Action undertaken by the Senate Committee on Undergraduate Studies at its meeting of November 4, 1980 gives rise to the following motion:

**MOTION**

"That Senate approve and recommend approval to the Board of Governors, as set forth in S.80-139, the proposed new course ARC. 485-5 - Lithic Technology."

Subject to approval of the course by Senate and the Board of Governors, SCUS approved waiver of the two semester time lag requirement in order that the course may be first offered in Summer 81-2.

**FOR INFORMATION**

At its meeting of November 4, 1980, acting under its delegated authority, SCUS approved a number of changes as follows:

ARC. 272-3 - Archaeology of the Old World - delete prerequisite
ARC. 273-3 - Archaeology of the New World - delete prerequisite
ARC. 301-2 - Prehistoric and Primitive Art - delete prerequisite;

ARC. 360-3 - Indian Cultures of North America - change vector from 0-3-0 to 1-2-0, and nature of course to Lecture/Seminar;

ARC. 438-3 - change of title.
The Faculty of Arts Curriculum Committee at its meeting of October 23, 1980 approved the attached curriculum changes submitted by the Department of Archaeology. Would you please place the same on the agenda of the next SCUS meeting.

Thank you.

S. Roberts

Attachment

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SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

Calendar Information

Department Archaeology

Abbreviation Code: ARC Course Number: 485
Credit Hours: 5 Vector: 4-0-1

Title of Course: Lithic Technology

Calendar Description of Course: An in-depth study of how to manufacture and analyze stone tools. Includes rock and mineral identification, stone working by students, fracture mechanics, and relevance to theoretical problems.

Nature of Course Lecture/Laboratory

Prerequisites (or special instructions): Arc. 101 and Arc. 372;

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 every two years

Semester in which the course will first be offered? 1980-2

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

Objectives of the Course

To train students in the analysis of stone tools. Archaeology relies extensively on the analysis of stone tools to date sites, to determine the cultural affiliation of sites and to determine the function of sites. The subject is therefore essential in archaeological training and is not covered by existing courses.

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty none

Staff one teaching assistant

Library none

Audio Visual none

Space none

Equipment none

5. Approval

Date: October 17, 1980

Richard Fladmark
Department Chairman

P. E. Brown
Dean

John Webster
Chairman, SCUS

§ § 73-34b:-(When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).
ARCHAEOLOGY 485-5

LITHIC ANALYSIS AND INTERPRETATION

REQUIRED TEXTS:


RECOMMENDED TEXTS:


Relevant Journals:

Lithic Technology
Flintknapper's Exchange

Description:

This course is intended to be an indepth exploration of techniques of lithic manufacture, maintenance (resharpening), use and interpretation. It will include experience in knapping and using stone tools; hafting and use. A weekend field trip is planned, to put lithic use concepts to use. Background research on resource utilization and technology is mandatory. The course will also deal with aspects of use-wear analysis and experimentation. Research papers are due at the end. Each student will be responsible for providing a pair of gloves, safety glasses, a piece of leather or rubber to protect legs, and a hard wood billet. Enrolment is limited to 15.

1. Goals; definitions; Ethnography; pseudofacts (Europe, Africa, the Kafau, Japan, Sozudai, and North America: Calico Hills, the Fraser Canyon); heatspalling and the real thing; what can be done with lithics? Fracture types. Film: The Flintknapper.


3. The beginnings: choppers and chopping tools and the Fraser Canyon: morphology and functions. Field Trip: making a chopper

continued--
4. Bipolar techniques and split cobbles: morphology and functions. (and splintered pieces) Video Tape: Boonichson

5. Flakes and retouch: morphology, functions, accidental retouch, use-retouch, and multiple tools.


9. Interpretations and analysis:
   edge angles
   material importance
   flake to tool ratios
   styles
   debitage (what to do with assemblages without tools)
   debitage in British Columbia with Poketylo and Magne
   morphological types vs. functional types vs. other types
   curation
   multi-functionality and the reasons for it
   unidirectional trends
   reasons for exotic materials and change over time (Tasmania and the PI)
   the evolution of ground stone tools
   information and decision making theory
   design theory
   site function, and the problem of high density sites e.g. Olorgesailie
   inter-assemblage variability - how to interpret it and criteria to be used.

10. Use-wear: causes and techniques: fractures and abrasion the Ho Ho Ho Report.

11. Residues. Film: Beautiful Tree, Wooden Box


13. Ground stone, the Hoabinhian, and cracked rocks.
READING ASSIGNMENTS

1  INTRODUCTION: Collins 1975
   ETHNOGRAPHY: Aiston 1928; Gould, Koster and Sontz 1971; Mountford 1941; Vaufrey 1950; Hayden 1979; Ch. 34.
   PSEUDOFACTS: Bleed 1977; Clark 1958; Mason 1965; Warren 1914; Barnes 1939


3  Borden 1975:55-68, Mountford 1941


5  Clark and Thompson 1954; Clark and Haynes 1970; Hayden 1979, pgs. 63-142

6  Mewhinney 1964; Newcomer 1970; Callahan 1979:10-11, 33-53, 67. 90. 116-7

7  Aigner 1970; Bordes and Crabtree 1969; Sanger 1968, 1970

8  Akerman 1978; Elkin 1948; Kroeber 1961 (Chapter 9); Nagle 1914; Crabtree 1966, 1970; Muto 1970

9  DEBITAGE: Hassan 1971
   VARIABILITY and CURATION: Binford 1973; Binford and Binford 1969, Wilmsen 1970

10 Keeley 1974; Tringham et al 1974; Wilmsen 1968; Witthoft 1967; Wylie 1975; Hayden 1979; Chaps. 1, 2, 17, 18, 24, 26
READING LIST

Aigner, J. S.

Aiston, George
1928 Chipped stone tools of the Aboriginal tribes east and northeast of Lake Eyre, South Australia. Papers and Proceedings, Royal Society of Tasmania 123-131.

Akerman, Kim
1978 Notes on the Kimberley stone-tipped spear focusing on the point hafting mechanism. Mankind II:486-489.

Barnes, A. S.

Binford, L. R.

Binford, Sally and L. Binford

Bonnichsen, Robson

Bleed, Peter

Borden, Charles

Bordes, Francois and Don Crabtree

Callahan, Errett
Clark, J. Desmond

Clark, J. D., and C. V. Haynes Jr.

Clark, J. G. D., and M. W. Thompson


Crabtree, Don

Elkin, A. P.

Fitzhugh, William
1972 Environmental archaeology and cultural systems in Hamilton Inlet, Labrador. Smithsonian Contributions to Anthropology, Number 16. Smithsonian Institution: Washington, D.C.


Hassan, Fekri

Haynes, Gary

Hayden, Brian (Ed.)
Hill, J., and R. Evans  
1972  A model for classification and typology. In Clarke, D.  

Honea, K.  
1964  The patination of stone artifacts. Plains Anthropologist  
9:14-17.

Keeley, Lawrence  
1974  The methodology of microwear analysis. American Antiquity  
39:126.

Kroeber, Theodora  
1961  Ishi in two worlds. University of California Press:  
Berkeley.

Mason, R. J.  
1965  Makapangsat Limeworks fractured stone objects and natural  
fracture in Africa. South African Archaeological Bulletin  
20(77):3-16.

MacDonald, George  
1968  Debert: a Paleo-Indian site in central Nova Scotia  
Anthropology Papers, National Museum of Canada, 16.

Mewhinney, H.  

Mountford, Charles P.  
1941  An unrecorded method of manufacturing wooden implements by  
simple stone tools. Transactions, Royal Society of South  
Australia 65:312-316.

Muto, Guy  
1970  A stage analysis of the manufacture of stone tools. In D. M.  
Aikens, (Ed.), Selected Papers, Great Basin Anthropological  
Conference 1970, University of Oregon Anthropological Papers  
1:109-118.

Nagel, E.  
1914  Arrow chipping by means of fire and water. American Archaeologist  
16:140.

Newcomer, Mark  
1970  Some quantitative experiments in hand-axe manufacture.  
World Archaeology 3:85-93.

Olsen, Larry  
1973  Outdoor survival skills. Brigham Young University Press:  
Provo.

Peterson, Nicolas  
1968  The pestle and mortar: an ethnographic analogy for archaeology  
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swanson, Earl (Ed.)</td>
<td>1975</td>
<td>Lithic technology: making and using stone tools.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1970</td>
<td>Lithic analysis and cultural inferences.</td>
<td>Anthropological Papers of the University of Arizona, #16.</td>
</tr>
<tr>
<td>Wilson, T.</td>
<td>1899</td>
<td>Arrowpoints, spearheads and knives of prehistoric times.</td>
<td>Annual Report, Smithsonian Institution (for 1897):823-988.</td>
</tr>
</tbody>
</table>
SFU LIBRARY COLLECTION EVALUATION

(To be completed only for new course or program proposals.)

1. Course No. and Name or Program: ARC 485 Lithic Technology
   Date to be offered: Spring 81

2. Resources currently in collection:
   Reading lists. No. and % of titles available: 54 88.5 %
   Related materials in general collection:
     Monographs:
     Serials Subscriptions:
     Backfiles:
     Other:

3. Recommended additions to collection:
   (Indicate approx. no. of titles, vols., date, as appropriate)
   Monographs: 5 - 7 titles
   New serials subscriptions: 1 title
   Serials backfiles: 1 title 20 vols., 1911-30
   Other (specify): Films 2 titles
   ESTIMATED COST
     Monographs: 150.00
     New serials subscriptions: 15.00
     Serials backfiles: 200.00
     Films: 800.00
   Total: 1165.00

4. Comments:
   See attached sheet

Eve Szabo
For Library
For Faculty Department
Comments:

The Library can provide good support for this subject. A check of the standard bibliography in the field (Hester, T.R. and R.F. Heizer. *Bibliography of archaeology I: Experiments, lithic technology and petrography*. 1973) showed that the Library's collection is adequate. Most of the titles lacking are articles in older, specialized and/or non-English language journals.

The basic text for mineral identification which is listed on the course outline is not in the Library's collection and should be purchased along with another 5-7 titles to build a basic collection in this area.

The Archaeology Dept. already has, or has access to, the video tapes and most of the films listed on the course outline. However, there are other films the Department would like to have and funds should be allotted to purchase at least two films immediately.
MEMORANDUM

To: Mr. H.M. Evans, Secretary

From: Sheila Roberts, Secretary

S.C.U.S.

Faculty of Arts Curriculum Committee

Subject: Curriculum Changes — Archaeology

Date: 1980-10-27

The Faculty of Arts Curriculum Committee at its meeting of October 23, 1980 approved the attached curriculum changes submitted by the Department of Archaeology. Would you please place the same on the agenda of the next SCUS meeting.

Thank you.

S. Roberts

Attachment

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CURRICULUM CHANGES

DEPARTMENT OF ARCHAEOLOGY

ARC.272-3 Archaeology of the Old World
DELETION OF PREREQUISITE
Delete "ARC.131 is recommended."

ARC.273-3 Archaeology of the New World
CHANGE IN PREREQUISITES
DELETE "ARC.101 is recommended."

RATIONALE:
The department has proposed the deletion of the present prerequisites for ARC.272 and ARC.273, as it now requires majors to take ARC.101, 131, 272 and 273, and they are strongly advised to take ARC 101 or ARC 131 before taking either ARC.272 or ARC.273. At the same time the course material is structured so that non-majors can handle the subject matter without any prerequisites.

SEE APPENDICES A & B

ARC.301-2 Prehistoric and Primitive Art
DELETION OF PREREQUISITES
Delete Any Lower Division Archaeology course.

RATIONALE:
The department has proposed the deletion of a prerequisite for ARC.301 as the subject matter of the course is self-explanatory and does not require prior work in archaeology.

SEE APPENDIX C

ARC.360-3 Indian Cultures of North America
CHANGE OF VECTOR AND NATURE OF COURSE
From: 0-3-0
To: 1-2-0
From: Seminar
To: Lecture/Seminar

RATIONALE:
This course may be taught as a Lecture/Seminar or as a Seminar depending on the Faculty member who teaches the course.

SEE APPENDIX D
ARC. 438-3 Application of Sedimentology to Archaeological Sites

CHANGE OF TITLE
From: Application of Sedimentology to Archaeological Sites
To: GEOARCHAEOLOGY

RATIONALE:
The department feels that Geoarchaeology more closely fits the course description for ARC. 438-3.

SEE APPENDIX E

NEW COURSE PROPOSAL
ARC. 485-5 LITHIC TECHNOLOGY

SEE APPENDIX F
SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE PROPOSAL FORM = Change in Prerequisite only

1. Calendar Information
Abbreviation Code: ARC  Course Number: 272
Title of Course: Archaeology of the Old World

Calendar Description of Course:
A survey of Old World Prehistory from the Paleolithic to the Bronze Age. Basic concepts used in reconstructing prehistoric cultures, and the artifactual, fossil and contextual evidence for the evolution of man and culture.

Nature of Course: Lecture/Tutorial

Prerequisites (or special instructions):

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

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?

3. 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: Oct. 6/80

Richard Shipton  Re Brown
Department Chairman  Dean

Chairman, SCUS

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

Arts 78-3
COURSE PROPOSAL FORM - Change in Prerequisite only

Calendar Information

Abbreviation Code: ARC
Course Number: 273
Title of Course: Archaeology of the New World

Calendar Description of Course: A survey of prehistoric cultures of North and South America. The entry of man into the New World, the rise of the pre-Columbian civilizations of Mexico and Peru, and the cultural adaptations by prehistoric populations to other parts of the New World.

Nature of Course: Lecture/Tutorial

Prerequisites (or special instructions):

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

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?

3. 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: Oct. 6/80

Chairman, SCUS

(When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).
SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE PROPOSAL FORM -- Change in Prerequisite only

Calendar Information
Abbreviation Code: ARC. Course Number: 301 Credit Hours: 2 Vector: 2-1-0
Title of Course: Prehistoric and Primitive Art
Calendar Description of Course: Art styles and traditions of prehistoric and preliterate peoples.

Nature of Course Lecture
Prerequisites (or special instructions):

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? At least once a year.
Semester in which the course will first be offered: --
Which of your present faculty would be available to make the proposed offering possible? Visiting faculty

3. 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: Oct. 6/80

Department Chairman [Signature] Dean [Signature] Chairman, SCUS

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

Abbreviation Code: ARC. Course Number: 360 Credit Hours: 3 Vector: 1-2-0

Title of Course: Indian Cultures of North America

Calendar Description of Course: Comparative Study of the traditional cultures of North American Indians: prehistory, language, beliefs and customs

Nature of Course: Lecture/ Seminar

Prerequisites (or special instructions):
ARC. 101 or 273

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

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?

3. 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: Oct. 6/80

Richard Shutt	 RC Brown
Department Chairman	 Dean
Chairman, SCUS

SCUS 73-34b- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).
4. **Title of Course:** Geoarchaeology

5. **Calendar Description of Course:** The applications of techniques of sedimentology and pedology to the descriptive analysis of archaeological sites.

6. **Nature of Course:** Laboratory

7. **Prerequisites (or special instructions):**
   One lower division Archaeology course and GEOG 318 or permission of the Department.

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

9. **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?

10. **Objectives of the Course:**

11. **Budgetary and Space Requirements (for information only):**
   What additional resources will be required in the following areas:
   - Faculty
   - Staff
   - Library
   - Audio Visual
   - Space
   - Equipment

12. **Approval:**
   Date: Oct. 6/80

13. **Chairman, SCUS**

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