## Washburn University Meeting of the Faculty Senate

## March 8, 2010

## 3:30 pm Kansas Room, Memorial Union

- I. Call to Order
- II. Approval of Minutes of the Faculty Senate Meeting of February 8, 2010 (pp. 2-3)
- III. President's Opening Remarks
- IV. Report from the Faculty Representatives to the Board of Regents

## V. Faculty Senate Committee Reports

- A. Minutes from the Faculty Affairs Committee meeting of January 25, 2010 (pg 4)
- B. Minutes from the Academic Affairs Committee meeting of January 15, 2010 (pp. 5-7)
- C. Minutes from the Academic Affairs Committee meeting of February 5, 20101 (pg. 8).
- VI. University Committee Reports
  - A. Minutes from Assessment Committee Meeting of January 13, 2010 (pg.9)
  - B. Minutes from Library Committee Meeting of February 3, 2010 (pp. 10-11)
  - C. Minutes from the Interdisciplinary Committee Meeting of February 16, 2010 (pg. 12)
  - D. Minutes from the Faculty Development Committee Meeting of February 2, 2010 (pg. 13)
  - E. Minutes from the Honors Advisory Committee Meeting of January 28, 2010 (pp.14-15)
- VII. Old Business
- VIII. New Business Special Guest: Elliott Haugen, Interim Chief Information Officer
- IX. Information Items
- X. Discussion Items
- XI. Announcements
- XII. Adjournment

## Faculty Senate Washburn University

Minutes of February 8, 2010 Kansas Room, Memorial Union

Present: Arteburn, Averett. Barker, Berry, Byrne, Catanzaro, Childers, Croucher, Faulkner, Fry, Isaacson, Janzen, Kelly, Manske, Melick, Ockree, Prasch, Rich, Routsong, Sharafy, Shaver, Sullivan, Tate (VPAA), Wynn, Love (SGA)

- A. The meeting of the Faculty Senate was called to order at 3:37 PM. Tom Prasch presiding.
- B. The minutes of the Faculty Senate meeting of December 14, 2009 were approved.
- C. President's Opening Remarks.

Prasch reported that the electoral committee is at work to fill the two at-large seats vacated by Wunder and McGuire. They are working on an electronic voting process, and should be ready very soon.

Prasch reminded the senators the General Education wiki is open for comments and is now in the hands of the Academic Affairs committee. Prasch reminded everyone to read all of the proposals and comment. He is not sure when it will come to the full senate.

Prasch also reminded senators that the strategic planning document will be released soon for comment. It is important to read and provided input.

D. Report from the Faculty Representatives to the Board of Regents.

Prasch reported that the Board of Regents met on January 29. The BOR went through the strategic plan without action. The BOR also reapproved the early retirement program for this year. And lastly, the BOR unanimously approved the RFP for outsourcing of facilities services. However, several regents noted that while they approved the RFP, they may withhold final approval of any contract to outsource. This is an involved processes which may take several months.

Prasch reported the Budget committee of the BOR met and is looking at \$2 million dollars in reductions, including the savings from early retirees. There was also some discussion concerning reallocation of funds.

- E. Faculty Senate Committee Reports.A. Minutes from the Academic Affairs meeting of 12-3-09 were approved.
- F. University Committee Minutes.
  - A. Minutes from the Assessment Committee Meeting of December 3, 2009 were accepted.
  - B. Minutes from Honors Advisory Committee Meeting of December 2, 2009 were accepted.

- G. Old Business. There was no old business.
- H. New Business.A. 10-01 Business Curriculum Change BU 484 the motion was passed.
- I. Information Items. There were none.
- J. Discussion Items. The senators had a brief discussion concerning what criteria determine a major change for curriculum as defined by the charter for the academic affairs committee. No action was taken.
- K. Announcements. There were no announcements
- L. Adjournment. The meeting was adjourned at 4:12 PM.
- M. The next meeting will be March 8, 2010 at 3:30 pm in the Kansas Room, Memorial Union.

Matt Arterburn was elected chair of the committee; Tom Prasch volunteered to act as secretary.

The committee turned to the project of the belated renewing the Academic/Sweet Sabbatical Committee. It was decided that the committee would solicit nominations from the same units represented by members rotating off the present Sabbatical Committee, with one exception: since Humanities was not represented on the committee, and Tony Naylor would continue as representive for Creative/Performing Arts, someone from Humanities would be selected to replace outgoing member Reinhild Janzen. The completed list of nominees would be circulated by e-mail to the whole committee to ensure a swift approval process.

Prasch agreed to solicit representatives from Humanities, Education, Social Sciences, and School of Applied Studies. Arterburn agreed to ensure that Natural Sciences Division would have a name with which to replace Andrew Herbig.

Arterburn announced that he would circulate plans for a regular meeting schedule through the spring, and that he would find out from the previous committee chair what matters before the committee had not yet been resolved.

The meeting was adjourned.

Addendum: 4 February 2010

The following slate of new nominees for the Academic/Sweet Sabbatical Committee was circulated by email and approved by the Faculty Affairs Committee:

Humanites: Mary Sheldon (replacing Reinhild Janzen) Education: Sandy Tutwiler (replace Judith McConnell-Farmer) Social Sciences: Mark Peterson (replacing Rachel Goossen) School of Applied Sciences: Kay Rute (replacing Nan Palmer) Natural Sciences: Matt Arterburn (replacing Andrew Herbig)

## Academic Affairs Committee January 15, 2010 Meeting Notes

Committee members in attendance: Kathy Menzie (chair) Keith Mazacheck Paul Byrne Kandy Ockree Linda Croucher Lori Khan Cal Melick Jeanie Catanzaro Debbie Isaccson Robin Bowen (ex officio)

<u>Guests</u> Alan Bearman Keith Rocci Mike Russell Nancy Tate

## Item I: Call to order and approval of minutes

The meeting was called to order by Kathy Menzie.

Action: Minutes from the December 5, 2009, meeting were approved as written.

## Item II: Old Business

## A. General Education Proposal

## 1. Discussion of new class in information literacy (WU 101)

Guests, Alan Bearman and Keith Rocci, were present to provide information about the proposed Information Literacy Class (WU 101). Prior to the meeting, committee members received a copy of the proposal for this class. Dr. Bearman noted the proposed name change was to eliminate confusion because WU101 is not an extension or expansion of the current one-hour IS170 course.

The three-hour Information Literacy course is presented as a core university requirement. Dr. Bearman explained that currently, the material covered by the course is not consistently taught by all faculty because of time limitations. With the addition of two more librarians, 40 sections would be ready for Fall of 2011, so implementation was feasible for the next academic year.

The committee expressed concerns regarding making this course a core university requirement. They agreed the information provided in the course was important, but may not need to be a required course for every student. Some honors or advanced students would not need this course and should not be forced to take it. The average student may find the courses helpful because they need to understand how to do research at appropriate levels.

The committee was also concerned about the potentially negative impact on transfer students, because this course is not currently a requirement in other universities.

Two possible alternatives were discussed; the first alternative was to use the current on-line, 1-unit course for students transferring in with a certain number of units. The second alternative was to provide a competency test, which would allow both traditional and nontraditional students an opportunity to test out of the course. The committee noted testing would require additional costs to the university.

The committee also noted that making WU 101 a core requirement would also increase the number of courses required for students to graduate, which is already a challenge for some Allied Health and Nursing programs.

Dr. Bearman suggested other possible adjustments of the course would be to provide an Honors section.

The committee said they did not have enough information about the proposed course and still had questions about the impact on transfer students and the impact on some of the schools regarding the number of units required to graduate. The committee determined continued discussion in another meeting was required.

## 2. Survey for faculty (<u>www.survey</u> moneky.com/s/K5QRL73)

The committee received a copy of the survey prior to the meeting. Dr. Mike Russell was present to answer any questions and make requested changes to the survey. The committee reviewed the document and made changes and additions as necessary for clarification.

The goal of the survey is to obtain more information and feedback from faculty and staff about the Gen Ed proposal, especially since the attendance of the Gen Ed open forums had been low. The information obtained will help the committee and the Gen Ed Task Force make decisions about the proposal.

It was noted the Faculty Development meeting on Feb 5<sup>th</sup> (3:30 pm) would be reserved specifically for discussion of the Gen Ed Proposal.

The committee agreed to send any additional questions after the meeting out to the entire group so the issues could be addressed as quickly as possible before distribution.

Action: The motion was made and carried to distribute the survey on Tuesday, January 19<sup>th</sup>.

## 3. Faculty Comments on Wiki (<u>http://wugened.pbworks.com</u>)

In addition to the comments from the Gen Ed open forums and survey, the committee how to obtain additional information from faculty about the Gen Ed proposal.

The College of Arts and Sciences has assigned learning objectives to the Gen Ed courses. The committee requested this information from the other schools as well.

The committee was also encouraged to attend the Faculty Development meeting on February 5<sup>th</sup>, after which the committee will convene for further discussion about the Gen Ed proposal.

## B. Discussion of Grade Appeal Process

Dr. Nancy Tate was present to provide information about this grade appeal process and to answer questions regarding the concerns pertaining to the existing grade appeal procedure. She explained the concerns from the Grade Appeal Committee had been brought before the Academic Affairs committee last year and were now being revisited.

The committee discussed several of the issues presented and determined a subcommittee should be formed to prepare a rough draft of the procedures for the appeal process. Kandy Ockree and Linda Croucher volunteered to work with Nancy Tate to develop a draft of the appeal process for the next meeting of the committee.

## Item III: School of Business Curriculum Changes

The committee reviewed and discussed the documentation for the proposed course change.

Action: The committee moved to recommend the approval of the change to the alternative required course in the Finance major: specifically the establishment of BU 484 Applied Portfolio Management as an Alternative to BU 374 Principles of Risk and Insurance to meet the requirement of the major area of concentration in Finance in the BBA degree.

The motion carried. The recommendation will move forwarded to the Faculty Senate.

The meeting was concluded.

The next meeting will be on February 5<sup>th</sup> following the Faculty Development meeting at approximately 3:30 pm.

## Academic Affairs Committee February 5, 2010 Meeting Notes

Committee members in attendance: Kathy Menzie (chair) Keith Mazacheck Paul Byrne Kandy Ockree Linda Croucher Lori Khan Cal Melick

Prior to the meeting, the Academic Affairs Committee participated in the Faculty Development Workshop, which focused on the Gen Ed Proposal.

Kathy Menzie explained to the committee the Gen Ed Proposal would be implemented in Fall 2010 only if faculty approves. This would allow one year for implementation after approval.

Kathy said the next step in the process is for the committee is to make a recommendation to the Faculty Senate, after which it would be forwarded to the General Faculty for vote.

The committee decided at the next meeting they would have a collective evaluation incorporating all parts of the proposal, rather than reviewing each section separately because the parts are closely related.

Prior to the next meeting, committee members were asked to collect information from their areas and to obtain as much feedback and information as possible from faculty.

The questions regarding IS170 persist regarding what the course includes (e.g., Washburn history). The committee determined they did not have enough information and prior to the next meeting would request additional information from Alan Bearman and Keith Rocci or, if necessary, obtain more information via a wiki.

Specific areas of concern were identified as:

- Course objectives
- Course content
- Freshman experience
- Course description
- Options for transfers
- Option for testing out
- Option for honors students
- Optional modules with the full 3-credit course

Another area of concern was the impact on Associate Degrees. Lori Khan and Linda Croucher would research this further on behalf of the committee, working on models for the Associate Degree requirements.

Meeting Adjourned. <u>Next meeting:</u> February 19, 2010 3:00 – 4:00 pm Baker Room

## MINUTES ASSESSMENT COMMITTEE Wednesday, January 13, 2010 Cottonwood Room 3:00 p.m.

Present: Donna LaLonde (chair), Nancy Tate, Cathy Hunt, Jay Memmott, Melodie Christal, and CJ Crawford (administrative support). Absent: Denise Ottinger, Joanne Altman, Mary Shoop, Lori Khan, Danny Wade, Kandy Ockree, Jane Carpenter, Heather Collins, Lucas Mullin and Don Vest.

Nancy moved and Melodie Christal seconded to approve the minutes from December 2. The motion carried.

The best time for the majority of the committee members to meet in spring is on Wednesdays at 3:30 p.m. The committee will meet once a month. CJ will work on selecting a Wednesday that doesn't interfere with the SAS Chairs' meeting dates and then notify the committee members via email.

Committee members should follow up with departments that have not completed and submitted a Student Learning Outcomes matrix and what assistance they need to move the process forward. Donna and Jay will meet with BIS/Rick Barker. If anyone needs to know which of their departments have not completed the SLO Matrix, contact CJ.

The Assessment shared folder is now available on the "S" drive. Departments have subfolders and access for individual department folders has been given to all committee members and the respective department chair, secretary, and liaison. These are to be used right now for departments to store assessment data and information that is not to be accessible to the public.

Donna showed the committee members the changes/additions that have been made to the Assessment wiki, including the annual assessment report that departments would complete. This has been reviewed and discussed with the Program Review Committee.

A proposed topic for the spring workshop is "focus" – how to manage data better and make it useful – talk about the types of data and how to manage it. A review of the annual department report form would also be included. The workshop will be targeted for April. CJ will check the University calendar and then select a Friday and notify the committee via email.

Donna suggested that we should roll out Matrix 2, which covers how often each outcome is assessed. It was recommended to send it to the liaisons that have completed the SLO Matrix and ask them to complete and return prior to the workshop so data collection methods can be combined. Donna will send the matrix out next week to the committee members at this meeting for their comments. Then it will be sent out to all committee members.

The meeting adjourned.

# Library Faculty Committee Meeting February 3, 2010 3:30 p.m. Room 105, Mabee Library

## *TO*:

	Dr. Andrew Herbig	Mrs. Marilyn Masterson	Dr. Tom Schmiedeler
Dr. David Bainum Dr. Alan Bearman Dr. Cherryl Childers	Dr. Rob Hull	Dr. Jay Memmott	Mrs. Heather Smith-Collins
Dr. Cheryl Childers Dr. Frank Chorba	Dr. Reinhild Janzen	Ms.Caley Onek + Dr. Karen Ray Dr. Karen Diaz Reategui	Dr. Lee Snook
Dr. Barry Crawford Ms. Linda Croucher Mrs. Judy Druse	Mr. Terry Knowles	Dr. Karen Diaz Kealegai Dr. Michael Rettig	Dr. Sharon Sullivan

The Library Committee convened in the Mabee Library, Room 105 at 3:30 p.m. The following members were present: Dr. Bearman, Dr. Childers, Ms. Smith-Collins, Ms. Croucher, Ms. Druse, Dr. Herbig, Dr. Janzen, Dr. Ray, Dr. Reynard, Dr. Sullivan, Dr. Thomas, Dr. Wagner, and Ms. Weber. Dr. Chorba, Dr. Hull, Dr. Leung, Dr. Diaz Reategui, Dr. Masterson, and Dr. Wilkinson sent word they would be unable to attend.

Dr. Bearman will e-mail an updated worksheet from 2006 that compares library expenditures for Washburn to other peer institutions.

Dr. Sullivan reported that Dr. Bowen, VPAA, announced the University's plans to search for a permanent Dean of Libraries. Anyone interested in serving on the search committee should contact her as soon as possible.

February 12<sup>th</sup> is the deadline for book and material requests. Please send in order requests as soon as possible so that the library can begin preparing for FY 2011. If there is something that your department needs this fiscal year, please let your liaison know. An e-mail reminder will be sent to each library representative showing how much remains in their budget.

Dr. Bearman was elected chair of the Council of Deans and Director's of Libraries (CODDL) group this past summer. Since then, he has been going around Kansas meeting and discussing the new Consortia proposal to the Kansas Board of Regents (KBOR), Council of Chief Academic Officers (COCAO) and Regents Library Database Consortium (RLDC). The Consortia has been working hard to get this new proposal in place. With this new model the library will, in time, have access to more materials and have more purchasing power. Dr. Bearman will distribute a draft of the new proposal.

The library welcomes two new staff people. Sean Bird, Instruction Librarian, joined the staff January 4, 2010. He has a B.A. in English from Washburn University and is an Adjunct Professor in English here at Washburn, an M.A. English, University of Oklahoma, M.L.S. in Library Science, Emporia State University. Michelle Canipe, Distance Education Librarian, joined the staff January 11, 2010. She holds both an M.F.A. in Creative Writing and an M.A. in English from McNeese State University and has a B.A. in English and Journalism from Louisiana Tech University. A few library liaison duties have been switched around to match the librarian's field of study with departments.

The KOCH room has been remodeled to house the Academic Success Center (Writing Lab). There has been a 20% increase in usage since they moved in. The KOCH Art and Tom Averill Collections will be housed on the lower level and displayed behind glass.

Library statistics show that there were twelve million hits on the web site last year. The library has 77 fully functional computers compared to six, two years ago.

The new Welcome Center is up and running and the open space where circulation was will now be used to display treasures from the Archives. This project is being done to connect students and patrons to WU traditions and history. The McVicar desk and reading table are now on display.

Caddy Stacks Miniature Golf Course will be set up April 14<sup>th</sup>, for students and April 17<sup>th</sup> for the general public. There will be tournaments on both days for grand prizes.

Meeting adjourned at 3:47 p.m. Respectfully submitted Ginger D. Webber, Administrative Secretary



# **Interdisciplinary Studies Committee Meeting**

# February 16, 2010

Nancy Tate called the meeting to order. Jeff Mott, Director – Leadership Studies, attended the meeting to answer questions regarding the proposed minor in Leadership Studies. After a productive discussion, it was moved and seconded to approve the minor in Leadership Studies. The motion passed unanimously.

Two additional courses in Leadership were brought to the Interdisciplinary Studies Committee for approval: LE398 – Special Projects (1-3 hrs) and LE399 – Special Topics (3 hrs). It was moved and seconded to approve these two courses as amended by the committee. The motion passed unanimously.

## Faculty Development Meeting Minutes February 5, 2010

Present: Kevin Charlwood, Andrew Herbig, Norma Juma, Annie Collins, Bassima Schbley, Roy Wohl, Emily Rishel, Phyllis Berry, Nancy Tate, Pat Munzer.

\*\*We will no longer be giving away Bod Bucks as door prizes.

- March 5, 2010 Still working on title
  - Norma and Annie will handle
  - Group tables into stages of career
  - Encourage Deans to attend
  - Introduce:
    - Teaching, Scholarly, Service
    - Quality vs Quantity
- April 2, 2010 Diversity Workshop
  - Kim Morse will handle
- May 7, 2010 Possible workshop?
  - Waiting to see if workshop is necessary
  - May Social?

## MINUTES HONORS ADVISORY BOARD

Thursday, January 28, 2010 Crane Room – 2:00 p.m.

**Present**: Michael McGuire (Chair), Jennifer Ball, Dean Corwin, Rachel Goossen, Dannah Hartley, Keenan Hogan, Vickie Kelly, Erica Koepsel, Denise Ottinger, Bonnie Peterson, Carol Prim, and CJ Crawford (Administrative support)

Michael introduced Vickie Kelly as the new Faculty Senate representative on the board.

The committee minutes from December 2, 2009 were approved.

### **OLD BUSINESS**

### **New Member Breakfast**

The spring New Member Breakfast has been <u>rescheduled</u> for Tuesday, February 16, 2010 in the Ruth Garvey Fink Hall in BTC from 8:00 a.m. to 9:00 a.m. Ten of the 11 new members have responded that they will attend. CJ will send a reminder to committee members who haven't replied with an RSVP. It was agreed to have assigned seating so that board members and new students sat together. For the format, breakfast would be first (buffet style), then remarks by Dr. Bowen and Dr. McGuire, and then introduction of the new students.

### **Spring Banquet**

The Program subcommittee needs to get together to discuss plans for the banquet. There are two funding sources for scholarships totaling \$1600+; we can award two or three. Should scholarship recipients be announced at the banquet or should the application process be promoted? After discussion, it was agreed that scholarships should be awarded at the banquet. The Scholarship subcommittee will need to determine the number of scholarships to be awarded.

#### **Honor Stoles**

CJ needs design information <u>no later than March 1</u> to send to vendor to ensure stoles are received by May Commencement.

## **Committee Reports**

#### **Communication** – None.

**Scholarship** – Michael sent out a draft for the University Honors Program Scholarship Application. He asked the committee for feedback and then he will send out an updated version on February 5.

**Curriculum** – A request for fall course proposals was sent to all faculty. Michael sent an email to the committee requesting input on what criteria courses should meet to be considered Honors courses along with a proposal that was received. Proposals are due by February 11 and Michael will forward all proposals to the Curriculum subcommittee for review and recommendation.

Michael is still reviewing what other programs do for their curriculum. For the next meeting, he would like to discuss the idea of crafting courses, or Honors Contracts, to count for Honors credit.

**Mission Statement** – Michael has developed one but plans to work on it more this semester. He will be in touch with individuals who agreed to assist.

## **NEW BUSINESS**

#### **Goals for Spring Semester**

There are many goals but a few are:

• Create a freshman Honors course with an interdisciplinary theme for fall – Michael is working on "Conflict in the Middle East;"

- Get the Student Council established; and
- Work on getting student input on tapping faculty to teach Honors courses.

## Other

CJ will send out a doodle for committee members to indicate their availability for a meeting the week of February 15.

The meeting adjourned at 3:00 p.m.

**Elliott Haugen**, Kaludis Consulting, Senior Vice President will serve as the interim CIO and director for ISS at Washburn.

Mr. Haugen has more than 30 years of higher education and information technology experience including management, planning, project implementation, service/process enhancement, and infrastructure improvement. He heads the firm's information management and technology practice. His consulting projects have included planning and assessment, organizational development, system improvement planning, implementation management, information security, and process redesign.

Prior to joining Kaludis Consulting in 1998, Mr. Haugen was responsible for academic computing at North Dakota State University which provided instructional technology support to other state institutions, including two-year colleges. He later served as CIO at Saint Louis University where he received the student government's highest award for outstanding contributions to the quality of student life; the University was selected by *Computerworld* as one of the best places to work for information systems professionals in higher education, and was recognized by *Yahoo Internet Life* as number 41 of top 100 "Wired Campuses". Mr. Haugen has served on the boards of CAUSE and EDUCAUSE and hosted the national CUMREC conference.



Colleagues Elliott Haugen and Gwenn Weaver

# Elliott J. Haugen

Mr. Haugen has extensive higher education and information technology experience including management, planning, project implementation, service/process enhancement, and infrastructure improvement. Prior to joining Kaludis Consulting in 1998, he served as Associate Vice President for Information Technology Services at Saint Louis University and as Associate Director for Academic Computing at North Dakota State University. Professional Experience:

<u>Senior Vice President</u>, Kaludis Consulting, an executive management services consulting firm supporting higher education. He heads the firm's information management and technology practice. He has a broad array of higher education and information technology experience including management, planning, service enhancement, and infrastructure improvement. His projects include IT organizational and systems assessments, IT planning, security assurance, system implementation planning, software project management, and process redesign. Mr. Haugen has extensive information systems experience with a wide variety of vendors and products.

He has led or participated in over fifty consulting engagements, including:

Alamo Community Colleges	Loyola College in Maryland	
Baylor College of Medicine	Macalester College	
Bloomfield College	Marymount University	
Cecil College	Montgomery College	
Chadron State College	Moravian College and Seminary	
College of Wooster	Mount Royal College	
DePauw University	New York Medical College	
Eckerd College	North Dakota State University	
Elon University	North Dakota University System	
Embry-Riddle Aeronautical University	Open University of Hong Kong	
Georgetown University	Pomona College	
Harford Community College	Princeton Theological Seminary	
Humber College	Saint Leo University	

Ithaca College	TCU (Texas Christian University)
Ivy Tech Community College	University of New Hampshire
Lake Forest Graduate School of Mgmt	University of North Carolina - Charlotte
Le Moyne College	University System of New Hampshire

- <u>Associate Vice President</u> for Information Technology Services, Saint Louis University (SLU). Responsible for academic technology, administrative information systems, telecommunications (voice, data), print and mail services. As CIO, led projects to modernize SLU's telecommunications infrastructure, expanded LAN access, created ResNet, introduced on-line student access to records via the Web, and participated in multi-institutional library automation upgrade project.
- Executive Director, Computing and Information Services, Saint Louis University. Created academic computing services and microcomputer support units. Promoted academic and administrative microcomputer strategies and developed SLU's first microcomputing seminars. Introduced faculty development computing institutes. Helped to plan and implement purchased administrative information systems. Initiated Internet and Web access. Added UNIX support for computer science curriculum.
- <u>Associate Director for Academic Computing Services</u>, North Dakota State University (NDSU). Responsible for planning and delivery of instructional and research computing services for NDSU and the ND Higher Education Computer Network academic timesharing system.
- <u>Manager, Academic Computing Services</u>, North Dakota State University. Directed staff of analysts/programmers plus part-time programmers whose duties include technical consulting, system design, programming, teaching seminars/workshops and developing publications. Lectured on management, computers, telecommunications, and graphics. Developed continuing education courses.
- <u>Programmer/Instructor</u>, North Dakota State University. Designed and wrote software applications and taught computer programming classes.

## Education:

- M.B.A., Minnesota State University Moorhead
- B.S., North Dakota State University, Fargo, ND