SIMON FRASER UNIVERSITY

MEMORANDUM

ToSENATE	From.	Senate Committee on
		Undergraduate Studies
1. New Kinesiology Courses and Subject Kinesiology Proposal (Formerly SCUS 77-26 or S.77-82).	Date	November 9, 1977
2. Faculty of Education Changes to the	· · · · ·	

2. Faculty of Education Changes to the Minor in Elementary School Physical Education and Information for Those Planning to Obtain a Kinesiology Minor or a Kinesiology Major in Preparation for Teaching Physical Education at the Secondary School Level.

Action taken by SCUS at its meeting of Tuesday November 1, 1977 gives rise to the following motions:

MOTION I

That the new Kinesiology courses and Kinesiology proposal, as set forth in S.77-148^Abe approved and recommended to the Board for approval.

NOTE - This action had formerly been taken by SCUS; the courses and proposal had been forwarded to Senate and had been referred back to SCUS for further information and consultation with the Faculties involved. The primary concern in Senate at that time related to the lack of evidence that the Kinesiology proposal was in fact a response to needs identified by the Faculty of Education and whether it had the support of that Faculty. That question is now clearly resolved and members of SCUS expressed no reservation about forwarding the proposal once again to Senate for approval.

MOTION 2

That the changes to the minor in elementary school Physical Education and information for those planning to obtain a Kinesiology minor or a Kinesiology major in preparation for teaching Physical Education at the secondary school level, as set forth in S.77-148, be approved and recommended to the Board for approval.

NOTE - The Minor in Elementary School Physical Education proposed changes include a technical change of the former KIN 144-3 to FPA 120-3 (a change occasioned by the transfer of dance courses), the addition of KIN 220-3 (Human Food and Nutrition), plus provision for selection from six of the seven new courses proposed by the Department of Kinesiology.

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S77-148A

The Faculty of Education has specified the requirements for students who intend to use a Kinesiology minor or a Kinesiology major as preparation for teaching Physical Education at the secondary level. This has been done so that the combination of work undertaken for the minor or major and work undertaken in the Professional Development Program will ensure an adequate, and possibly superior, preparation for teaching. The distinction between the student with a minor and the one with the major is that the former would be teaching Physical Education as a second subject whereas the latter would be regarded as a Physical Education specialist. In either case, the specification of requirements is intended to ensure reasonable competence. SCUS noted that the requirements for the minor exceed the norm and those specified for the major leave a student with less flexibility than he/she might otherwise have in his/her program. However, it was agreed that the scale of requirements was appropriate to the academic and professional objective desired.

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cc: T.W. Calvert J.W.G. Ivany E. Bannister M. Wideen

Registrar's Note:	Papers S.77-148A and S.77-148B are interrelated. S.77-148A includes the following: New Kinesiology courses -
	KIN. 343-3 - Fitness Appraisal and Guidance
	••
	KIN. 367-3 - Psychology of Motor Performance and Skill Acquisition
·	KIN. 370-3 - Biomechanics in Motor Learning
•	KIN. 375-3 - Physiological and Developmental Basis of Motor Performance
	KIN. 467-3 - The Components of Skilled Performance
	KIN. 470-2 - Motor Activities Laboratory I
	KIN. 471-2 - Motor Activities Laboratory II
	and the discontinuance of KIN. 366-3 and KIN. 466-3

SIMON FRASER UNIVERSITY

MEMORANDUM

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	A.	B

SENATE COMMITTEE	ON	UNDERGRADUATE
STUDIES		

From H. M. EVANS, SECRETARY

SENATE COMMITTEE ON UNDERGRADUATE STUDIES OCTOBER 26, 1977

 1. NEW KINESIOLOGY COURSES AND

 Subject
 KINESIOLOGY PROPOSAL (FORMERLY Date

 SCUS 77-26 OR S.77-82), NOW SCUS 77-37A

2. FACULTY OF EDUCATION CHANGES TO THE MINOR IN ELEMENTARY SCHOOL PHYSICAL EDUCATION AND INFORMATION FOR THOSE PLANNING TO OBTAIN A KINESIOLOGY MAJOR IN PREPARATION FOR TEACHING PHYSICAL EDUCATION AT THE SECONDARY SCHOOL LEVEL - SCUS 77-37B

> In June 1977, the Senate Committee on Undergraduate Studies approved a proposed Physical Education Sequence in Kinesiology and new courses in Kinesiology, with recommendation for approval to the July 4, 1977 meeting of Senate (Paper SCUS 77-26, with Senate covering memo and paper identification S.77-82 - copy attached).

Following lengthy discussion at Senate, motion was approved, "That Paper S.77-82 be referred back to the Senate Committee on Undergraduate Studies to obtain further information and consultation required."

This referral back was discussed by SCUS on July 12. At that meeting J. Ellis, then Dean of Education, noted that the concern expressed at Senate related to wording in the document which appeared to specify prerequisites for another faculty and he indicated that appropriate alterations would be made to the wording to make explicit the intent of the courses. There was general agreement at SCUS with a suggestion presented by J. Ellis that the Faculty of Education undertake the task of producing a more complete calendar entry following consultation with the Department of Kinesiology.

The Dean of the Faculty of Education has submitted a paper now entitled SCUS 77-37B.

The Dean of the Faculty of Interdisciplinary Studies has submitted the paper entitled SCUS 77-37A, to which is attached the original submission from that Faculty and the transmittal memo which accompanied it from SCUS to Senate.

In brief, the items under discussion are SCUS 77-37A and SCUS 77-37B.

SIMON FRASER UNIVERSITY

MEMORANDUM

io Mr. H. Evans,	From T.W. Calvert, Dean, Faculty of
Secretary, SCUS.	Interdisciplinary Studies.
Subject New Kinesiology Courses	Date 24th October, 1977

I have received the proposed calendar entry from the Faculty of Education in which they set out

- (a) The requirements for a Minor in Elementary School Physical Education.
- (b) The undergraduate course requirements for those entering PDP with a Kinesiology Minor, as preparation for elementary school P.E.
- (c) The undergraduate course requirements for those entering PDP with a Kinesiology Major, as preparation for secondary school P.E.

The requirments which have been specified by the Faculty of Education are in accordance with understanding developed between Kinesiology and Education when the new courses were developed. Please put the Kinesiology proposal which was referred back to SCUS by Senate on the SCUS agenda for reconsideration at the same time as the Faculty of Education changes.

In examining the parallel proposals from Kinesiology and Education it might be helpful to note the following points:

- 1. When KIN. 367 and 467 are approved KIN. 366 and 466 will be discontinued. KIN. 367 and 467 will replace 366 and 466 in the list of courses which may be used for the major.
- 2. The semester hour requirement for the Minor in Elementary School Physical Education is unchanged.
- 3. Students taking a KIN. Minor who wish to enter PDP to teach Elementary School P.E. will be required to take 12 lower division KIN. (or FPA.) credits and 15 upper division KIN. credits. Thus they have 3 lower division and 4 upper division credits over those required for the Minor.
- 4. Students taking a Kinesiology Major who wish to enter PDP to teach Secondary School P.E. are required to take 27 lower division KIN. (or FPA.) credits and 19 upper division KIN. credits. This will involve 24 lower division and 7 upper division credits which are not required for the Kinesiology Major. The total number of elective credits available in the Major is 29.

77-148A

c.c. J. Dickinson G. Kirchner E. Banister G. Ivany

Thomas W. Calvert

5.77-82 SIMON FRASER UNIVERSITY MEMORANDUM

SENATE COMMITTEE ON UNDERGRADUATE SENA TE From. STUDIES PROPOSED PHYSICAL EDUCATION SEQUENCE IN KINESIOLOGY - NEW COURSES KIN. JUNE 16, 1977 Date.... 343-3, 367-3, 370-3, 375-3, 467-3. 470-2: 471-2: DISCONTINUANCE OF

KIN. 366-3,466-3.

MOTION: 5

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Subject...

"That Senate approve and recommend approval to the Board of Governors, as set forth in S. 77-82, the following new courses:

KIN. 343-3 - Fitness Appraisal and Guidance KIN. 367-3 - Psychology of Motor Performance and Skill Acquisition KIN. 370-3 - Biomechanics in Motor Learning KIN. 375-3 - Physiological and Developmental Basis of Motor Performance KIN. 467-3 - The Components of Skilled Berformance KIN: 470-2 - Motor Activities Laboratory I KIN. 471-2 - Motor Activities Laboratory II

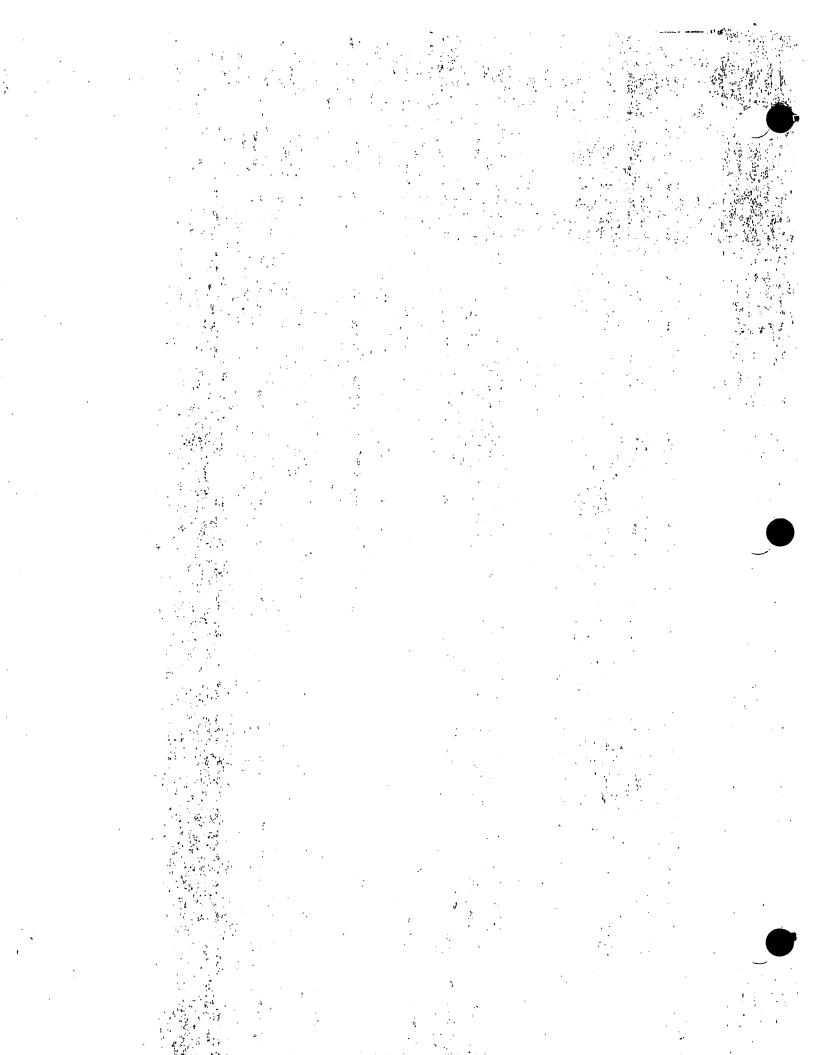
and the discontinuance of KIN. 366-3 and KIN. 466-3."

(Consideration has been given over some time to the development of an appropriate sequence of courses in the Department of Kinesiology as preparation for individuals who wish to undertake the Professional Development Program in Education with better preparation for the teaching of physical education. Intensive discussions have been held between the Department of Kinestology and the Faculty of Education. Proposals were considered by the Senate Committee on Academic Planning with referral back to the Faculty of Interdisciplinary Studies for further consideration as the proposal was not considered necessarily to be a new program. Following further discussions and adjustments to the earlier proposals the proposed new courses and sequences of courses for use toward the Minor in Kinesiology were reviewed and approved by SCUS.

Further consideration is being given to the place of a number of these courses relative to the Kinesiology Major.

It is noted that KIN, 366 and 466 will be discontinued only if there is approval of KIN. 367 and 467. KIN. 467 is new but is not a part of the sequence proposed. SCUS approved waiver of the time requirement to permit offering of these courses as from 78-1.)

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SIMON FRASER UNIVERSITY MEMORANDUM

Mr. H. Evans, Registrar and

Secretary of SCUS.

T.W. Calvert, Dean, Faculty of From

Interdisciplinary Studies.

Subject Physical Education Sequence in Kinesiology - 4

> New Courses KIN. 343-3, 367-3 =70-3 375-3 467-3,470-9 471-9; discentinge KIN. 366-3,466-3

As you know Kinesiology proposed a new "Special Minor" for those intending to teach Secondary School Physical Education. This was approved by the Faculty of Interdisciplinary Studies Undergraduate Curriculum Committee and forwarded to the Senate Committee on Undergraduate Studies. However, the Chairman of SCUS referred it to SCAP and it was discussed at some length by that Committee. The outcome of the SCAP discussion was that the proposal was referred back to Kinesiology with the suggestion that they consider whether a new "Special Minor" was necessary since the proposed sequence of courses would more than qualify a student for the existing Kinesiology Minor.

The Kinesiology Department has now withdrawn its proposal for a new "Special Minor" and is substituting a proposal for the addition of some new courses (KIN. 343, 367, 370, 375, 467, 470, and 471) and the dropping of two existing courses (KIN. 366, 466). This will result in a suitable sequence of courses becoming available to those who wish to teach Physical Education. Presumably the sequence would be specified as prerequistes by the Faculty of Education for those who wish to enter PDP to specialize in Physical Education.

The proposal is attached. Please place it on the agenda for SCUS.

TWC/et Attachment

J. Dickinson, Kinesiology c.c. E.W. Banister, Kinesiology G. Kirchner, Education J. Chase, Secretary, SCAP

Warne to primit offering 78-1

SCUS 77-26

6th June, 1977 Date.

A CROUP OF COURSES IN KINESIOLOGY

SCHOOL PHYSICAL EDUCATION

The Kinesiology Department in consultation with the Faculty of Education will offer new theory and laboratory courses in biomechanics, motor learning and exercise for those who intend a career in teaching Physical Education. The new courses, together with existing courses will qualify students for an existing Minor in Kinesiology and will be a pre-requisite for those who want to enter PDP to specialize in Secondary School Physical Education.

The rationale for these new courses is that in organizing, managing, and teaching physical education our students are asked to apply their theoretical knowledge to teaching a variety of instructional and recreational programs in the elementary and secondary schools of this province. The existing Kinesiology courses provide a scientific background for our <u>majors</u> but no professional application. Our existing <u>minors</u> (in sports sciences and recreation) find the theoretical courses are largely inaccessible to them because of extensive science pre-requisites. The proposed courses are designed to offer a theoretical basis with a minimum of pre-requisites. The Motor Activity Labs will provide an opportunity for students to apply the theory to practical problems and to develop a proficiency in a minimum number of physical activities. A Fitness Appraisal and Guidance course will cover the practical implementation of exercise physiology theory for children and adolescents.

It is stressed that the laboratory courses will \underline{only} be available to those who have taken the theory courses.

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SUMMARY OF PROGRAM

LOWER DIVISION

Kinesiology 100-3

Kinesiology 142-3

Kinesiology 143-3

FPA. 120-3

UPPER DIVISION

Kinesiology 320-3

Kinesiology 343-3(new)

Kinesiology 367-3 (new)

Kinesiology 370-3 (new)

Kinesiology 375-3(new)

Kinesiology 470-2 (new)

Kinesiology 471-2(new)

Introduction to Human Structure and Function.

Introduction to Kinesiology.

Exercise Management.

Aesthetic Forms of Human Movement. (Originally KIN.144)

Cultural Aspects of Human Movement.

Fitness Appraisal and Guidance.

Psychology of Motor Performance and Skill Acquisition. (KIN 366 will be dropped).

Biomechanics in Motor Performance.

Physiological and Developmental Basis of Motor Performance.

Motor Activities Lab I. (Individual)

Motor Activities Lab II. (Team activities)

A choice of one of KIN. 303-3; 326-3; 241-3; PSYC 355-3; S.A. 315-4; and FPA. 220-3.

LowerDivision Credit: 12

- UpperDivision Credit: 22
 - Total Credit: 34

Six new courses are proposed which would be mandatory for the program but one old course (366) will be dropped.

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DISCUSSION

This proposed sequence will make optimal use of existing courses and introduce a minimum of new courses to meet the needs of a student who wishes to teach P.E. in public schools. It is packaged as a group of courses and it is hoped that the student will combine it with a major (or minor in a B.G.S. degree) to give him another subject to teach in the school. It is considered best if P.E. can be combined with a science(e.g. Biology) or one of the humanities (e.g. History) rather than taken as an end in itself. Of course there is nothing to prevent this selection of courses being combined with a major in Kinesiology.

STRENGTHS OF THE PROPOSED SEQUENCE

The lower ^{division} courses give a general introduction to human structure and function (Kinesiology 100), measurement and evaluation (Kinesiology 142), the design of exercise programs (Kinesiology 143) and the aesthetics of movement (FPA 120). The upper ^{division} lecture courses give a background in the cultural aspects of human movement (Kinesiology 320), the psychology of performance and skill acquisition (Kinesiology 367 (new)), the biomechanics of motor performance (Kinesiology 370 (new)) and the applied physiology of exercise which will be taught in an integrated way with growth and development (Kinesiology 375 (new)). The new motor activities labs (Kinesiology 470, 471) have the motor learning, biomechanics, and exercise physiology and growth and development courses (Kinesiology 366, 370 and 375) as absolute pre-requisites and apply the theoretical knowledge to qames, dance or gymnastic activities. These motor activities labs will not concentrate on teaching any particular activity but will use a number

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of activities to illustrate and explore the psychological, biomechanical and physiological concepts and principles developed in the theory courses. The result will be some minimal proficiency in relevant games, dance, aquatics and other relevant physical activities and an understanding of the basics of these activities. The new exercise management course (Kinesiology 343) will provide the students with experience in designing and running exercise programs.

WEAKNESS OF THE PROPOSED SEQUENCE

At 34 credits, the sequence is relatively heavy (the minimum for a Kinesiology Minor is 24 credits). In fact it would be desirable to encourage students to elect all of the following additional courses but to limit the total credit required to complete the sequence:

KIN. 303-3	Kinanthropometry
KIN. 326-3	Functional Anatomy
KIN. 241-3	Sports Injuries
FPA.220-3	Contemporary Dance Technique and Theory
PSYC 355-3	Psychology of Adolescence and Youth
S.A. 315-4	Sociology of Leisure

It should be noted that the existing motor learning courses (Kinesiology 366,466) will be re-organized to ensure that the applications of psychology to motor performance and skill acquisition are presented in the new Kinesiology 367-3 while the more abstract models of information processing are reserved for the new Kinesiology 467-3. The old Kinesiology 366-3 and 466-3 will be dropped.

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CONCLUSION

This sequence of courses is the result of discussion with Dr. Kirchner and an attempt to answer the question: "Given that the Kinesiology Major cannot be substantially changed at this time, what can the department do to best prepare students for secondary school physical education in PDP?" This sequence is an honest attempt to answer the question. Obviously the proposal has been prepared in the light of the current era of fiscal restraint.

FINANCIAL IMPLICATIONS OF THE PROPOSED SEQUENCE

Lecture	Kinesiology 370-3; 375-3
Lecture/Lab	Kinesiology 343-3
Lab	Kinesiology 470-2; 471-2 (two instructors are required to handle 40 students)

Assuming that a faculty work load is four courses per year, these courses would require 1.75 faculty years. The Faculty of Education will require some additional support for their Secondary School P.E. Program and it is hoped that either Professor Kirchner or a new appointee will teach KIN. 320. Thus we realistically estimate the new faculty needs as:

One position in Kinesiology \$20,000 One position jointly in \$20,000 Education and Kinesiology Four sessional lecturer \$10,000 appointments/year

Salary Total: \$50,000

Equipment (for Motor Activities Labs) \$10,000

In addition the labs would require use of the gymnasium and related

facilities.

NEW COURSE PROPOSAL FORM

Department: KINESIOLOGY Calendar Information Vector: 2-0-4

Credit Hours: 3 Course Number: 343 Abbreviation Code: KIN.

Title of Course: FITNESS APPRAISAL AND GUIDANCE.

Calendar Description of Course: This course is an extension of KIN. 143 Exercise Management designed to provide students with an opportunity to appreciate principles of exercise leadership, assess individual fitness needs, design programs and monitor effects of prescribed exercise.

Nature of Course

Prerequisites (or special instructions):

KIN. 100, 142, 143, 375 (or consent of department).

What course (courses), if any, is being dropped from the calendar if this course is approved: None

Scheduling

How frequently will the course be offered? Once per year, possible 2 times if offered on a Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible? Ross, Clement, Banister

Objectives of the Course

Integrate previous learnings and develop competence as an exercise professional capable of planning, supervising, conducting and evaluating programs of exercise management

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty Present faculty and T.A. adequate.

Honorarium for off-campus supervisors 4 @ \$50.00 = \$200.00 Staff

Library \$50 for update of collection of pertinent papers from ongoing computer search search systems each offering. Audio Visual Nil

Space Small classroom once per week, 2 hours in the evening.

Equipment ECG paper, medical and data forms, program materials \$80.00 each offering.

5. Approval	14 1.0 77	14 June 17
Date:		
7 W. C. Prost	I. W. boliert	JEB-L
Department Chairman	Dean	Chairman, SCUS

.JUS 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

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KINESIOLOGY 343-3: Fitness Appraisal and Guidance.

Vector: 2-0-4

This course is an extension of Kinesiology 143 Exercise Management designed to provide students with an opportunity to appreciate principles of exercise leadership, assess individual fitness needs, design programs and monitor effects of prescribed exercise.

Pre-Requisite: Kinesiology 100, 142, 143, 375

The course consists of a weekly seminar and four hours of guided learning as junior leaders in the following:

1. KIN. 143 Exercise Management (day)

2. KIN. 143 Exercise Management (evening)

3. Faculty Fitness

4. YMCA/YWCA

5. Kinestherapy programs in cooperating schools.

 Kinestherapy or remedial physical education class offered as an extension course.

Content:

- Medical screening, counter indications, relative counter indications, role of physician in fitness programs, initial exercise screening, signs of duress, field tests for referral.
- Safety in exercise. Clothing, footgear, facilities, traffic, disease and illness effects, progression, injury inducing and prophylatic exercise.
- 3. Faulty body mechanics and techniques to correct and ameleorate condition e.g. medical referral, choice of shoe, connective exercise.

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NOTE: On Courses 367 and 467.

These courses replace current offerings 366 and 466 with the addition of a laboratory. The content of 366 and 466 has been reorganized so that applied topics relevant to physical education will be covered in 367 which forms part of the proposed new sequence. The more theoretical aspects will be covered in 467 which is not specifically designed for the sequence, but is presented here since it represents a new course.

- 4. Pulmonary procautions. Tests for pulmonary sufficiency. Breathing techniques. Asthma and allergies.
- 5. The cardiac prone individual. Risks factors and precautions. Abnormal response to exercise. Emergency procedures. CPR techniques.
- Nutritional aspects of exercise. Emergencies. Dietary guidance.
 Weight loss programs.
- 7. Exercise recruitment and retention. Screening procedures. Program Offerings. Services. Public relations.
- 8. Fitness assessment procedures for field situations. Practical structural and functional assessment techniques.

9. Strength training programs.

10. Cardiovascular training programs.

11. Recreational programs.

12. Individual differences. Growth and aging effects.

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13. Fitness in the school programs. The Canadian standard school.

NEW COURSE PROPOSAL FORM

Calendar Information		Department:	KINES IOLOGY
Abbreviation Code: KIN.	Course Number: 367	Credit Hours: 3	Vector: 2-1-1

Title of Course: PSYCHOLOGY OF MOTOR PERFORMANCE AND SKILL ACQUISITION.

Calendar Description of Course: An examination of phases of skill acquisition, transfer of training, training principles, retention of motor skills, and the influence of motivation, personality and social factors on the acquisition of skill.

Nature of Course 2 lectures - 1 tutorial - 1 hour lab per week. Prerequisites (or special instructions): At least 30 hours undergraduate course credit.

What course (courses), if any, is being dropped from the calendar if this course is approved: KIN. 366-3

2. Scheduling

How frequently will the course be offered? 1/annum

Semester in which the course will first be offered? 78-1

Which of your present faculty would be available to make the proposed offering possible? J. Dickinson

-. Objectives of the Course The course will present an overview of factors related to the acquisition of skills relevant to a physical education program.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Staff

Library

Audio Visual

Space - Development of laboratory in trailer B3.

Equipment - \$4000 for laboratory equipment to initiate course. Maintenance subsequently from departmental budget. (For this & KIN 467)

5. Approval Date: S.w. Dolne

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CUS 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

KINESIOLOGY 367-3: Psychology of Motor Performance and Skill Acquisition.

Vector: 2-1-1

This course is intended for students with an interest in the field of motor learning and will emphasize factors influential in skill acquisition. The course content may be subdivided into three sections:

- 1.
- The acquisition process:
- (a) Learning curves, plateaus and measurement.
- (b) Cognitive, associative and autonomous phases of acquisition.

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- (c) Mechanisms of control and level of skill.
- (d) Transfer of training.
- (e) Short and long-term retention of skill.

2. Factors under experimenter/instructor control:

(a) Schedule of practice, part-whole learning.

(b) Knowledge of results and guidance.

3. Factors varying with the learner:

- (a) Personality and skill.
- (b) Motivation in acquisition and performance.
- (c) Ability and skill.
- (d) Maturation, aging and skill.

THERE WILL BE A WEEKLY LAB.

NEW COURSE PROPOSAL FORM

Department: KINESIOLOGY - Salendar Information Vector: 2-1-1Credit Hours: 3 Course Number: 467 ...bbreviation Code: KIN. Title of Course: THE COMPONENTS OF SKILLED PERFORMANCE. Calendar Description of Course: An analysis of models of performance. The approach

will rely heavily on an information processing analysis of performance. Course content will include: perceptual mechanisms in skill, attention and performance, signal detection theory, anticipation and timing, decision mechanisms and reaction time, control processes for movement, theories of learning and performance.

Nature of Course 2 lectures - 1 lab - 1 tutorial

Prerequisites (or special instructions): At least 45 hours undergraduate course credit.

What course (courses), if any, is being dropped from the calendar if this course is approved: KIN. 466

2. Scheduling

How frequently will the course be offered? 1 annum

Semester in which the course will first be offered? 78-1

Which of your present faculty would be available to make the proposed offering J. Dickinson possible?

1. Objectives of the Course This course is designed for Kinesiology Majors with a pience background and is not specifically designed for those who wish to teach hysical Education. This course replaces Kinesiology 366 as the primary theoretical course in this area.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Replaces existing course. No new committment. Staff

Library

Audio Visual)

Space - Development of laboratory in trailer B3.

Equipment - \$4000 for laboratory equipment to initiate the course. (For $H_{13} + K_{1N} = 367$).

- fune 5. Approval 14 Jue 7> J.W. boliet Date:

JUS 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

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KINESIOLOGY 467-3: The Components of Skilled Performance.

The approach in this course will rely heavily on an information processing analysis of performance. The course is intended for those with an interest in models of human performance with special reference to skill.

Course Content:

- 1. Introduction to concepts of information processing.
- 2. The sensory systems
 - (a) psychophysical measurement.
 - (b) signal detection theory.
- 3. Perceptual mechanisms in skill.
 - (a) perceptual changes with skill.
 - (b) selective attention.
 - (c) anticipation and timing.
 - (d) short-term retention.
- 4. Decision mechanism
 - (a) simple and choice reaction times.
 - (b) compatibility and practice effects.
 - (c) refractory periods.
 - (d) speed and accuracy.

5. Effector systems

- (a) attention demands of movement control.
- (b) hierarchical control systems.

THERE WILL BE A WEEKLY LAB.

NEW COURSE PROPOSAL FORM

Department	:	KINESIOLOGY
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.- Jalendar Information

breviation Code: KIN. Course Number: 370 Credit Hours: 3 Vector: 2-1-0

litle of Course: BIOMECHANICS IN MOTOR LEARNING.

Calendar Description of Course: To provide knowledge of a Biomechanical nature which has direct application to (a) the teaching and learning of physical skills and (b) the suitaillity of different types of activity to which children of different ages are exposed.

Nature of Course Two one-hour lectures - and one tutorial per student.

Prerequisites (or special instructions): This course is intended for students completing the course sequence in Physical Education - KIN. 100, 142, 143 are prerequisites.

What course (courses), if any, is being dropped from the calendar if this course is approved: None

2. Scheduling

One semester per year. How frequently will the course be offered?

Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible? Chapman

- 3. Objectives of the Course To provide potential teachers of Physical Education with a ackground in Biomechanics which will allow them to (a) identify the important mechanical satures of a skill, (b) formulate a protocol for teaching the skill, (c) identify and correct errors in skill performance, (d) identify skills which may be injurious to children of different ages and (e) plan a programme of varied skills which are mechanically appropriate to different age-groups.
- 4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

New faculty - see attached memo. Faculty

None Staff

Duplication of approximately 5 texts which are presently held. Library

Audio Visual None

Classroom space for three hours per week. Space

None Equipment

5. Approval Date:

14 June 77 11 June 1. W. A. P. A. A. Mark Mark

US 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

NEW COURSES

KINESIOLOGY 370-3: Biomechanics in Motor Learning.

Vector: 2-1-0 Possible Teacher: Chapman

<u>Major Emphasis</u>: To provide knowledge of a biomechanical nature which has direct application to (a) the teaching and learning of physical skill and (b) the suitability of different types of exercises to which children of different ages are exposed.

Nature of the Course: The basic mechanical principles which govern the following:

- 1. Propulsion of the body linearly.
- 2. Propulsion of the body rotationally.
- 3. Motion of body parts in free fall.

4. Generation of motion in implements.

- (a) throwing
- (b) hitting and striking

5. Absorption of external forces.

6. Control of swinging movements.

7. Mechanical properties of body tissues.

Pre-Requisites: Kinesiology 100, 142, 143

NEW COURSE PROPOSAL FORM

KINESIOLOGY

alendar Information

Department: Vector: 2-1-0___ Credit Hours: 3

ubbreviation Code: KIN. Course Number: 375

Title of Course: PHYSIOLOGICAL AND DEVELOPMENTAL BASIS OF MOTOR PERFORMANCE.

Calendar Description of Course: This is a course aimed at studying the fundamentals of physiologic growth and development so that the student may bring some insight, on the nature of the developing child, to the design of appropriate activity programs throughout the range from kindergarten to grade 12.

Nature of Course

Course is for students studying in the course Prerequisites (or special instructions): sequence in Physical Education. KIN. 100, 142, 143

What course (courses), if any, is being dropped from the calendar if this course is None approved:

2. Scheduling

How frequently will the course be offered? One semester per year

Semester in which the course will first be offered? Not known yet

Which of your present faculty would be available to make the proposed offering possible? Banister, Ross, Savage

3. Objectives of the Course The objectives of the course are to teach students the fundamentals of growth and development of children, especially physiologic mechanisms. This would be related to developing appropriate programs of activity for school children over the whole range of ages from infant to adolescent. The material taught would also facilitate the students' ability to teach in those programs, already developing in schools, which seek to teach children a similar body of knowledge through which the child's perception of the need for vigorous activity in his life is enhanced. 4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

New faculty - attached memo covering whole scheme. Faculty

Staff None

Library Probably some additional texts. These need not be excessive in number however.

Audio Visual Projectors, overhead

Classroom, - 3 hours per week Space

Equipment None

5. Approval

Date:

14 sine 7) The bolant

CUS 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

KINESIOLOGY 375-3: Physiological Developmental Basis for Motor Performance.

TOPICS TO BE COVERED:

- 1. Review of simple physiological systems relevant to growth and performance.
- 2. Heredity and environmental factors governing development.
- 3. Normal physical and physiological development.
- 4. Energy metabolism at rest and during exercise.
- 5. Temperature regulation.
- 6. Nutrition
- 7. Review of expected performance capacity from K -- 12.
- 8. Programs of physical activity necessary for optimal physical growth.

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9. New approaches to physical education/active health programs.

NEW COURSE PROPOSAL FORM

 Lalendar Information
 Department:
 KINESIOLOGY

 Abbreviation Code:
 KIN.
 Course Number:
 470
 Credit Hours:
 2
 Vector:
 0-0-4

Title of Course: MOTOR ACTIVITIES LABORATORY I

Calendar Description of Course: Application of principles of Motor Learning, Biomechanics and Physiology to the learning of physical skills inherent in some individual sporting and recreational activities.

Nature of Course 2 hours practical session on each of two activities.

Prerequisites (or special instructions): This course is intended for students completing the course sequence in Physical Education. Pre-requisites KIN.367, 370 and 375.

What course (courses), if any, is being dropped from the calendar if this course is approved: None

2. Scheduling

How frequently will the course be offered? One semester per year. Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible? Chapman, Banister, Dickinson, Hendy (Dept. of Rec.), Sessional Lecturer.

<u>Objectives of the Course</u> To integrate knowledge in the areas of Motor Learning, Lonechanics and Physiology within the context of the variety of skills required to participate in some individual sporting and recreational activities. Emphasis will be placed on how physiology illustrates the relative muscular and cardio-respiratory requirements; how Biomechanics illustrates the sequence and magnitudes of the segmental actions; and how Motor Learning illustrates the direction of attention of the individual and the spacing of practice activities in the process of skill-learning. 4. <u>Budgetary and Space Requirements</u> (for information only)

What additional resources will be required in the following areas:

Faculty New faculty - see attached memo.

Staff None

Library Addition of approximately 8 texts.

Audio Visual None

Space Gym, field or court-space for 8 hours per week.

Equipment All is available from either Recreation, Education or Athletics.

5. Approval Parla Date: SCUS airman.

SCUS 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

KINESIOLOGY 470-2: Motor Activities Laboratory J (Individual Sports and Recreational Activities).

Vector: 0-0-4 Possible Teachers: Chapman, Baniser, Hendy, Dickinson, Sessionals

The aim of the course is to teach students the principles involved in individual physical, sporting and recreational activities. During this course students will be expected to make every effort to improve their own performance in these activities. This requirement is based upon the principle that visual demonstration by a teacher of physical education is a valuable means of instruction. However, it should be noted that the major emphasis will be placed upon the development of an understanding of how the concepts and principles of motor learning, biomechanics and physiology apply to a wide range of individual activities.

Students will select two activities from a choice of four. The four available may vary from semester to semester but will always include Gymnastics and Track and Field. The activities offered will from time to time also include Tennis, Squash, Badminton, Swimming, Canoeing, Mountaineering, etc.

The course will accompdate 40 students and will be taught by two instructors.

<u>Pre-Requisite</u>: Kinesiology 367-3; 370-3; 375-3. <u>Evaluation</u>: Students will be graded on the basis of laboratory reports and on a final oral and written examination.

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	NEW COURSE PROPOSAL FORM
	Department: KINESIOLOGY
alendar Intorm	KIN 471 (redit hours: ² Vector: $0-0-4$
Abbreviation Co	
Title of Course	: MOTOR ACTIVITIES LABORATORY II Biomechanic
Calendar Descri	ption of Course: Application of principles of Motor Learning, Biomechanic
and Physiology	to the learning of physical skills inherent in some team sports.
Nature of Cours	e Two hours practical session on each of two activities.
	this course is intended for students
completing the 370 and 375.	course sequence in Physical Education. Pre-requisites KIN. 367,
	ourses), if any, is being dropped from the calendar if this course is
approved: No	one
n Cabadultan	
2. <u>Scheduling</u>	will the course be offered? One semester per year
c as a start of the	tch the course will first be offered?
_	fronty would be available to make the proposed offering
possible? Cha	present faculty would be even a rec.), Sessional Lecturer.
>-Objectives of	the Course
See section 3 to team sports	on proposal form for KIN. 470. This one (KIN. 471) is with reference
4. Budgetary and	Space Requirements (for information only)
What additiona	I resources will be required in the following areas:
Faculty	New faculty as per attached memo.
Staff	None
Library	Addition of approximately 8 texts.
Audio Visual	None
Space	Gym or field space for 8 hours per week.
Equipment	Available from either Recreation, Education or Athletics.
5. Approval	14 Dec 77 11 June
Date:	14 Sig 77 - in frince
R_	The chairman Dean Chairman, SCUS

Attach course outline).

KINESIOLOGY 471-2: Motor Activities Laboratory II (Team Sports).

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Vector:0-0-4Possible Teachers:Chapman, Hendy,
Banister, SessionalsThis will be handled in the same way as Kinesiology 470-2.Pre-Requisites:Kinesiology 367-3; 370-3; 375-3.Evaluation:Students will be graded on the basis of laboratory reports
and on a final oral and written examination.

Students will select two team activities from a choice of four. The four available will vary from semester to semester. From time to time the activities offered will include, soccer, basket ball, volley ball, football, etc.

SUION FRASER UNIVERSITY MEMORANDUM

		Lete
LH MAY 9	1977	
MIL-TI	TT.	- مربسان

-)	J. Blanchet, Secretary	From	L. E. Thomas
	FIDS Undergraduate Curric, Comm.		Collections Librarian
Subject	SPECIAL MINOR IN KINESIOLOGY	Date	4th May 1977

Our Biological Sciences Librarian, Maurice Deutsch, has provided the following statement in regards to library resources:

With regard to the programme for the new Special Minor in Kinesiology only six new courses are proposed, two of which are laboratory courses. The other four courses are:

1. Fitness Appraisal & Guidance (Kin. 343)

 Psychology of Motor Performance & Skill Acquisition (Kin. 367)

3. Biomechanics in Motor Performance (Kin. 370)

4. Physiological & Developmental Basis of Motor Performance (Kin. 375)

These courses do not deal with new areas of teaching or research in the Kinesiology Department, at least as far as Library support is concerned. The Library can fully support these courses and this programme with its current monograph and journal collection.

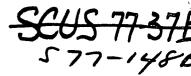
Larry Thomas

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SIMON FRASER UNIVERSITY MEMORANDUM

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ToHarry Evans	FromJ. W. George Ivany
Registrar	Dean of Education
Subject	Date October 19., 1977

The Faculty of Education at its meeting on Monday, September 26, 1977 approved the attached course and program changes in the calendar description for the Department of Kinesiology and the Faculty of Education commencing with the 1978-1979 academic year. Please include these changes on the next agenda for Senate Committee on Undergraduate Studies for consideration of Senate.

JWGI:nb Encl. cc Marvin Wideen, Director of Undergraduate Programs Glenn Kirchner Norma Rowe Stan Kanehara, Administrative Assistant to the Dean of Education Tom Calvert, Dean, Interdisciplinary Studies



COURSE AND PROGRAM CHANGES PROPOSED

BY THE DEPARIMENT OF KINESIOLOGY

AND

THE FACULTY OF EDUCATION

The enclosed changes in Calendar descriptions of the Kinesiology Major and Minor (page 315 and 317 of the 1977-78 Calendar) and the Faculty of Education's suggested sequence of courses (page 251) for students planning to teach physical education are proposed for the 1978-79 S.F.U. Calendar. In addition, new courses offered by the Department of Kinesiology and the Department of Fine Arts have been incorporated into the existing Elementary School Physical Education Minor.

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Course and program changes provided within each respective program offered by the Department of Kinesiology and the Faculty of Education are the result of four years of joint discussions. Also, supervisors, department heads and practicing physical educators were consulted in the process of developing these programs.

The following revised program requirements are designed to prepare future teachers of physical education with a strong background in the foundation areas of human movement and with a knowledge and proficiency in a wide variety of physical activities. Further, the content of these courses as well as the courses and internship experiences of the Professional Development Program, emphasize the health/science aspects of human movement and the inherent values of life time recreational activities. In summary, these programs are complimentary to the contemporary philosophy expressed by the Ministry of Education and by leading experts in the fields of kinesiology and preventive medicine. 1978-79 Calendar

CHANGES IN CALENDAR DESCRIPTIONS

KINESIOLOGY 315

to complete an Honors paper and not less than 60 hours of upper division course work numbered 300 and above with at least 50 hours of such work in Kinesiology numbered 300 and above, including the courses specified for a Major. Any additional hours may be for course work in Arts, Interdisciplinary Studies, Science, or Education (excluding EDUC 401/402, 405).

Requirements for a Minor in Kinesiology

The basic requirements will be (a) KIN 100-3, (b) 21 hours of additional course work in the Kinesiology Department of which at least 15 hours must be selected from courses numbered 300 and above. For the purpose of meeting these requirements the dance courses FPA. 120-3, FPA. 220-3, FPA. 324-3 and FPA. 326-3 may be treated as Kinesiology courses. Students using this minor in preparation for teaching are urged to select the courses for their minor program for emotion with the Faculty of Bdueation and the Bepurtment of Kinesiology.

Areas of Special Emphasis

For those students who are studying Kinesiology and who have selected a particular career or occupational field, the department offers programs of study with a major emphasis in each of the following areas: applied physiology, rehabilitation science, and sports science-recreation.

Lists of courses which would be appropriate for studies in each of these areas follow. These lists contain both required courses and suggested options. The existence of these areas does not imply that a student must be committed to any particular emphasis.

Applied Physiology

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The following is a list of courses which would provide appropriate options in this program

BICH 312-2, 413-3.

- BISC 101-4*, 102-4*, 201-3, 202-3, 203-3, 301-3, 302-3, 303-3, 305-3, 401-3, 402-3, 403-3, 428-3, 438-3, 448-3.
- CHEM 104-3*, 105-3*, 106-2, 115-2*, 117-2*, 251-3*, 252-3*, 256-2*, 261-3*, 356-2*.
- MATH 101-3, 151-3*, 152-3*, 154-3, 155-3, 302-3.
- PHYS 101-3*, 102-3*, 211-3, 221-3, 333-4.
- **PSYC** 101-3, 150-3, 201-3, 325-3, (351-3, 355-3), 360-3, 380-3, 430-5.
- CMNS 100-3, 200-3, 303-3.
 - CMPT 103-3, 142-1, 240-3, 250-3, 290-3, 305-3.
 - KIN. 100-3, 110-3, 140-3, 220-3, 241-3, 303-3, 326-3, 330-3, 336-3, 366-3, 402-4, 405-3, 406-3, 407-3, 420-3, 442-3, 480-3.
- *Courses marked with an asterisk are required for admission to the University of British Columbia and some other Canadian medical schools.

as suggested under the Faculty of Education (see page 251 of this (endar).

KINESIOLOGY 317

KINESIOLOGY 317

Sports Science and Recreation

Selections from the following courses would provide an appropriate major or minor for those students who plan to teach physical education at the secondary level, become sports technical coaches or recreationalists.

204-3, 304-3, 409-3. BISC COMM 223-5, 343-3, 345-5, 387-3, 488-3. ECON 332-3, 333-3. GEOG 242-3, 324-3, 369-3, 382-3, 421-5, 424-5, 443-5. CMNS 200-3, 320-5, 331-5, 401-5. 103-3, 118-3, 142-1. CMPT 100-3, 110-3, 140-3, 142-3, 143-3, 220-3, 241-3, 303-3, 320-3, KIN. 326-3, 330-3, 401-4, 402-3, 405-3, 406-3, 407-3, 466-3. 120-3, 220-3, 324-3 and 326-3. FPA.

Note

DESCRIPTION OF KINESIOLOGY COURSES (KIN.)

KIN. 160-3 Introduction to Human Structure and Function

This course provides an insight into the structure, function and organization of the various systems of the body and how they interact to form a living organism. Material includes: the nervous system; structure and function of muscle; the cardiovascular system; respiration energy metabolism; endocrinology and reproduction. Prerequisite: A knowledge of Biology, Chemistry, and Physics at the Grade 11 level recommended.

Students with credit for KIN. 100-3 under its previous title "Introduction to Kinesiology" may nos sake this course for further crédit.

KIN. 119-3 Current Topics in Human Nutrition

A study of the basic nutritional needs and general nutritional status of affluent and indigent populations. Causes and consequences of under-nutrition and malnutrition. food additives and contaminants, nutrition in health, disease and in athletic preparation, etc., will be stud-(Lecture/Tutorial) ied.

KIN. 140-3 Contemporary Health Issues

This course will focus on current problems in developing and sustaining the health and fitness of the nation. Topics discussed will range from indices of current national health status, present health care delivery systems, allied para-medical agencies, new methods in marketing health, review of the concepts of preventative and rehabilitative health care across the broad spectrum of society and special topics such as drug abuse, human sex-(Lecture/Tutorial) uality, medical technology and ergonomics. Students with credit for PDS 240-3 or KIN. 040-3 cannot take KIN. 140-3 for further credit.

KIN. 142-3 Introduction to Kinesiology

An analysis of the physiological and psychological status of the individual in relationship to (Lecture/Laboratory) physical performance. Students with credit for PDS 242-3 or KIN. 042-3 cannot take KIN. 142-3 for further credit.

KIN. 143-3 Exercise Management.

Describes the principles and practices in exercise-management for men and women. Special reference is given to the cardio-respiratory system. Medical clearance from a personal (Lecture/Laboratory) physician is advised. Students with credit for KIN. 043-3 may not take KIN. 143-3 for further credit.

Students planning to Note: complete a major in Kinesiology and who plan to teach physical education should refer to the Faculty of Education (see page 251 of this Calendar).

Specific Minor Programs

Four Specific Minor Programs are Offered by the Faculty of Education Each requires the approval of the Director of Undergraduate Programs.

Minor in Elementary School Physical Education

The Minor in Elementary School Physical Education provides studeots in the Professional Development Program with an additional and special competence to teach Physical Education. Note: There is one intake per year (Fall Semester) to the Elementary School Physical Education Minor.

Prerequisites.

There are no mandatory lower division courses for the Elementary School Physical Education Minor. However, it is strongly recommended that a prospective student for this program complete at least two of the following courses prior to enrolling in EDUC 401 and preferably during his lower levels:

Introduction to Human Structure and Function KIN. 100-3

Current Topics in Human Nutrition KIN. 110-3

Contemporary Health Issues KIN. 140-3

Introduction to Kinesiology KIN. 142-3

Exercise Management KIN. 143-3

EPA. 120-3 Aesthetic Forms of Human Movement (formerly KIN. 144-3)

KIN.220-3 Human Food and Nutrition

- Sport Injurics Prevention and Rehabilitation KIN. 241-3
- PSYC 105-3 Differential Psychology

Required Courses (At least 14-18 semester hours, as specified below.)

EDUC 459-4 Instructional Activities in Elementary School **Physical Education**

EDUC 479-4 Designs for Learning: Physical Education

The remaining 6 to 10 hours of the 14-18 required for the Minor may be selected from the following recommanded courses which may be completed prior to entering the Professional Development Program or during EDUC 404. Other courses not listed below must be approved by the Director of Undergraduate Pro-

grams.

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Cultural Aspects of Human Movement KIN. 320-3 KIN. 343-3 (new) Fitness Appraisal and Guidance KIN. 367-3 (new) Psychology of Motor Performance and Skill Acquisitio KIN. 370-3 (new) Biomechanics of Motor Learning KIN. 375-3 (new) Physiological and Developmental Basis of Motor Performance KIN.470-2 (new) Motor Activities Laboratory I (Individual) KIN.471-2 (new) Motor Activities Laboratory II (Team) Learning PSYC 302-3 Child Psychology PSYC 351-3

Note: Students who are planning on obtaining a Kinesiology Minor in preparation for teaching physical education at the secondary school level should complete the following courses prior to entering the Professional Development Program or during Education 404.

> KIN.100-3; KIN.142-3; KIN.143-3; FPA.120-3; KIN.320-3; KIN.343-3 (new); KIN.367-3 (new) or KIN.466-3; KIN.370-3 (new) or KIN.401-4; KIN.375-3 (new); KIN.470-2 (new); KIN.471-2 (new); EDUC 479-4. A choice of one of KIN.303-3; 326-3; 241-3; PSYC 355-3; S.A. 315-4; and FPA.220-3.

Note: Students who are planning on obtaining a Kinesiology Major in preparing for teaching physical education at the secondary level should complete the following courses prior to entering the Professional Development Program or during Education 404.

KIN.100-3; KIN.110-3; KIN.140-3; KIN.142-3; KIN.143-3; FPA.120-3; FPA.220-3 (was KIN.244-3); KIN.220-3; KIN.241-3; KIN. 303-3; KIN.320-3; KIN.343-3(new); KIN.367-3 (New) or KIN.466-3; KIN. 370-3 (new) or KIN.401-4; KIN.470-2 (new); KIN.471-2 (new); EDUC 479-4.