

SIMON FRASER UNIVERSITY

MEMORANDUM

To: Senate

From: Senate Committee on
Undergraduate Studies

Subject: School of Kinesiology -
New Course Proposals

Date: October 15, 1986

Action undertaken by the Senate Committee on Undergraduate Studies at its meeting of October 14, 1986 gives rise to the following motion:

MOTION:

"That Senate approve and recommend approval to the Board of Governors, as set forth in S.86-55 the proposed

New courses - KIN. 203-3 Computer Applications in Kinesiology
KIN. 426-3 Neuromuscular Anatomy"

Subject to the approval by Senate and the Board of Governors the Senate Committee on Undergraduate Studies approved waiver of the normal two-semester time lag requirement to permit first offering of KIN. 203-3 in Spring 87-1.

SIMON FRASER UNIVERSITY

SCUS 86-18

MEMORANDUM

To..... R. Heath, Registrar.....

From..... J. Blanchet, Secretary.....

..... Faculty of Applied Sciences Undergraduate
Studies Committee.

Subject..... New Course Proposals, Kinesiology...
(ASU. 86-3).

Date..... September 19/86.....

At a meeting of the Faculty of Applied Sciences Undergraduate Studies Committee held on Tuesday, September 16, 1986 members of the committee approved the following two new course proposals:

KIN. 203-3, Computer Applications in Kinesiology.

KIN. 426-3, Neuromuscular Anatomy.

Would you please place these two courses on the next agenda of the Senate Committee on Undergraduate Studies for consideration by that committee.

J. Blanchet

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

1. Calendar Information

Department: KINESIOLOGY

Abbreviation Code: KIN Course Number: 203

Credit Hours: 3 Vector: 2-0-2

Title of Course: Computer Applications in Kinesiology

Calendar Description of Course:

An introductory course on the various applications of computers to the study of Kinesiology. Topics to be covered include operating systems and programming languages, computer simulations, computer aided instruction, data capture and analysis, and real-time control.

Nature of Course

Prerequisites (or special instructions):

Kin. 100, Kin. 142

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? once yearly

Semester in which the course will first be offered? 87-1

Which of your present faculty would be available to make the proposed offering possible? Dr. Goodman, Dr. Davison

3. Objectives of the Course

To provide students with the necessary knowledge and skills to successfully incorporate the computer in a variety of situations.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty nil

Staff Graduate teaching assistant

Library Books to be placed on reserve

Audio Visual nil

Space

Equipment microcomputers and software

5. Approval

Date: 2 Sept '86

[Signature]
Department Chairman

D.A. George
Per J. K. [Signature]
Sept 19/86
Dean

[Signature]
Chairman, SCUS

KINESIOLOGY 203.

COMPUTER APPLICATIONS IN KINESIOLOGY

D. Goodman

Kinesiology 203 is intended as an introduction to computing applications of particular interest, but not limited to students of Kinesiology. While no prior computing experience is required, access to a computer is a necessity. It is anticipated that information garnered in this course will be helpful to those wanting to use their computer in further studies. Students who wish to develop programming skills are advised to take CMPT 103.

TOPICS:

- (1) Introduction
- (2) Operating systems and programming languages
- (3) Computer simulations (computers in physiology)
- (4) Computer aided instruction (computers in Kinanthropometry)
- (5) Communications and Networking
- (6) Searching Bibliographic Data Bases
- (7) Word Processing and Data Management
- (8) Data analysis 1 Descriptive
- (9) Data analysis 2 Inferential
- (10) Acquisition of analogue information (computers in biomechanics)
- (11) Controlling and Timing Events (computers in motor control)
- (12) Computer Imaging
- (13) Artificial intelligence
- (14) Sport analysis

Lectures will be supplemented by lab time during which the student will work on projects designed to reinforce/expand lecture material. Weekly assignments will require use of the computer at times other than the regularly scheduled lab times. This might well create some scheduling nightmares (be prepared and tolerant).

COURSE REQUIREMENTS:

- | | |
|---------------------|-----|
| (1) Lab assignments | 50% |
| (2) Course project | 25% |
| (3) Final exam | 25% |

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

1. Calendar Information

Department: Kinesiology

Abbreviation Code: KIN. Course Number: 426

Credit Hours: 3 Vector: 2-1-1

Title of Course: Neuromuscular Anatomy

Calendar Description of Course: This course explores human neuromuscular anatomy using a lecture format supplemented by course readings, an anatomy atlas and tutorials which are presented in an interactive fashion via the MacIntosh computer laboratory on campus. A strong grounding will be given in neuroanatomy with additional emphasis on the limb musculature and its innervation.

Nature of Course

Prerequisites (or special instructions):

KIN. 326

60 credit hours

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? once yearly

Semester in which the course will first be offered? 87-3 (has been offered with success as an elective (KIN. 422-3) in 86-1 and will be in 86-3)

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

D. Hedges, M. D.

3. Objectives of the Course

To supplement our students' background in anatomy with particular reference to the anatomy of the nervous system, which must necessarily be covered only briefly in the one-semester course KIN. 326, but which nonetheless is of clear intrinsic interest to kinesiologists and of special reference to electives offered in neurophysiology as well as to KIN. 306.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty none

Staff none

Library none (texts are already on hand in the library)

Audio Visual minimal (overhead projector, slide projector)

Space for lectures twice weekly; six hours weekly for open labs in Mac Lab
(MacIntosh computer facility on campus)

Equipment as for any elective course

5. Approval

Date: 2nd Sept 86

Sept 19/86

[Signature]
Department Chairman

[Signature]
Dean

[Signature]
Chairman, SCUS

KIN. 426 NEUROMUSCULAR ANATOMY

D. Hedges/J. Anthony

Prerequisites: KIN. 326,
60 credit hours

Texts: Barr, M. S. & J. A. Kiernan, The Human Nervous System, Fourth Edition.
Bertram, E. G. M. & K. L. Moore, An Atlas of the Human Brain and Spinal Cord.

(both texts required)

Course Format: Two one-hour lectures and one one-hour tutorial per week.

Lecture Schedule (rough outline):

Origins of the nervous system
Brainstem: external anatomy; nuclei & tracts; cranial nerves.
Cerebellum: gross anatomy; fine structure.
Diencephalon: thalamus; hypothalamus, pituitary.
Striate cortex.
Hemispheres: topography; internal capsule.
Olfactory system.
Limbic system.
Visual system.
Auditory system.
Vestibular system.
Spinal cord: gross anatomy, nerve roots & dermatomes; tracts & gray matter.
Ventricles, meninges & blood supply.
Autonomic nervous system.
Major peripheral nerves: brachial plexus, lumbosacral plexus.
Muscles: upper extremity, lower extremity (four lectures).
Review.

Marking: Tutorial quizzes (5) -- 20%
Practical exam -- 30%
Written final -- 50%
100%

This course will serve to expand your knowledge of neuroanatomy based on your earlier work in KIN. 326, and thus will help you to make better sense of your neurophysiology courses and help you to justify calling yourselves kinesiologists. There will be considerable demands on you to memorize names and structures, as is natural in any anatomy course.

SIMON FRASER UNIVERSITY

MEMORANDUM

To..... The Registrar

From..... N.M.G. Bhakthan

School of Kinesiology

Subject..... Waver for offering
Kin. 203-3 in 1987-1

Date..... Oct. 14, 1986

Kin. 203-3 (Computer Applications in Kinesiology) is being proposed as a new course for today's meeting of SCUS. If the course is approved, it is requested that permission be given to offer this course in 1987-1. Otherwise it will have to be offered as Kin. 421-3 as a special topic course. We do not wish that upper division credits be given to a course which is being proposed as a lower division course. Hence the request for the waver.

