

SIMON FRASER UNIVERSITY

MEMORANDUM

S-221

Kinesiology

To Mr. H. M. Evans,

Secretary of Senate.

From B. L. Funt,

Dean of Science.

Subject *Senate Interdisciplinary
Committee on Kinesiology
Courses*

Date April 21, 1969

The Kinesiology Committee of Senate at its meeting of March 13th, considered the revision of Kinesiology courses 306-4 and 316-3.

These courses were referred to the Department of Biological Sciences for comment and then to the Faculty of Education for consideration at its meeting of April 10th. Support for the proposed changes was obtained and these courses are now recommended to Senate for approval.

I enclose a detailed description of the revision of course content.

BLF/pt

enc.

B. L. Funt

COURSE CHANGE

Proposal for Human Anatomy (Kines. 306-4) and Functional Anatomy (Kines. 316-3).

Rationale for Course Changes.

Over the past two years it has become apparent that Kines. 306-4 (P.D.S. 306-4) has included an overabundance of subject matter and concepts. Because of the very nature of such a basic science as anatomy, selectivity of subject matter is not justified. Moreover, anatomical nomenclature is so vast that an adequate period of time is essential for orientation and learning. Under the present structure of 306-4 both gross and microscopic anatomy have been studied (see course outline), with more specialized topics pertaining to function, being covered in 316-3.

From past experiences and solicited comments from students, it is apparent that the basic knowledges in anatomy can best be acquired by participation in two courses as proposed (see Gross Anatomy, 326-3 and Microscopic Anatomy, 336-3). These courses would replace 306-4, and 316-3. An introduction to the majority of the topics now included in 316-3 would be incorporated into either 326-3 or 336-3. Opportunities for more comprehensive knowledge of specialized subject matter should be left to graduate courses, i.e. Kines. 801-5.

Because of the fundamental nature of the two proposed courses, it is believed that they would both be of particular significance to non-Kinesiology majors (e.g. Bio-Science and Pre-Medical).

R. J. TOMANEK.

Kinesiology

REORGANIZATION PROPOSAL

Human Anatomy (Kinesiology 306-4)
Functional Anatomy (Kinesiology 316-3)

1. Present Organization

A. Human Anatomy (Kinesiology 306-4)

Lectures (2 per week) (micro- and systemic anatomy)

1. Intro - History
2. Basic Cytology
3. Epithelium and Connective Tissue
- 4.-5. Bone Development and Microanatomy
6. Cartilage and Joints
7. Muscle as a Tissue (Skeletal and Smooth)
- 8.-9. Cardiovascular Histology
10. Lymphatics
11. Midterm Exam
12. Integumentary Sys. and Respiratory Sys.
13. Respiratory Anatomy
14. Digestive
15. Digestive
- 16.-17. Urino - Genital
- 18.-19. Endocrine
- 20.-24. Neuroanatomy
- 25.-26. Organs of Special Senses

Laboratory (5 hours per week)

Upper Extremity
Lower Extremity
Back and Neck
Face and Brain
Thorax and Abdomen
Perineum

B. Functional Anatomy (Kinesiology 316-3)

Lectures

- 1.-3. Arthrology
- 4.-5. Muscular Aspects of Locomotion
- 6.-7. The Muscle Spindle and Postural Regulation
- 8.-14. Neuroanatomy: (a) Reflexes (b) Vestibular Mechanisms (c) Respiratory and Cardiac Mechanisms (d) Temperature Regulation and Range Reaction
15. Hypothalamic and Pituitary Relations
- 16.-19. Growth: Hypertrophy, Hyperplasia, Compensatory Growth
20. Induction and Regulation of Regeneration and Compensatory
21. Hypertrophy
- 22.-26. Adaptation: (a) Muscle (b) Nerve (c) Heart and Vessels (d) Other Tissues and Organs

Kinesiology

Laboratory

Arthrology and Movement at Joints
Electromyography

Term Paper

Selected Topic in Functional Anatomy

11. Proposed Organization.

A. Gross Anatomy (Kinesiology 306-3)

1. Lecture - Demonstration and Dissection of the Rhesus Monkey.
2. Laboratory - 3 - 2 hour sessions per week.

B. Microscopic Anatomy (Kinesiology 316-3)

1. Lecture - 2 hours per week.
Discussion of the 4 major classes of tissues and their contributions to various systems and organs; functional significance of cell types and tissues.
2. Laboratory - 3 hours per week.
Demonstration of various tissues, organs and cell types.