

Date: April 3, 1979  
To: Sheldon Wettack  
From: Herbert Dershem  
Subject: Goals

1. I will continue to develop the Computer Science program at Hope so that it can serve as a model for other small colleges.
2. I will take the lead at the national level in opening communication between Computer Science Departments at colleges similar to Hope and through this communication, provide guidance for colleges starting programs.
3. I will take an active role in introducing computers into elementary and secondary schools through the offering of workshops to teachers.
4. I will publish papers on the following topics:
  - a. The new statistics computer laboratory.
  - b. The volume of spheres in  $W$ -dimensional space.
  - c. The modularized approach to introductory computing.
  - d. The computer game of Nine-tac-toe.
  - e. Computerized decision making.
5. I will prepare the following for publication:
  - a. A Statistics Laboratory Manual - through CONDUIT.
  - b. Introductory Computer Science Modules - through UMAP.

Attachment to Faculty Service to Hope College, January, 1978-  
January, 1979 for Herbert L. Dershem

### C. SCHOLARLY ACTIVITY

#### 1. Scholarly Work Supported by Outside Funding

National Science Local Course Improvement Project, "A Modular Multi-path Course in Introductory Computing."

I developed six modules of this course during the Summer of 1978. In addition, I wrote textual material for each of these modules. I am currently in contact with two publishers about publication of these modules.

"Nearest Neighbor Problems", research work at Oak Ridge National Laboratories supported in part by a grant from the Oak Ridge Associated Universities.

"Computers in Teaching Mathematics," co-authored with David A. Smith, Donald McLaughlin, and Allen Ziebur, in Computers in Undergraduate Teaching: 1977 CONDUIT State of the Art Reports in Selected Disciplines. Work supported by NSF grant to CONDUIT.

#### 2. Other Scholarly Work and/or General Professional Development

##### Articles authored:

"Computer science at a liberal arts college", College Curriculum in Computer Science, Engineering, and Data Processing, IEEE Computer Society, 1977, pp. 128-132.

"An experience component for undergraduate computer science education", SIGCSE Bulletin, 10, 1(Feb., 1978), pp. 24-26.

"Factor Game", Personal Computing, 2, 6(June, 1978), pp. 44-49.

"Introducing elementary school children to the computer", Calculators/Computers Magazine, 2, 6(Sept/Oct, 1978), pp. 69-71, with J. Whittle.

"A survey of computing in private liberal arts colleges", Journal for Data Education, to appear, Jan., 1979 issue.

"Recursive programming in BASIC", Personal Computing, to appear.

"A general game playing program", Personal Computing, to appear.

"Dirichlet Regions", under revision according to referees recommendations for Mathematics Magazine.

FACULTY SERVICE TO HOPE COLLEGE  
January, 1978 - January, 1979

Name Herbert L. Dershem

A. SCHEDULED TEACHING - Courses (see notes below)

| Dept. & No. | Credit Hours | Course Description                              | Formal Contact Hours | Other Contact | Enrollment |
|-------------|--------------|---|----------------------|---------------|------------|
| -FALL-      | 2 ✓          | C.S. for Liberal Arts                           | 2                    | 0             | 16         |
|             | 3 ✓          | Intro. to Comp. Sci.<br>(with Whittle & Leland) | 6                    | 0             | 73         |
|             | 3 *          | Numerical Analysis<br>(with Brockmeier)         | 3                    | 0             | 17         |
|             | 3            | Data Structures                                 | 3                    | 0             | 23         |
|             | 1-3          | Independent Study                               | 0                    | 4             | 4          |
|             | 1 ✓          | Intro. Stat. Lab                                | 2                    | 0             | 13         |
| -SPRING-    |              | On sabbatical                                   |                      |               |            |

- Notes: 1. For team-taught courses, please place an asterisk (\*) before the course description and list other members of the team immediately under the course description.  
2. If this is the first time you have taught a listed course, please place a check (✓) before the course description.

B. ACADEMIC ADVISING

Total Number of Advisees 14  
Majors 8  
Fresh./Soph. 6

C. SCHOLARLY ACTIVITY (List)

1. Scholarly Work Supported by Outside Funding (list both project description and source of funding)  
See attached list.

| Activity                                     | Number of Activities | Number of Credits |
|--|----------------------|-------------------|
| Supervision of independent study or research | ✓                    | 4                 |
| Directing a play                             | —                    | —                 |
| Recitals                                     | —                    | —                 |
| Coaching Programming team                    | ✓                    | 4                 |

Other (describe):

2. Administrative (List)  
 Chairman, Computer Science Department  
 Project director, NSF LOCI project

3. Board and Committee Assignments (List)  
 None

4. Departmental Assignments (List)  
 Library liaison  
 Advisor to ACM student chapter

- E. PUBLIC SERVICE/CONSULTING (List)  
 Series editor for statistics, CONDUIT  
 Instructor in summer Quest program for the Holland Public Schools.

- F. OTHER (course and curricular development, lectureships, seminars, presentations to high school students, etc.)  
 High School talks: presented to high school students and teachers at Sigma Xi Science Day, Lampen Contest, Shelby High School, and Union City High School.  
 Papers presented: "Computer science in a liberal arts college".  
 IEEE-AEDS workshop on Curricula in Computer Science, Engineering, and Data Processing, February 2, 1978.  
 "An experience component for computer science education", SIGCSE Symposium, February 23, 1978.  
 "Nearest Neighbor polygons", University of Tennessee Computer Science and Management Science Colloquium, March, 1978.  
 Visiting Honorary Associate Professor of Computer Science, University of Tennessee, winter and spring quarters, 1978.  
 Visiting Research Scientist, Oak Ridge National Laboratory, January-May, 1973.