

SIMON FRASER UNIVERSITY

S.78-138

MEMORANDUM

To... Senate.....	From... N.R. Reilly, Chairman.....
.....	Senate Committee on
Changes in the Psychology	..... Undergraduate Studies.....
Subject Program.....	Date... 15 November 1978.....

Action taken by the Senate Committee on Undergraduate Studies at its meetings on November 7 and 14, 1978 gives rise to the following motion:

MOTION

That Senate approve and recommend approval to the Board of Governors the following changes in the Psychology Program as detailed in S78-138 :

- (a) Change in requirements for honors
- (b) New course PSYC 280-3, Biological Bases of Behaviour
- (c) New course PSYC 300-3, Laboratory in Psychophysiology
- (d) Title change, description change, prerequisite change  
PSYC 335-3, Sensation I
- (e) New course PSYC 336-3, Sensation II
- (f) Deletion of PSYC 347-3, Motivation and Work
- (g) New course PSYC 356-3, Developmental Disorders
- (h) Deletion of PSYC 380-3, Physiological Psychology
- (i) New course PSYC 381-3, Introduction to Physiological Psychology
- (j) New course PSYC 382-3, Physiology and Complex Behaviour
- (k) Deletion of PSYC 415-5, Measurement

The new course PSYC 356-3, Developmental Disorders, was the focus of particular attention on SCUS both with regard to prerequisites and resources. After discussions with the Department of Biosciences, BISC 202 was included as a recommended prerequisite. The library reported that it did not carry all the resources listed for the course but on further investigation the department indicated that it was satisfied with the current resources and was prepared to give the missing materials high priority from the Department's library allocation in future years.



N.R. Reilly

SCUS 78-66

# SIMON FRASER UNIVERSITY

## MEMORANDUM

To..... Mr. H.M. Evans, Secretary	From Sheila Roberts, Secretary
S.C.U.S.	Faculty of Arts Curriculum Committee
Subject... CURRICULUM CHANGES-PSYCHOLOGY	Date... October 31, 1978

The Faculty of Arts Curriculum Committee at its meeting of October 19, 1978 approved the attached changes and new course proposals for the Department of Psychology. The new course proposals were distributed to other Faculties prior to the meeting, with the understanding that other Faculty Committees would have two weeks - until November 2, 1978, to respond to the question of overlap with courses in their respective faculties.

Please place these items on the agenda of the next SCUS meeting.

Thank you.



S. Roberts

Attachments:

CALENDAR CHANGES 1979-80

Department of Psychology

RECAPITULATION

p. 206 Requirements for Honors in Psychology CHANGE OF REQUIREMENTS:

DELETE

2. Present to the departmental Undergraduate Studies Committee a coordinated program of approximately 45 credits suited to a chosen direction within psychology. Normally the program will be designed in consultation with the faculty adviser, and must be presented before 30 credits have been accumulated. Approval of the program will be based on its quality and coherence.

RENUMBER as shown

2. Have a 3.0 or higher grade point average for all courses taken in each semester.
3. Have a 3.0 or higher grade point average for all psychology courses taken each semester.

RATIONALE:

The requirement that Honors students must present a program of 45 credits of study for advance approval by the departmental Undergraduate Studies Committee is to be dropped. This requirement has proved to be unworkable, inasmuch as many students enter the Honors program when they have less than 45 credits remaining, and in any case, the planned program is often impossible to follow because of the infrequent offering of certain advanced courses.

P. 209 NEW COURSE PROPOSAL SEE APPENDIX A.  
PSYC 280-3

RATIONALE:

A reorganization of courses in physiological psychology is proposed. This involves a splitting of the present Psyc 380 (Physiological psychology) into two courses, Psyc 381 (Introduction to physiological psychology) and Psyc 382 (Physiology of complex behavior). In addition, a prerequisite course, Psyc 280 (Biological bases of behavior) is being introduced, and a laboratory course, Psyc 300 (Laboratory in psychophysiology), which may be taken by students in any of the other courses, is being added. The attached material provides details about the new courses.

p. 209 NEW COURSE PROPOSAL PSYC 300-3.

SEE APPENDIX B

RATIONALE: see rationale under PSYC 280-3

p. 210 PSYC 335-3

CHANGE OF TITLE

SEE APPENDIX C

FROM: Sensation

TO: Sensation 1

CHANGE OF DESCRIPTION

FROM:

Considers the capabilities of the sensory system, and the sensory bases of experience with reference to the characteristics of stimuli, the receptor mechanisms, the processes of transmission, and the concomitant neurophysiological processes. Consideration is also given to the problems of response indicators and the measurement of sensory magnitudes.

TO: Considers the capabilities of the visual and auditory sensory systems, and the sensory bases of experience with reference to the characteristics of stimuli, the receptor mechanisms, the processes of transmission, and the concomitant neurophysiological processes. Consideration is also given to the problems of response indicators and the measurement of sensory magnitudes.

CHANGE OF PREREQUISITES

FROM:

PSYC 101-3

TO:

PSYC 101-3

Recommended: PSYC 201-3, PSYC 280-3, and PSYC 300-3

RATIONALE: SEE UNDER NEW COURSE PROPOSAL PSYC 336-3.

NEW COURSE PROPOSAL PSYC 336-3

SEE APPENDIX D

RATIONALE:

A new course, Psyc 336 (Sensation II), is to be added as an expansion of the subject matter now being taught. Although our present Psyc 335 is titled "Sensation", it has never proved possible in one semester to cover more than vision and audition, with perhaps one or two lectures acknowledging that there are other senses. It is proposed that the title of Psyc 335 be changed to "Sensation I", that its course description be changed slightly to indicate that the course content is confined to the visual and auditory senses, and that Psyc 336 (Sensation II) be added to cover the senses of taste, smell, touch, pressure, temperature, orientation, balance, muscle reception and pain. The new course is described in the attached material.

p. 210 PSYC 347-3 Motivation and Work DELETE

RATIONALE:

Psyc 347-3 and 415-5 are to be dropped from the calendar because of insufficient student and faculty interest.

211 NEW COURSE PROPOSAL PSYC 356-3 SEE APPENDIX E

PSYC 380-3 Physiological Psychology DELETE

211 NEW COURSE PROPOSAL PSYC 381-3 SEE APPENDIX F

PSYC 382-3 SEE APPENDIX G

RATIONALE See under New Course Proposal PSYC 280-3

213 PSYC 415-5 Measurement DELETE

RATIONALE: see under PSYC 347-3

214 PSYC 493-3, 494-3, and 495-3 Change of Description

From: "PSYC 493-3 Directed Studies  
Independent reading or research in topics selected in consultation with the supervising instructor.  
Pre-requisites: PSYC 201-3 and permission of the instructor."

PSYC 494-3 Directed Studies  
Independent reading or research in topics selected in consultation with the supervising instructor.  
Pre-requisites: PSYC 201-3 and permission of the instructor.

PSYC 495-3 Directed Studies  
Independent reading or research in topics selected in consultation with the supervising instructor.  
Pre-requisites: PSYC 201-3 and permission of the instructor."

To: "PSYC 493-4, 494-3, and 495-3 Directed Studies  
Independent reading or research in topics selected in consultation with the supervising instructor.  
Students should register for 493-3 the first time a 3-credit Directed Studies is taken, and for 494-3 and 495-3 if further 3-credit directed Studies on separate topics are taken.

PSYC 496-5, 497-5, 498-5

Pre-requisties: PSYC 201-3 and permission of the instructor.

From: "PSYC 496-5 Directed Studies  
Independent reading or research in topics selected in consultation with the supervisor instructor.  
Pre-requisites: PSYC 201-3 and permission of the instructor.

PSYC 497-5 Directed Studies  
Independent reading or research in topics selected in consultation with the supervisor instructor.  
Pre-requisites: PSYC 201-3 and permission of the instructor.

PSYC 498-5 Directed Studies  
Independent reading or research in topics selected in consultation with the supervisor instructor.  
Pre-requisites: PSYC 201-3 and permission of the instructor."

To: "PSYC 496-5, 497-5, 498-5 Directed Studies  
Independent reading or research in topics selected in consultation with the supervisor instructor.

Students should register for 496-5 the first time a 5-credit Directed Studies is taken, and for 497-5 and 498-5 if further 5-credit Directed Studies on separate topics are taken.

Pre-requisites: PSYC 201-3 and permission of the instructor."

RATIONALE:

The description of Directed Studies courses has been rewritten in an attempt to ensure that students will remember to register with a different course number each time a Directed Studies course is taken.

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

APPENDIX A.

1. Calendar Information

Department: Psychology

Abbreviation Code: Psych Course Number: 280 Credit Hours: 3 Vector: 2-0-2

Title of Course: Biological Bases of Behaviour.

Calendar Description of Course: Surveys a variety of biological approaches to understanding behaviour, including research from allied disciplines relevant to the biopsychological analysis of behaviour. Includes: genetic basis of normal and abnormal behaviour, psychobiology of development, intelligence, aggression, biological approaches to mental illness, learning disabilities, and the behavioural effects of drugs, hormones, biorhythms, brain damage, and environmental enrichment.

Nature of Course Two 1 hour lectures and one 2 hr. lab

Prerequisites (or special instructions):

Psyc 101

Recommended: BISC 101 or 102 or 105

What course (courses), if any, is being dropped from the calendar if this course is approved: None. PSYC 180 (Brain and Behavior) and PSYC 480 (Seminar in Physiological Psychology) will be offered less frequently.

2. Scheduling

How frequently will the course be offered? Once per year.

Semester in which the course will first be offered? 1979-3

Which of your present faculty would be available to make the proposed offering possible? Drs. Beyerstein, Davis, Weinberg

Objectives of the Course To provide an introductory background to 300-level courses in physiological and biological psychology.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty None; PSYC 180 and 480 will be offered less frequently

Staff Current staff and faculty sufficient to handle new course, due to reduced frequency of offering current courses.

Library None

Audio Visual None

Space None

Equipment None

5. Approval

Date: 6 Oct 78

1978

15 Mar 78

[Signature]  
Department Chairman

[Signature]  
Dean

[Signature]  
Chairman, SCUS

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

Oct. '78

# SIMON FRASER UNIVERSITY

## MEMORANDUM

Dr. Hal Weinberg Psychology Department	From Lin Kemp Chairman, DUCB Biological Sciences
Subject Psychology course revisions	Date 26 Sept/78

I've looked over your revisions and proposed new course PSYCH 280, and have discussed them with several members of the Biology Department. We see no substantive overlap but would offer the following suggestions:

It would be useful for students planning to take PSYCH 280, or any further Physiological Psychology courses to have at least an introductory grounding in Physiology and Genetics. While it would be ideal if they took BISC 305-3, Animal Physiology, this may be too much, considering the Chemistry prerequisites. So my suggestion would be that they be required to take BISC 101 (a form and functions course) and BISC 202 (Genetics). Because of the usual prerequisites for BISC 202 you may wish to only recommend Genetics.

*Lin Kemp*

OFFICE OF THE  
DEAN  
SIMON FRASER UNIVERSITY

The Biological Bases of Behaviour

1. Introduction
2. Behaviour Genetics - basic concepts
3. - inheritance of behavioural traits
4. - the genetics of intelligence controversy
5. - nature-nurture and aggression
6. Animal behaviour in the field and laboratory - Comparative Psychology and Ethological analysis of behaviour.
7. Biorhythms - introduction - periodicities in animal and human behaviour
8. - circadian rhythms, sleep cycles
9. - annual rhythms: fertility, migration, hibernation, etc.
10. Hormones and behaviour - basic data
11. - sexual dimorphism, a comparative analysis
12. - hormones & non-reproductive behaviours
13. Biopsychology development
14. - maturation of the nervous system in relation to the development of behaviour
15. - adult effects of enriched and impoverished environments during development
16. Biopsychology of abnormal behaviour - effects of brain damage
17. - behavioural and conscious effects of nervous diseases; malnutrition and the brain
18. - biological approaches to mental illness
19. - hyperkinesis and learning disabilities
20. Drugs and Behaviour - chemical effects on the nervous system
21. - drugs for the treatment of behavioural problems
22. - popular social drugs
23. - possible hazards of social drug use
24. The Human Nature of Human Nature - biopsychological perspectives

Reading List for Psychology 280-3

- Cartwright, R.D. A Primer on Sleep and Dreaming. Addison-Wesley (1978)
- Hinde, R. Biological Basis of Human Social Behaviour. McGraw-Hill (1974)
- Julian, R.M. A Primer of Drug Action. Freeman (1978)
- Lerner, I.M. Heredity, Evolution and Society. Freeman (1968)
- Montague, M.F.A. Man and Aggression. Oxford University Press (1973)
- Snyder, S. Madness and the Brain. McGraw-Hill (1974)

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

APPENDIX B

1. Calendar Information

Department: Psychology

Abbreviation Code: Psych Course Number: 300 Credit Hours: 3 Vector: 1-0-4

Title of Course: Laboratory in Psychophysiology

Calendar Description of Course: The techniques of electrophysiological recording currently used in psychophysiology and sensory psychology are demonstrated and learned. These will include electroencephalography, electromyography, electrocardiography, electrodermography and other techniques for the measurement of physiological changes which are related to behaviour. The recorded information is related to the behavioural and physiological conditions which influence their occurrence and form.

Nature of Course 1-hr. lecture & 4-hr. laboratory

Prerequisites (or special instructions):

Previous or concurrent enrolment in Psyc 280

What course (courses), if any, is being dropped from the calendar if this course is approved: None. PSYC 180 (Brain and Behavior) and PSYC 480 (Seminar in Physiological Psychology) will be offered less frequently.

2. Scheduling

How frequently will the course be offered? Once each calendar year

Semester in which the course will first be offered? 1979-3

Which of your present faculty would be available to make the proposed offering possible? Drs. Reyerstein, Davis, Diamond, Weinberg.

3. Objectives of the Course To provide first-hand exposure to psychophysiological recording methods as they are currently practiced in research and clinical settings. This will lead to an appreciation of the possibilities and limitations of psychophysiological techniques in the study of behaviour and in the treatment of behavioural disorders.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty NONE See above.

Staff The current support staff (technicians and demonstrator) will suffice

Library None

Audio Visual None

Space None

Equipment \$5000/yr. for 3 yrs. to update existing equipment and purchase new equipment.

5. Approval

Date: 6 Oct 79 OCT 31 1978 15 Nov 78

J.H. Bowman Department Chairman

R.C. Brown Dean

Norman R. Reilly Chairman, SCUS

CHANGE OF TITLE  
DESCRIPTION  
PREPARED

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

CHANGE OF TITLE, DESCRIPTION

PRE-REQUISITES ONLY  
Calendar Information

Department PSYCHOLOGY

Abbreviation Code: PSYC Course Number: 335 Credit Hours: 3 Vector: 2-0-2

Title of Course: Sensation I

Calendar Description of Course: Considers the capabilities of the visual and auditory sensory systems, and the sensory bases of experience with reference to the characteristics of stimuli, the receptor mechanisms, the processes of transmission, and the concomitant neurophysiological processes. Consideration is also given to the problems of response indicators and the measurement of sensory magnitudes.

Nature of Course Lecture/Laboratory

Prerequisites (or special instructions):

PSYC 101-3. Recommended: PSYC 201-3, PSYC 280-3, and PSYC 300-3.

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?

Semester in which the course will first be offered?

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

Objectives of the Course

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

- Faculty
- Staff
- Library
- Audio Visual
- Space
- Equipment

5. Approval

Date: 31 Oct 78 30 Nov 78 15 Nov 78

M. Bowman  
Department Chairman

R. C. B...  
Dean

Norman R. Keilly  
Chairman, SCUS

5 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

APPENDIX

NEW COURSE PROPOSAL FORM

D.

1. Calendar Information

Department: PSYCHOLOGY

Abbreviation Code: PSYC Course Number: 336 Credit Hours: 3 Vector: 2-0-2

Title of Course: Sensation II

Calendar Description of Course: The senses other than vision and hearing.

A consideration, similar to that in Sensation I, of taste, smell, touch, pressure, temperature, orientation, balance, muscle reception and pain.

Nature of Course : Companion to 335, Sensation I. Lectures and laboratory.

Prerequisites (or special instructions): PSYC 101-3  
PSYC 201-3, 280-3, 300-3 recommended

What course (courses), if any, is being dropped from the calendar if this course is approved: None. PSYC 335 (Sensation I) will be offered less often.

2. Scheduling

How frequently will the course be offered? Once per year

Semester in which the course will first be offered? 1979-3

Which of your present faculty would be available to make the proposed offering possible? Drs. Beyerstein, Davis, Diamond, Weinberg.

3. Objectives of the Course

Cover material not now being adequately presented

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty NONE Psyc 335 will be offered less often.

Staff None

Library None

Audio Visual None

Space None

Equipment Eventual build-up of additional equipment for senses other than vision and audition.

5. Approval

Date: 10 Oct 78

Oct 31 1978

15 Nov 78

W.H. Brewster  
Department Chairman

R.C. Brown  
Dean

Norman L. Keilly  
Chairman, SCUS

PSYCHOLOGY 336

SENSATION II

TEXT: Geldard, F.A. The Human Senses, John Wiley, Toronto, 2nd Edition, 1973.

<u>WEEK</u>	<u>TOPIC</u>	<u>ASSIGNMENTS</u>
1	Introduction	(Chapter) 1
2	The Skin and its Stimuli	9
3	Pressure Sensitivity	10
4	Pain	11
5	Pain	11
6	Temperature	12
	MID TERM	
7	Kinesthesia	13
8	Kinesthesia	13
9	Vestibular Sensitivity	14
10	Vestibular Sensitivity	14
11	Olfaction	15
12	Taste	16
13	Somesthesia	13

READING LIST FOR PSYCHOLOGY 336

The Human Senses. F. Geldard

Proprioceptive Control of Human Movement. Dickinson

Receptors and Sensory Perception. R. Granit

Sensory Processes. Alpern, Lawrence & Wolsk

Efferent Organization and the Integration of Behavior. J. Maser

Movement Produced Stimulation in the Development of Visually Guided  
Behavior. R. Held & A. Hein

The Senses Considered as Perceptual Systems. J.J. Gibson

Touch and Kinesthesia. Rose & Mountcastle

The Activity of the Mammalian Olfactory Apparatus. E.D. Adrian

Somesthesia and the Chemical Sense. F. Geldard

Special Senses: Thermal Receptors. Y. Zotterman

Studies in Space Orientation. III. Perception of the upright in the  
absence of a visual field. H.A. Witkin & S.E. Asch.

The Nature and Importance of Individual Differences in Perception.  
H.A. Witkin.

Sensation and Perception II. The minor Senses. J. Cohen

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

APPENDIX E.

Calendar Information

Department: PSYCHOLOGY

Abbreviation Code: PSYC Course Number: 356 Credit Hours: 3 Vector: 2-0-2

Title of Course: DEVELOPMENTAL DISORDERS

Calendar Description of Course: Examines theoretical approaches, research findings, and treatment outlooks concerning problems and disorders in childhood development.

Nature of Course: Two one-hour lectures and one two-hour laboratory.

Prerequisites (or special instructions): PSYC 351 and PSYC 340, or permission of the Department. BISC 202 highly recommended.

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 per year

Semester in which the course will first be offered? 1980-1

Which of your present faculty would be available to make the proposed offering possible? Janet Strayer, Elinor Ames, James Marcia, Philip Wright

Objectives of the Course to inform and educate by means of a critical examination of theories, issues and research findings concerned with the possible causes and treatment of problems in a number of content areas in development. Students should gain an understanding of the process of normal development as a context for examining disorders. They should also acquire critical skills in the assessment and evaluation of theory and research in the areas considered.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty NONE Other developmental courses will be offered less frequently.

Staff None

Library None

Audio Visual None

Space None

Equipment None

5. Approval

Date: 6 Oct 78

OCT 21 1978

15 Nov 78

[Signature]  
Department Chairman

[Signature]  
Dean

[Signature]  
Chairman, SCUS

## Psychology 356-3

### COURSE CONTENT:

The objectives of the course will be to survey and examine critically each of the following general problem areas:

Intellectual: intellectual development in normal and retarded individuals; learning disabilities; speech, hearing, and language disorders.

Emotional: psychotic and neurotic disorders of children.

Behavioral and Sociogenenic: hyperactivity; delinquency; aggression; and problems of behavior control and management.

Each area will be considered according to the following framework:

- 1) Theories and Models of Development and Developmental Disorders:  
Freudian and Ego-Psychoanalytic; S-R Learning; Social Learning;  
Cognitive-Developmental.
- 2) Related Treatment Approaches:  
Analytic and Psychodynamic; Behavioristic; Cognitive; Social and  
Observational Modelling; Cognitive-Behavior Modification; Adult  
vs. Peer treatment; Individual vs. Group treatment models.
- 3) Issues in the Treatment of Children:  
Historical perspectives on developmental disorders of children;  
Concepts of normal and "abnormal" development in childhood;  
Contrasts between biological (medical), behavioral, and  
educational intervention strategies.
- 4) Etiological Factors:  
The influence of genetics, congenital and biological factors,  
social, and cognitive factors will be considered in relation to  
each problem area.

Psychology 356-3

The prevailing perspective overall will be to describe and attempt to explain the current state of knowledge in several areas of developmental deviation by setting these within the context of developmental psychology.

Psychology 356-3

DEVELOPMENTAL DISORDERS

Reference Materials

Text: M.T. Erickson, Child Psychopathology, Toronto: Prentice-Hall of Canada, 1978.

In addition to the text, articles will be assigned from the following Developmental journals:

Child Care Quarterly; Child Development; Developmental Psychology; Human Development; J. of Experimental Child Psychology; J. of Genetic Psychology; J. of Personality and Social Psychology; J. of Youth and Adolescence; Merrill-Palmer Quarterly.

Journals dealing more specifically with select problem areas include: American J. of Mental Deficiency; American J. of Orthopsychiatry; Child's Brain; J. of Abnormal Child Psychology; J. of Abnormal and Social Psychology; J. of Applied Behavior Analysis; J. of Autism and Childhood Schizophrenia; J. of Child Psychology and Psychiatry; J. of Child Psychotherapy; J. of Clinical Psychology; J. of Learning Disabilities; J. of Speech and Hearing Disorders; Exceptional Children; Mental Retardation; Psychoanalytic Study of the Child.

Reference Books and Resource Materials:

- Achenbach, T.M. Developmental Psychopathology (1974)  
Adams, P.L. Obsessive Children (1973)  
Allen, F.H. Psychotherapy with Children (1942)  
Anthony, E.J. & Koupernik, C. (Eds.). The Child in his Family,  
3 volumes (1974)  
Axline, V.M. Play Therapy (1947)  
Bryan, T. & Bryan, J. Understanding Learning Disabilities (1975)  
Caplan, G. (Ed.) Emotional Problems of Early Childhood (1955)  
Clarizio, H.F., & McCoy, G.F. Behavior Disorders in School-Aged  
Children (1970)  
Clarke, A.M. & Clarke, A.D.B. (Eds.) Mental Deficiency: The  
Changing Outlook (1975)  
Davids, A. Children in Conflict: A Casebook (1974)  
Davids, A. (Ed.) Child Personality and Psychopathology (1974)  
Gibbons, D.C. Delinquent Behavior (1970)  
Goldfarb, W. Childhood Schizophrenia (1961)  
Hobbs, N. (Ed.) Issues in the Classification of Children (1975)  
McIntire, R.W. Child Psychology: A Behavioral Approach to  
Everyday Problems (1975)  
Mischel, W. Personality and Assessment (1968)  
Mussen, P.H. (Ed.) Carmichael's Manual of Child Psychology, vol. II,  
part V; Psychopathology (1970)  
Reisman, J.M. Principles of Psychotherapy with Children (1973)  
Rexford, E.N., Sander, L.W., & Shapiro, T. (Eds.) Infant Psychiatry (1976)  
Rimland, B. Infantile Autism (1964)  
Robinson, W. & Robinson, H. The Mentally Retarded Child, 2nd ed. (1976)  
Ross, A.O. Psychological Disorders of Children: A Behavioral  
Approach (1974)  
Sattler, J.M. Assessment of Children's Intelligence (1974)  
Schopler, E. & Reichler, R.J. Psychopathology and Child Development (1973)  
Steinhauer, P.D. & Rae-Grant, Q. (Eds.) Psychological Problems of  
the Child and his Family (1977)  
Weiner, I.B. Psychological Disturbance in Adolescence (1970)  
Westman, J.C. Individual Differences in Children (1973)  
Wolman, B.B., (Ed.) Manual of Child Psychopathology (1972)

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

APPENDIX  
F.

NEW COURSE PROPOSAL FORM

1. Calendar Information

Department: Psychology

Abbreviation Code: Psych Course Number: 381 Credit Hours: 3 Vector: 2-2-0

Title of Course: Introduction to Physiological Psychology

Calendar Description of Course: A consideration of the physiological systems which control and regulate basic drives including hunger, sex, thirst, sleep, and arousal.

Nature of Course Lecture and Tutorials

Prerequisites (or special instructions): Psyc 280

*kin-100*, Psyc 300 recommended

What course (courses), if any, is being dropped from the calendar if this course is approved: Psychology 380. Psychology 380 is being split into Psych 381, offered once per year and 382, offered once per year.

2. Scheduling

How frequently will the course be offered? Once a year

Semester in which the course will first be offered? 1979-3

Which of your present faculty would be available to make the proposed offering possible? Drs. Weinberg, Davis, Beyerstein

3. Objectives of the Course

To consider in detail the physiology of basic drive systems, primarily at the human level.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty None see above

Staff None

Library None

Audio Visual None

Space None

Equipment None

5. Approval

Date: 6 Oct 78

OCT 31 1978

15 Nov 78

W. H. Bouman  
Department Chairman

R. C. Brown  
Dean

Norman R. Kelly  
Chairman, SCUS

Course Outline for Psychology 381  
Introduction to Physiological Psychology

**Weeks**

- 1 & 2      **Research Methods:** Electrolytic, thermal chemical, ablation and sectioning techniques. Recording techniques: single unit, Evoked Potentials, EEG and DC fields.  
Stimulation Techniques: electrical and chemical stimulation.
- 3 & 4      **Cells of Central Nervous system and peripheral nervous system:**  
Development of membrane potentials, axonal membrane changes, ionic fluxes, propagation of axon potentials. Structure of synapses, mechanisms of synaptic transmission, postsynaptic potentials, inhibition at the synapse, temporal and spatial integration.
- 5 & 6      **Glands, muscles and control of voluntary movements.** Anatomy of skeletal muscles, neuromuscular functions, motor and plates and the physical basis of muscular contractions. Neuro-synaptic and polysynaptic reflex pathways. The Gamma motor systems. Central control of motor function: pyramidal and extra-pyramidal systems, the basal ganglia systems, the cerebellum and disorders of movements resulting from brain lesions.
- 7          **Basic Structure of Brain and Spinal Cord.** Gross anatomy of Cortex, Thalamus, basal ganglia, hypothalamus, brainstem, cranial nerves and related nuclei and major cortico-spinal tracts. Lateralization of input and output with respect to brain.
- 8          **Physiological systems related to the development and control of sexual behaviour.** Human control of sexual differentiation and motivation. Effects of prenatal sex hormones on the brain. Spinal mechanisms controlling sexual behaviour. The effects of brain lesions on sexual behaviour.
- 9 & 10     **Regulation and control of hunger and food intake.** The digestive process and controls of metabolism. Patterns of food intake. Glucostatic and other theories, specific hungers, brain

function and systems controlling hunger and thirst, lesion and electrical stimulation studies. Regulation of water and sodium balance. Neural control of drinking.

- 11 & 12      **Sleep and Dreaming: Stages of sleep, patterns of sleep, fast wave and slow wave sleep and their relationship to dreaming. Sleep deprivation and its effects. Conditioning during sleep, Insomnia, narcolepsy, chemical factors in the control of sleep. The effects of brain transactions on sleep and waking. The influence of electrical stimulation on sleep. Brainstem mechanism controlling dreaming, overview of active and passive theories of sleep.**
- 13            **The influence of early visual and somatosensory stimulation on brain and sensory development.**

READING LIST FOR PSYCHOLOGY 381-3

Thompson, R.F. Foundations of Physiological Psychology. Harper & Row

Tower, D.B. The nervous system, The Basic Neurosciences. Raven.

Schade and Ford. Basic Neurology. Elsevier.

Note: the first listing will be the basic text and the other listings are books from which selected readings will be assigned.

NEW COURSE PROPOSAL FORM

G.

1. Calendar InformationDepartment: PSYCHOLOGYAbbreviation Code: PSYC Course Number: 382 Credit Hours: 3 Vector: 2-2-0Title of Course: Physiology of Complex Behaviour

Calendar Description of Course: A consideration of the central nervous systems which control and regulate higher order complex behaviour. Emphasis on human data. The complex behaviour considered includes learning, memory, information processing, emotion, aggression and language.

Nature of Course: Lecture and TutorialPrerequisites (or special instructions): Psych 381 or 380Psych 300 recommended

What course (courses), if any, is being dropped from the calendar if this course is approved: Psyc 380. Psych 380, now offered twice a year, will be substituted by Psych 381 and 382 each of which will be offered once per year.

2. SchedulingHow frequently will the course be offered? Once a yearSemester in which the course will first be offered? Fall 1978Which of your present faculty would be available to make the proposed offering possible? Drs. Weinberg, Davis, and Beyerstein

3. Objective of the Course: To develop a comprehensive understanding of the theory and data relevant to the physiological basis of learning and memory, language, aggression, reward and punishment.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty: None see aboveStaff: NoneLibrary: NoneAudio Visual: NoneSpace: NoneEquipment: None5. Approval

Date:

6 Oct 78OCT 31 197815 Nov 78M. Bowman  
Department ChairmanRC Brown  
DeanNorman H. Keally  
Chairman, SCUS

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

March '78

PSYCHOLOGY 382

Physiology of Complex Behaviour

1. An introduction to the history of issue of localization of function in the brain.
2. Lesions of the brain and their reference on learning and memory.
3. Electrical changes in the brain during information processing, learning and retrieval of information.
4. The influence of electrical and chemical stimulations of the brain on learning and memory.
5. An overview of current theoretical concepts of brain functions related to coding and retention of information.
6. The use of electrical stimulation of the brain as reward and reinforcement: The data and current interpretations.
7. Brain systems involved in language. Physiological bases of aphasia and other language disorders.
8. Brain systems controlling and regulating aggression. Data bearing on the control of aggression through lesions and stimulation of the brain.
9. The use of drugs for the control of emotion.
10. The use of Psychosurgery and electroconvulsive shock for treatments of behavioural disorders. The evidence and relevant interpretations.
11. The phenomena of recovery of function after brain lesions. Theoretical explanations and implications for the analysis of brain systems.
12. An overview and review.

READING LIST FOR PSYCHOLOGY 382

Carlson, Physiology of Behavior. Wiley.

Boddy, Physiology and Psychological Concepts. Wiley.

Luria, Human Brain and Psychological Processes. Harper & Row.

Karczmar and Eccles, Brain and Human Behavior. Springer-Verlag.

Pribram, Languages of the Brain. Prentice Hall.

Note: The first listing is the basic text for the course. The additional listings are for selected readings.

# SIMON FRASER UNIVERSITY

## MEMORANDUM

To: Dr. Elinor Ames  
Psychology Department  
Subject: New Course Proposals

From: Gail Tesch  
Psychology Librarian  
Date: 10 November 78

Of the six new course proposals submitted to the Library for assessment, four of them (PSYC 280, 336, 381, and 382) are essentially a re-organization of existing courses and as such do not place new demands on the collection. PSYC 300 is a laboratory course which will be well supported by the materials now in the science collection.

PSYC 356 - Developmental Disorders is the only proposal which current holdings do not appear to support adequately. We lack 11 of the 28 monographs and 5 of 24 serials on the reading list, which is indicative of our general weakness in an area with a large bibliography.

Janet Strayer has advised us that 90% of the readings will be from textbooks, while the remaining 10% will use other sources, and that there will be considerable reliance on materials currently being acquired for the new applied and clinical psychology program. Also, the projected enrolment of 15 to 20 students should not place too great a burden on library resources. It should be noted that materials acquired for courses in learning disabilities (EDUC 326 and 422) will be of use to students in PSYC 356.

In view of the above information, the price of bringing the strength of the collections up to a desirable level can be relatively modest. Our estimate of costs are as follows:

Monographs (20-30 titles @ av. \$25.00)	\$600
Serials (6 subscriptions @ \$20-\$60)	\$250
Backfiles	\$200
	<hr/>
	\$1,050

GT:vk  
Encl.

cc: ✓H. Evans, Registrar  
L.E. Thomas