plan may not be realistic or include a unclear data collection methods. May or may not include a suggested statistical model and may or may not mention what the data may look like.	Data plan is unrealistic or does not include a plan for data collection. Does not include a suggested statistical model or does not mention what the data may look like.			
Communication Plan	Communication plan specifically addresses the target audience or appropriate opportunities to share the project conclusions. This could be an example to others.	Communication plan may or may not specifically addresses the target audience or appropriate opportunities to share the project conclusions.	Communication plan is vague or does not specifically addresses the target audience or appropriate opportunities to share the project conclusions.	Communication plan is void of details that specifically addresses the target audience or appropriate opportunities to share the project conclusions.			
Poster Aesthetics	Poster has images, representational graphs, proper spacing and is laid out in a way that it is easy to understand the proposal as a stand alone resource. This could be an example to others.	Poster has few images, representational graphs, proper spacing or may not be laid out in a way that it is easy to understand the proposal as a stand alone resource.	Poster has few if any images, representational graphs, proper spacing or may be laid out in a confusing manner or not be useful as a stand alone resource.	Poster lacks images, representation graphs, proper spacing or may be laid out in a confusing manner and not be useful as a stand alone resource.			

