(NEW GRADUATE INITIATIVES)

PROPOSAL PROCEDURES CHECKLIST

Academic units should adhere to the following procedures when requesting new curricular initiatives (degrees, concentrations or certificates). Obtain the required approval from the Office of the Provost to move the initiative forward for internal ASU governance reviews/approvals. Establishment of new curricular initiative requests; degrees, concentrations, or certificates Rename requests; existing degrees, concentrations or certificates Disestablishment requests; existing degrees, concentrations or certificates ☐ Submit any new courses that will be required for the new curricular program to the Curriculum ChangeMaker online course approval system for review and approval. Additional information can be found at the Provost's Office Curriculum Development website: Courses link For questions regarding proposing new courses, send an email to: courses@asu.edu Prepare the applicable proposal template and operational appendix for the proposed initiative. New degree, concentration and certificate templates (contain proposal template and operational appendix) can be found at the Provost's Office Curriculum Development website: Academic Programs link Obtain letters or memos of support or collaboration. (if applicable) When resources (faculty or courses) from another academic unit will be utilized When other academic units may be impacted by the proposed program request ☐ Obtain the internal reviews/approvals of the academic unit. Internal faculty governance review committee(s) Academic unit head (e.g. Department Chair or School Director) Academic unit Dean (will submit approved proposal to the curriculumplanning@asu.edu email account for further ASU internal governance reviews (as applicable, University Graduate Council, CAPC and Senate) Additional Recommendations - All new graduate programs require specific processes and procedures to maintain a successful degree program. Below are items that Graduate Education strongly recommends that academic units establish after the program is approved for implementation. ☐ **Set-up a Graduate Faculty Roster for new PhD Programs** – This roster will include the faculty eligible to mentor, co-chair or chair dissertations. For more information, please go to http://graduate.asu.edu/graduate faculty initiative. ☐ Establish Satisfactory Academic Progress Policies, Processes and Guidelines – Check within the proposing academic unit and/or college to see if there are existing academic progress policies and processes in place. If none have been established, please go to http://graduate.asu.edu/facultv-staff/policies and scroll down to the academic progress review and remediation processes (for faculty and staff) section to locate the reference tool and samples for establishing these procedures. ☐ Establish a Graduate Student Handbook for the New Degree Program – Students need to know the specific requirements and milestones they must meet throughout their degree program. A Graduate Student Handbook provided to students when they are admitted to the degree program and published on the website for the new degree gives students this information. Include in the handbook the unit/college satisfactory academic progress policies, current degree program requirements (outlined in the approved proposal) and provide a link to the Graduate Policies and

<u>Check Box Directions</u> – To place an "X" in the check box, place the cursor on the left-side of the box, right click to open the drop down menu, select *Properties*, under *Default value*, select *Checked* and then select *Ok*.

Procedures website. Please go to http://graduate.asu.edu/faculty_staff/policies to access Graduate Policies and

Procedures.



This template is to be used only by programs that have received specific written approval from the University Provost's Office to proceed with internal proposal development and review. A separate proposal must be submitted for each individual new degree program.

DEGREE PROGRAM

_	
College/School(s) offering this degree: College of Promotion	Health Solutions, School of Nutrition and Health
Unit(s) within college/school responsible for pro	gram: Exercise and Wellness
If this is for an official joint degree program, list a involved in offering the degree program and prov	
Proposed Degree Name: Master of Science	e in Clinical Exercise Physiology
Master's Degree Type: MS	
Proposed title of major: Clinical Exercise F	Physiology
Is a program fee required? Yes ⊠ No □	
Is the unit willing and able to implement the prog	ram if the fee is denied? Yes 🗌 No 🖂
Requested effective term: Fall and year: 2014 (The first semester and year for which students may	begin applying to the program)
	ACT INFORMATION egarding this proposal)
Name: Kathryn D. Campbell	Title: Senior Lecturer and M.S. Coordinator Exercise and Wellness Program School of Nutrition and Health Promotion
Phone: 602-496-1852	email: kdcampbell@asu.edu
DEAN A	PPROVAL
This proposal has been approved by all necessary u College/School(s) has the resources to offer this deg proposed degree program. (<i>Note: An electronic signa PDF of the signed signature page is acceptable.</i>)	
College Dean name: Keith Lindor, M.D.	
College Dean Signature _ Keith Kidw	Date: _9-19-13_
College Dean name: (if more than one college involved)	
College Dean Signature	Date:

ARIZONA STATE UNIVERSITY PROPOSAL TO ESTABLISH A NEW GRADUATE DEGREE

This proposal template should be completed in full and submitted to the University Provost's Office [mail to:_curriculumplanning@asu.edu]. It must undergo all internal university review and approval steps including those at the unit, college, and university levels. A program may not be implemented until the Provost's Office notifies the academic unit that the program may be offered.

DEGREE PROGRAM INFORMATION			
Master's Type: MS (E.g. MS, MA, MAS, PSM, or other)			
Proposed title of major: Clinical Exercise Physiology			

1. PURPOSE AND NATURE OF PROGRAM:

A. Brief program description

The proposed degree will prepare individuals for a career as a Clinical Exercise Physiologist, the professional who guides exercise and rehabilitation programs for at – risk and chronic disease clients usually in concert with medical professionals. The American College of Sports Medicine (ACSM) is the national association responsible for establishing guidelines and recommendations for exercise testing, prescription and evaluation of research for both healthy and chronic disease populations. The **ACSM Registered Clinical Exercise Physiologist® (RCEP)** Certification is deemed "ACSM's most prestigious credential - for clinical professionals with a master's degree who work with clients currently under the care of a physician for cardiovascular, pulmonary, metabolic, orthopedic/musculoskeletal, neuromuscular, or neoplastic immunological/hematological disease." (ACSM, 2011). This degree will provide the knowledge, clinical experience, and skills needed for individuals to successfully complete the registration examination for the RCEP credential.

B. Will concentrations be established under this degree program?

Yes

No

(Please provide additional concentration information in the operational appendix – number 5A.)

2. **PROGRAM NEED -** Explain why the university should offer this program (include data and discussion of the target audience and market).

As more adults enter the retirement stages of their lives, the impact of preventative and rehabilitative programs will be increased. The medical profession is just now beginning to realize the value of exercise and physical activity in the prevention of and recovery from chronic disease, embodied by a new program "Exercise is Medicine", developed and coordinated by the American College of Sports Medicine. Patients with diabetes, cardiac disease or pulmonary disorders are often referred to a practitioner with the RCEP certification. The extent to which clinical exercise physiology programs are visible is more apparent on the eastern and western coastlines where programs and requirements for clinical exercise program leaders have been developed. The exercise physiologist who has prepared only with the bachelor's degree is not well accepted for employment in rehabilitation positions mainly due to a lack of knowledge of the chronic disease population. Students who have taken even a single graduate course in cardiac rehabilitation are a bit more marketable. A graduate of ASU who obtains the proposed Master's Degree and also the Registered Clinical Exercise Physiology Certification would be able to move into hospital, clinical and rehabilitation positions with proper preparation for the occupation. The degree will be highly marketable and attractive to both in-state and out-of-state students. The U.S. Bureau of Labor Statistics predicts employment opportunities for careers such as Clinical Exercise Physiology will increase over the decade from 2008-2018. Persons with graduate education and clinical certification earn, on average, \$20,000 more per year than BS-level trained

practitioners.

- 3. IMPACT ON OTHER PROGRAMS Attach any letters of collaboration/support from impacted programs. (see Checklist coversheet) Letters of support from the Director of the School of Nutrition and Health Promotion and the Dean of the College of Nursing and Health Innovation are attached.
- 4. PROJECTED ENROLLMENT How many new students do you anticipate enrolling in this program each year for the next five years? Please note, The Arizona Board of Regents (ABOR) requires nine masters and six doctoral degrees be awarded every three years. Thus, the projected enrollment numbers must account for this ABOR requirement.

5-YEAR PROJECTED ANNUAL ENROLLMENT					
Please utilize the following tabular format.	1 st Year	2 nd Year (Yr 1 continuing + new entering)	3 rd Year (Yr 1 & 2 continuing + new entering)	4 th Year (Yrs 1, 2, 3 continuing + new entering)	5 th Year (Yrs 1, 2, 3, 4 continuing + new entering)
Number of Students Majoring (Headcount)	5	10	13	17	22

5. STUDENT LEARNING OUTCOMES AND ASSESMENT:

- A. List the knowledge, competencies, and skills students should have attained by graduation from the proposed degree program. (You can find examples of program Learning Outcomes at (http://www.asu.edu/oue/assessment.html).
- Students will demonstrate their ability to conduct and act upon a Clinical Assessment as would be required for out-patient and in-patient clients
- Students will demonstrate their ability to select, administer, and interpret tests to assess a range of client/patient characteristics through appropriate methods of exercise testing
- Students will demonstrate their ability to develop and implement an appropriate Exercise Prescription based upon client/patient goals, health, abilities, and other factors.
- Students will demonstrate their ability to plan, implement, monitor, adapt, and assess the outcomes of specific Exercise Training protocols
- Students will describe and utilize appropriate techniques related to client/patient Education and Behavior Change within relevant cultural, economic, social, and other related domains
- Students will describe the requirements for successful Program Administration, including personnel management, program evaluation tools and customer service
- Students will demonstrate their ability to perform all professional duties with appropriate consideration of current legal and professional standards of practice
- **B.** Describe the plans and methods to assess whether students have achieved the knowledge, competencies and skills identified in the Learning Outcomes. (You can find examples of assessment methods at (http://www.asu.edu/oue/assessment.html).

Students will be continuously evaluated on their abilities to conduct and evaluate exercise tests through the use of case studies, utilization of the Simulation Laboratory, and during supervised clinical placements. They will be assessed on their ability to successfully complete various interpretive assignments throughout their plan of study; the exact mechanisms will be defined during the development of the program's Academic Assessment Plan. Each required course in the MS degree will have identifiable Learning Outcomes that will be assessed every semester. Instructional methods will be modified as needed based upon the results of the Academic Assessment. As a secondary method of assessment, student/alumni surveys, course and instructor evaluations, job placement data and graduate/professional school admission data will be collected

and assessed annually.

6. ACCREDITATION OR LICENSING REQUIREMENTS (if applicable): Provide the names of the external agencies for accreditation, professional licensing, etc. that guide your curriculum for this program, if any. Describe any requirements for accreditation or licensing.

A Job Task Analysis (JTA) was developed by ACSM to serve as a blueprint of the description of a Registered Clinical Exercise Physiologist (RCEP^R). The RCEP is an allied health professional with a minimum of Master's degree in Exercise Science and works in the application of physical activity and behavioral interventions for those clinical diseases and health conditions that have been shown to provide therapeutic benefit. The ACSM has developed a roster of Registered Clinical Exercise Physiologist Knowledge, Skills and Abilities (KSA) that form the basis of the national examination for the RCEP credential. The RCEP credential requires the completion of a graduate degree in clinical exercise physiology, at least 600 hours of supervised clinical experience, CPR credential, and satisfactory completion of the RCEP examination. Accreditation through the Commission for Accreditation of Allied Health Education programs (CAAHEP) is available and would enhance the marketability of the program. Accreditation would be pursued once the program is established and has students enrolled.

7. FACULTY, STAFF, AND RESOURCE REQUIREMENTS:

A. Faculty

i. Current Faculty - List the name, rank, highest degree, area of specialization/expertise and estimate of the level of involvement of all current faculty members who will teach in the program.

Kathy Campbell, EdD, Senior Lecturer, Exercise Physiology, FACSM, Certified Exercise Specialist, will teach 1-2 classes.

Donna Cataldo, PhD, Senior Lecturer, Exercise Physiology, will teach 1-2 classes Cheryl DerAnanian, PhD, Asst. Professor, teaches 1-2 classes Jarod Dickinson, PhD, Asst. Professor, teaches 1 class Glenn Gaesser, PhD, Professor, Exercise Physiology, teach 1 class Pamela Swan, PhD, Assoc. Professor, Exercise Physiology, teach if needed Siddhartha Angadi, PhD, Assistant Professor, Exercise Physiology, 2 classes Chong Lee, PhD., Associate Professor, Statistics and Research Design, will teach 1

Marc Adams, PhD, Asoc. Professor, research methods, if needed Barbara Ainsworth, PhD, Professor, epidemiology, public health, teach if needed

ii. New Faculty - Describe the new faculty hiring needed during the next three years to sustain the program. List the anticipated hiring schedule and financial sources for supporting the addition of these faculty members.

No new faculty needed.

class

iii. Administration of the program - Explain how the program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available staff support.

The Exercise and Wellness program will continue to administer the admissions, advising, and course offerings required for this degree. Staff are currently available (and will continue to be available) to support internship/clinical placements, academic advising, routine administrative support during the admissions cycles, and scheduling of all courses. Instructional laboratories are available in NHI-2 and the newly remodeled downtown Phoenix YMCA facility. Staff are available to set up and assist with instructional laboratories.

B. Resource requirements needed to launch and sustain the program: Describe any new resources required for this program's success such as new staff, new facilities, new library resources, new technology resources, etc

No new resources would be required to launch and sustain the program. Faculty are available in the Exercise and Wellness Program as well as the Kinesiology Program to teach courses in the program. The Kinesiology faculty have significant experience in teaching the content of many of the proposed courses and will easily adapt to graduate level instruction. Due to recent reductions in undergraduate enrollment within the Kinesiology program, no conflict re current undergraduate KIN courses is anticipated. Equipment is already available that can be used within the program.

8. COURSES:

- A. Course Prefix(es): Provide the following information for the proposed graduate program.
 - i. Will a new course prefix(es) be required for this degree program?
 Yes ☐ No ☒
 - ii. If yes, complete the <u>Course Prefixes / Subjects Form</u> for each new prefix and submit it as part of this proposal submission.
- **B.** New Courses Required for Proposed Degree Program: Provide course prefix, number, title, and credit hours and description for any new courses required for this degree program.
 - **EXW 565** Cardiovascular and Pulmonary Physiology (3): In-depth study of the physiology of exercise with special regard to cardiovascular and pulmonary responses in healthy and chronically diseased individuals.
 - **EXW 562** Functional Assessment and Exercise Prescription for Older Adults (3): Assessment and prescription of exercise that is appropriate for older adults, including healthy, frail, diseased and very old.
 - **EXW 560** Cardiopulmonary Rehabilitation (3): Exercise testing and prescription for cardiac and pulmonary patients as well as pharmacology, electrocardiography, pathophysiology of chronic diseases, and leadership of patients in cardiac rehabilitation and pulmonary rehabilitation programs.
 - **EXW 568** Management and Treatment of Chronic Disease for the Clinical Exercise Physiologist(3): Investigate the physiology, pathophysiology and treatment options for a variety of diseases that the clinical exercise physiologist routinely encounters in the work environment. Prepares the student to qualify for ACSM Clinical Exercise Physiologist certification.

APPENDIX OPERATIONAL INFORMATION FOR GRADUATE PROGRAMS

(This information is used to populate the <u>Graduate Programs Search</u>/catalog website.)

1. Provide a brief (catalog type - no more than 150 words) program description.

The proposed degree will prepare individuals for a career as a Clinical Exercise Physiologist, the professional who guides exercise and rehabilitation programs for at – risk and chronic disease clients usually in concert with medical professionals. The American College of Sports Medicine (ACSM) is the national association responsible for establishing guidelines and recommendations for exercise testing, prescription and evaluation of research for both healthy and chronic disease populations. The **ACSM Registered Clinical Exercise Physiologist® (RCEP)** Certification is deemed "ACSM's most prestigious credential for clinical professionals with a master's degree who work with clients currently under the care of a physician for cardiovascular, pulmonary, metabolic, orthopedic/musculoskeletal, neuromuscular, or neoplastic immunological/hematological disease." (ACSM, 2011). This degree will provide the knowledge, clinical experience, and skills needed for individuals to successfully complete the registration examination for the

RCEP credential.

2.	Campus(es) where program will be offered: (Please note that Office of the Provost approval is needed for ASU Online campus options.)				
	ASU Online only (all courses online)				
	All other campus options (please select all that apply):				
	☐ Downtown☐ Polytechnic☐ Tempe☐ West				
	☐ Both on-campus and ☐ ASU Online (*) - (Check applicable campus from options listed.)				
	(*) Please note: Once students elect a campus option, students will not be able to move back and forth between the on-campus (in-person) or hybrid options and the ASU Online campus option.				
3.	Admission Requirements:				
	Degree : Minimum of a Bachelor's or master's degree in exercise science, exercise physiology, kinesiology, or a closely related field from a regionally accredited College or University.				
	GPA: Minimum of a 3.00 cumulative GPA (scale is 4.0=A) in the last 60 hours of a student's first bachelor's degree program.				
	English Proficiency Requirement for International Applicants: The English proficiency requirements are the same as the Graduate Education requirement. (see Graduate Education requirement http://graduate.asu.edu/admissions/international/english_proficiency): Yes No				
	If applicable, list any English proficiency requirements that are supplementary to the Graduate Education requirement.				
	Foreign Language Exam: Foreign Language Examination(s) required?				
	If yes, list all foreign languages required:				
	Required Admission Examinations: GRE GMAT Millers Analogies None required (Select all that apply.)				
	Letters of Recommendation: ⊠Yes □No				
	All qualified applicants will be admitted providing they have completed and met all requirements for admission. Admission will not be limited to any target number of students unless enrollment exceeds the projected capacity of the program to provide an adequate, quality program. In the case of a limited number of "spaces", applicants will be prioritized based on GRE scores, GPA, letters of reference and letter of intent for admission to the program.	е			
4.	Application Review Terms (if applicable Session): Indicate all terms for which applications for Admissions are accepted and the corresponding application deadline dates, if any:				
	☐ Fall (regular)☐ Session B☐ Almost unviewable				
	☐ Spring (regular) Deadline (2013): Session B ☐ Deadline (month/year):				

☐ Summer I	Deadline (month/year):
☐ Summer II	Deadline (month/year):

5. Curricular Requirements:

(Please expand tables as needed. Right click in white space of last cell. Select "Insert Rows Below")

5A. Will concentrations be established under this degree program? \square Yes \boxtimes No (Please expand table as needed. Right click in white space of last cell. Select "Insert Rows Below")

5B. Curricular Structure:

Require	Credit Hours		
(Prefix & Number) (Course Title)		(New Course?) Yes or No?	(Insert Section Sub-total)
EXW 501	Research Statistics	No	3
EXW 542	Health Promotion	No	3
EXW 536	Physiological Aspects of Physical Activity and Chronic Disease	No	3
KIN 547	ECG Interpretation	No	3
EXW 562	Functional Assessment and Exercise Prescription for Older Adults	Yes	3
EXW 565	Cardiovascular & Pulmonary Physiology	Yes	3
EXW 560	Cardiopulmonary Rehabilitation	yes	3
EXW 568 Management and Treatment of Chronic Disease for the Clinical Exercise Physiologist		yes	3
<u>El</u>	Credit Hours		
(Prefix & Number)	(Course Title)	(New Course?) Yes or	(Insert Section Sub-total)
EXW 591	Seminar (1 + 1)	No	2
(as deeme	Credit Hours		
(Prefix & Number)	refix & Number) (Course Title) (New Course? Yes or No?		(Insert Section Sub-total)
EXW 500	Research Methods	No	3
EXW 592	Research	No	1
E.g Capstone course, applied (docto	Credit Hours (Insert Section Subtotal)		

Written Comprehensive Exam	n/a	
Other Requirements E.g Internships, clinical requirements, field studies as applicable	Credit Hours (Insert Section SubtotaEI) 6	
EXW 584: Clinical Exercise Physiology Internship	6	
For doctoral programs – when approved by the student's supervisory committee, will this program allow 30 credit hours from a previously awarded master's degree to be used for this program? If applicable, please indicate the 30 credit hour allowance that will be used for this degree program.		
Total required credit hours	36	
 List all required core courses and total credit hours for the core (required courses other than interr dissertation, capstone course, etc.). Omnibus numbered courses cannot be used as core courses. 	•	
 Permanent numbers must be requested by submitting a course proposal to Curriculum ChangeMa Courses that are new, but do not yet have a new number can be designated with the prefix, level of 	• • •	

6.

	degree program.	, ,			l
		Total required cred	it hours		36
	dissertation, capstoneOmnibus numberedPermanent numbers	courses cannot be used as core c must be requested by submitting but do not yet have a new numbe	ourses. a course proposal t	to Curriculum ChangeMa	ker for approval.
6. Comp	orehensive Exams	:			
	Master's C	Comprehensive Exam (who	en applicable)	, please select the	appropriate box.
	Х	(Written comprehensive	exam is requi	ired)	
		Oral comprehensive exan	n is required – i	n addition to written	exam
	\boxtimes	No oral comprehensive ex	kam required -	only written exam is	required
be include 8. Comn	ed on a graduate st	s: Yes No (No more udent plan of study.) Iumber of Thesis or Disserta			
specific to		ords that could be used to s gram.) Clinical Exercise Phy tation,			
10. Area	☐ Architecture,☐ Artistic Expre☑ Biological Sc	Mathematics	rest from the lis	st below that applies Engineering & Teo Environmental Isso Interdisciplinary St Languages & Culto Law & Justice Social Science, Po	chnology ues & Physical Sci udies ures

Master	of Science	in Clinical	Exercise	Physiology

(UGC Final Version 10/9/13)

B.	3. Select any additional Areas of Interest that apply to this program from the list below.					
		Architecture, Construction & Design	. 🔲	Education & Teaching Engineering &		
		Artistic Expression & Performance		Technology Environmental Issues &		
		Biological Sciences, Health & Wellness		Physical Sci Interdisciplinary Studies		
		Business, Management & Economics		Languages & Cultures		
		Communication & Media		Law & Justice		
		Computing & Mathematics		Social Science, Policies & Issue		

School of Nutrition and Health Promotion

Official Submission

From: Linda Vaughan [mailto:LINDA.VAUGHAN@asu.edu]

Sent: Wednesday, September 25, 2013 12:59 PM

To: <u>curriculumplanning@asu.edu</u>

Cc: Melanie Burm; Kathryn Campbell; Barbara Ainsworth

Subject: Official submission for MS in Clinical Exercise Physiology

Attached please find our revised submission for the MS in Clinical Exercise Physiology. Thank you for your assistance.

College of Nursing and Health Innovation Impact Statement

From: Teri Pipe

Sent: Wednesday, September 25, 2013 8:53 AM

To: Linda Vaughan

Subject: RE: Graduate Education Review: Master of Science in Clinical Exercise Physiology

Dear Linda,

I am very enthusiastic about your offering the proposed MS in Clinical Exercise Physiology through the School of Nutrition and Health Promotion. You have my support. Please let me know if there is anything else I can do to assist.

Best wishes,

Teri

Teri Pipe, PhD, RN

Dean and Professor College of Nursing and Health Innovation Arizona State University 500 N. Third Street Phoenix, AZ 85004-0698

Phone: 602-496-2200 Fax: 602-496-0873

School of Nutrition and Health Promotion Support Stament

September 25, 2013

To Whom It May Concern:

I am highly supportive of the proposal to establish a Master of Science degree in Clinical Exercise Physiology within the School of Nutrition and Health Promotion. This degree will provide excellent career advancement opportunities for current and potential students. This program also meets ASU's goal of ensuring the health and well-being of our community. Please let me know if you need any additional information

Sincerely,

Linda A. Vaughan, PhD, RD

Professor of Nutrition and Director, School of Nutrition and Health Promotion