

AGENDA

MEETING OF THE  
UTAH STATE BOARD OF REGENTS

June 3-4, 2004

**Utah State Board of Regents  
Office of the Commissioner  
of Higher Education  
Board of Regents Building, The Gateway  
60 South 400 West  
Salt Lake City, Utah 84101-1284**

STATE BOARD OF REGENTS MEETING  
AGENDA

**DRESS FOR ALL MEETINGS WILL BE BUSINESS CASUAL**

Thursday, June 3 – Snow College, Ephraim, Utah  
(All meetings will be held in the Eccles Center for the Performing Arts)

12:00 noon - BOARD OF REGENTS' EXECUTIVE SESSION LUNCHEON  
1:30 p.m. Room T-120

12:30 p.m. - Lunch – Others  
1:30 p.m. Barrett Lobby

1:30 p.m. - COMMITTEE OF THE WHOLE  
2:00 p.m. Jorgensen Concert Hall

2:00 p.m. - MEETINGS OF BOARD COMMITTEES  
4:30 p.m.

Academic, Applied Technology and Student Success Committee  
Larsen Recital Hall

ACTION:

1. University of Utah – Masters and Doctoral Program in Computing Tab A
2. University of Utah – Doctor of Audiology Degree (Au.D.) Tab B
3. Utah State University – Ph.D. Degree in Theory and Practice of Professional Communication Tab C
4. Southern Utah University – Organizational Restructuring Tab D
5. Utah Valley State College – Four-year Degree Program – Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts – through the Art and Visual Communications Department Tab E
6. Salt Lake Community College/Utah College of Applied Technology – Strategic Alliance Tab F

CONSENT:

7. Consent Calendar Tab G
  - A. Snow College – Culinary Arts – Fast Track
  - B. Utah Valley State College – Environmental Management Emphasis
  - C. Utah College of Applied Technology – Expansion of the Cosmetology Training offered on the Davis Applied Technology Campus (DATC)

INFORMATION:

8. Information Calendar Tab H
  - A. University of Utah
    - i. Undergraduate Minor in Meteorology
    - ii. Name Change: Gerontology Center to the Center on Aging
  - B. Utah Valley State College – Stand-alone Minor in American Studies

REPORTS:

9. Utah Valley State College – Two-year follow-up on Bachelor Degrees in Chemistry, Tab I

Mathematics and Physics  
10. Response to HB 320, Transferability of Credit Tab J

Finance, Facilities and Accountability Committee  
Jorgensen Concert Hall

ACTION:

1. USHE – Final Capital Improvement Funding Allocations Tab K
2. USHE – Proposed Amendments to Policy R511, *Tuition Disclosures and Consultation* Tab L
3. University of Utah – Approving Resolution, University of Utah (Medical Research Facility Renovation Project) Research Facilities Revenue Bonds, Series 2004A Tab M
4. Snow College – Campus Master Plan Tab N
5. College of Eastern Utah – Campus Master Plan Tab O
6. UVSC/DFCM – Approval of Energy Performance Contract and Capital Equipment Lease with Chevron Texaco (ESCO) Tab P
7. Utah Valley State College – Approving Resolution, Student Center Refunding Revenue Bonds, Series 2004 Tab Q
8. Utah Valley State College – Municipal Building Authority Conduit Bonds, Purchase Contract, and Sublease with Utah County, Series 2004 Tab R
9. Utah College of Applied Technology – Approval of 2004-2005 Tuition Rate Tab S

CONSENT:

10. Consent Calendar Tab T
  - A. USHE – 2003-2004 Final Work Program Revisions
  - B. USHE – 2004-2005 Initial Work Program
  - C. USHE – 2004-2005 Presidents' Salaries
  - D. University of Utah – Sale of Donated Property
  - E. UofU and USU – Capital Facilities Delegation Reports
  - F. OCHE – Third Quarter Budget/Investment Report

INFORMATION/DISCUSSION:

11. USHE – Progress Report on Administrative Collaboration and Consolidation: Purchasing Tab U
12. USHE – Draft Report, Recommended Refinements to Q&P Process Tab V
13. USHE – Five-Year Budget Forecast Scenarios Tab W
14. Salt Lake Community College – Information Update on Metro Learning Center Tab X

4:30 p.m. CAMPUS TOUR (Optional)  
(Gather in Barrett Lobby)

5:30 p.m. DINNER MEETING – REGENTS AND SNOW BOARD OF TRUSTEES  
Founders Hall, Noyes Building

Dinner Meeting for Presidents  
Lorenzo and Erastus Snow Room, Noyes Building

Friday, June 4 – College of Eastern Utah, Price, Utah  
(All meetings will be held in the Jennifer Leavitt Student Center)

9:30 a.m. -  
11:30 a.m.

COMMITTEE OF THE WHOLE  
Multipurpose Room

1. Report of the Chair
2. Report of the Commissioner  
    Report of May 20 Higher Education Appropriations Subcommittee Meeting  
    Strategic planning follow-up
3. General Consent Calendar
4. Reports of Board Committees  
    Academic Committee (Tabs A - J)  
    Finance Committee (Tabs K - X)

Tab Y

11:30 a.m. -  
1:00 p.m.

LUNCHEON MEETING – REGENTS AND CEU BOARD OF TRUSTEES  
Alumni Room

Luncheon – Others  
Multipurpose Room

1:00 p.m.

CAMPUS TOUR (Optional)

MEETING OF SBR AND CEU AUDIT COMMITTEES  
Board Room

**MEMORANDUM**

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: **University of Utah – Request to Establish New Master’s and Doctoral Degrees in Computing – Action Item**

**Issue**

Officials at the University of Utah (U of U) request approval to offer M.S. and Ph.D. degrees in Computing, starting Fall 2004. In January 2004, the University of Utah requested an exception to the moratorium based on high “institutional priority” and “sustained and significant student expectation.” The Program Review Committee approved the request on February 23, 2004. This program has been approved by the University of Utah Board of Trustees on April 19, 2004.

**Background**

The creation of the School of Computing (SoC) at the University of Utah reflects a large and sustained growth in the emerging multidisciplinary area of Computing. Computing, as distinguished from traditional Computer Science, is the study and solution of a new class of multidisciplinary problems whose solution depends on the combination of state-of-the-art computer science coupled with domain-specific expertise in such areas as medicine, engineering, biology, and geophysics.

Substantial growth in Computing at U of U has arisen through the world-leading efforts of several multidisciplinary research and education initiatives. These initiatives include the Scientific Computing and Imaging (SCI) Institute, the Department of Energy (DOE) CSAFE project on modeling accidental fires and explosions, the NSF Grid-Computing Environment for Research and Education in Computational Science and Engineering, and the newly announced University priority to create the Brain Institute.

In 2000, the University of Utah made the expansion of the Department of Computer Science into the School of Computing an institutional priority. Considerable resources from the College of Engineering, the Senior Vice President for Academic Affairs, and the Utah State Legislature supported this expansion, and it resulted in the growth of the faculty of the School of Computing from 20 members in 2000 to 30 members in 2003. The intended results are well on their way to realization: the School of Computing is now advancing once again into the forefront of the emerging discipline of Computing and is now poised to reassume the preeminent place it held in Computer Science in the 1960s.

*Policy Issues*

The institutional Board of Trustees has approved this proposal. No USHE institution expressed opposition to this proposal.

*Options Considered*

After Regents have reviewed the proposal from the University of Utah, they may raise issues, request additional information, deny the request, or approve the request.

*Commissioner's Recommendation*

The Commissioner recommends that the Regents approve the Request from the University of Utah to offer M.S. and Ph.D. degrees in Computing, effective Fall Semester, 2004.

Richard E. Kendell, Commissioner

REK/GW  
Attachment

**ACADEMIC, APPLIED TECHNOLOGY AND STUDENT SUCCESS COMMITTEE**

**ACTION ITEM**

*Request to Offer M.S. and Ph.D. Degrees in Computing, Starting Fall 2004.*

University of Utah

Prepared for  
Richard E. Kendell  
By  
Gary Wixom

May 26, 2004

## SECTION I: THE REQUEST

Officials at the University of Utah (U of U) request approval to offer M.S. and Ph.D. degrees in Computing, starting Fall 2004. This program has been approved by the University of Utah Board of Trustees on April 19, 2004.

## SECTION II: PROGRAM DESCRIPTION

### *Complete Program Description*

Multidisciplinary Computing is one of the fastest growing research areas in the US and Europe. Computing is the study and solution of a new class of multidisciplinary problems whose solution depends on the combination of state-of-the-art computer science coupled with domain-specific expertise. Examples of such problems are:

- How can we efficiently store, model, visualize and understand the mass of data generated by the human genome program?
- How might we digitize patient records such that they help medical practitioners rather than drown them in a mass of irrelevant data and baroque procedures?
- How can we model disease transmission in populations that are structured in complicated ways, such as the vectors of the West Nile virus?
- How can we use the extraordinary amount of information recorded by point-of-sale checkout machines to coordinate retail industries with the shoppers that drive them?
- How might software agents be built such that we trust them to do our shopping online?
- How might we model, simulate and visualize the functions of the heart and brain to better diagnose and treat cardiac and neural abnormalities with a view to improving the quality of life?
- How might we compute solutions to realistic physical models of dangerous situations such as explosions with a view to improving safety?

### *Purpose of Degree*

The success of the research mission reflects society's need for work in multidisciplinary areas, a need that cannot be fulfilled unless the training needs of the next generation of scientists, to work closely with the kinds of industries we most want brought to Utah, are met. Examples include those specializing in biomedical technologies, as well as those involved in software development, industrial design, and other high-technology endeavors. To provide this training, a degree program is needed which will answer growing demands from industry on the one hand and students on the other. Students participating in high-tech research areas with U of U faculty are at present limited to academic program choices that so far reflect neither the changing multidisciplinary demands of these employers in industry nor the actual breadth and multidisciplinary nature of their training and achievements.

A growing number of students have been forced to respond to the interests of industry and funding agencies by specializing very broadly in multidisciplinary Computing or by finding increasingly unsatisfactory ways to tailor their programs to existing degrees. For example, the number of graduate students in the SCI Institute has grown from four to twenty-five over the last decade. While many of these students participate in the high-quality Computer Science graduate program, their multidisciplinary needs and aspirations are somewhat different from those satisfied by conventional Computer Science. Computer



Science provides more emphasis on learning about computer hardware, operating systems, and theory, and less on how to apply these tools to real-world interdisciplinary problems. Conversely, these students also require serious study in Computer Science, and their need for this content makes other Engineering graduate programs equally inappropriate. Even the master's degree in Computational Engineering and Science (CES), which has grown by a factor of four over three years and which has helped somewhat to provide for interdisciplinary education for engineers and scientists, does not fulfill the specific needs of graduate students in computing. For this reason, student inquiries in the proposed new program have been widespread and sustained, and existing students working in the School of Computing, the SCI Institute, and the CES program are constantly making inquiries as to whether they might complete their studies under the new proposed Computing degree requirements.

The proposed Computing degree structure will operate at both the master's and doctoral levels and will be interdisciplinary through its track structure. Each track will have a minimum of six faculty members who will form a Track Faculty Committee (TFC). The TFC, under the leadership of the Director of Graduate Studies in the School of Computing, will be responsible for the creation and subsequent administration of a track. This track structure will make it possible for the Computing degree to be applicable to emerging multidisciplinary problems with a maximum of efficiency in a sound academic manner. We note that academic tracks have been shown to be a successful mechanism for offering a variety of educational opportunities within a larger degree option. For example, the Department of Bioengineering has tracks in Bioinstrumentation, Biomaterials, Biomechanics, Computational Bioengineering, and Neural Interfaces. Similarly, the Department of Biology offers options in Biology, Molecular Biology, Biological Chemistry, and Neuroscience. In a similar vein, the School of Business operates its graduate program under a structure of specializations, which students select at the time of admission.

Examples of possible academic tracks formed under the umbrella of the Computing degree include:

1. Scientific Computing (currently under development by a TFC)
2. Computer Graphics and Animation (currently under development by a TFC)
3. Software Engineering
4. Applied Robotics

A key role of the TFC will be to ensure that the track has academic standards consistent with and as academically rigorous as those of the participating departments, schools or institutes at both the master's and doctoral levels.

An unusual feature of this program is that, because of the multidisciplinary nature of the problems under examination, no single student will arrive from a traditional undergraduate degree having mastered all of the background necessary to study a given problem in depth. The aim is to create a degree that accepts students from a variety of backgrounds. In particular, the degree will create a balance between traditional computer science and problem-specific content in the training tailored to the common needs of the students and the multidisciplinary application academic discipline.

### *Admission Requirements*

Admission requirements for the M.S. and Ph.D. in Computing will be similar to the admission requirements for the M.S. and Ph.D. in Computer Science and the admissions process will occur at the same time. Students will select the program (Computing or Computer Science) that they wish to apply for on the

admissions form. The School of Computing Graduate Admissions Committee will have representatives from both Computer Science and Computing who will assess the quality of the applicants.

All graduate admissions information will be available on-line on the School of Computing's website ([www.cs.utah.edu](http://www.cs.utah.edu)).

***Student Advisement***

The Director of Graduate Studies (DGS), a two-year service role assigned to a senior faculty member in the School of Computing, will initially advise each student. The Graduate Studies Committee supports the DGS. Within two semesters, students are required to select an advisor to guide them in course selection and the formation of a research advisory committee (three members for the MS degree and five for the Ph.D.). Faculty advisors are expected to meet frequently with student advisees, and required to make a formal report to the DGS on an annual basis in the fall as to the status of the student in meeting the degree milestones. A staff advisor also meets with students annually in the spring to ensure that the students understand the program requirements and to assist with the necessary paperwork for completion of the milestones.

***Justification for Number of Credits***

The number of credit hours required is within the limits set by Regent's policy.

***External Review and Accreditation***

No external consultants were involved in the development of this proposal. Currently, there are not any national formal professional accreditation mechanisms in place for Computing. The Computing degree will be reviewed and accredited in the same manner as the existing Computer Science degree: through the University of Utah Graduate School review and accreditation process.

***Projected Enrollment***

The School of Computing will recruit graduate students for the Computing degree in concert with its efforts to recruit into the Computer Science degree (through the school website, advertising as needed, etc.). In addition, TFCs will recruit students through contacts with their colleagues, at national scientific meetings, and through other media relevant to their disciplines.

The following projections are based on three data sources: the growth of the carrying capacity of research funding in support of graduate students, the expected increase in advising capacity of the School of Computing faculty as new faculty members ramp up their research programs, and the initial transfer of students from the Computer Science degree to the new program.

	MS	Ph.D.	Faculty Participants	Mean student/faculty ratio
Year 1	6	6	12	1:1
Year 2	10	10	15	1.33:1
Year 3	15	15	15	2:1
Year 4	15	20	18	2:1

Year 5	15	25	20	2:1
--------	----	----	----	-----

*Table 1: Computing degree enrollment projections*

The current enrollment in the Computer Science degree programs is 34 M.S. and 64 Ph.D. students; of these, we expect approximately 10 students to transfer into the new program.

Based on steady-state projections in the late 1990s, graduate students were admitted at about a one-to-one ratio to the existing faculty into the Computer Science program. Having increased the faculty by more than 10 since that time, and increasing the expected supervisory load of each faculty member, we believe that the enrollment of students in years two through five can be projected as above, reaching a steady state by the fifth year.

In the first year of the program, a small fraction of students already enrolled in the M.S. or Ph.D. Computer Science programs may wish to transfer to tracks that better fit their scholastic needs.

### *Faculty*

No additional faculty will be required to support this program (see Section V: Finance). The School of Computing faculty are well prepared to launch these degree programs upon approval. The participating faculty, working together in interdisciplinary research, have already established informal links that will become the foundations for Track Faculty Committees (TFCs). Additional faculty will be mentored into the system as part of the normal faculty mentoring processes for junior faculty in the School of Computing. A list of the current faculty appears in Appendix B.

### *Staff*

No additional staff will be required to support this program (see Section V: Finance).

### *Library*

The J. Willard Marriott Library, a member of the Association of Research Libraries, ranks 41 of the 113 largest university research libraries in North America. It is a member of the Center for Research Libraries. Its collection includes 2.5 million volumes and 23,000 periodical subscriptions, of which 13,500 are e-journals. Other electronic resources include 20,000 e-books and 350 electronic databases. Interlibrary loan requests totaled 27,000 in 2002; most requests can now be supplied in electronic format.

In addition to offering information resources, the libraries encourage students beginning advanced-degree programs to take advantage of in-depth research consultation. The libraries offer regularly scheduled library instruction and technology training to help students become effective library users.

Current journal and online resources in the combined library holdings at the Marriott Library are sufficient for the Computing program. New journals will be added as necessary using the current budget that is earmarked for the School of Computing. Examples of the journals available from the above libraries to support the program are:

- *ACM Transactions on Graphics*
- *ACM Transactions on Mathematical Software*

- *ACM Transactions on Modeling and Computer Simulation*
- *ACM Transactions on Software Engineering and Methodology*
- *Computing in Science & Engineering*
- *IEEE Computer Graphics and Applications*
- *IEEE Distributed Systems Online*
- *IEEE Signal Processing Letters*
- *IEEE Signal Processing Magazine*
- *IEEE Transactions on Biomedical Engineering*
- *IEEE Transactions on Medical Imaging*
- *IEEE Transactions on Parallel and Distributed Systems*
- *IEEE Transactions on Visualization and Computer Graphics*
- *IEEE/ACM Transactions on Computational Biology and Bioinformatics*
- *International Journal of Applied Mathematics and Computer Science*
- *International Journal of Computational Engineering Science (IJCES)*
- *SIAM Journal on Applied Mathematics*
- *SIAM Journal on Computing*
- *SIAM Journal on Control and Optimization*
- *SIAM Journal on Discrete Mathematics*
- *SIAM Journal on Mathematical Analysis*
- *SIAM Journal on Matrix Analysis and Applications*
- *SIAM Journal on Numerical Analysis*
- *SIAM Journal on Optimization*
- *SIAM Journal on Scientific Computing*
- *Journal of Computing and Information Science in Engineering*
- *Journal of Computational and Graphical Statistics*
- *Journal of Computational Chemistry*
- *Journal of Computational Mathematics*

### ***Learning Resources***

The current University of Utah graduate program in Computer Science is ranked in the top 29 programs nationally by U.S. News and World Report. There are over 200 graduate degree programs in computer science in the United States. The following resources currently support the Computer Science program and will support the additional demand of the proposed Computing programs.

The School of Computing currently occupies approximately 40,000 square feet in the Merrill Engineering Building and the Engineering and Mining Classroom Building. This space adequately houses 30 tenure-track and 7 auxiliary faculty.

A core computing facility, operated in-house, provides the School of Computing with state of the art computing facilities for both instructional and research use. Both facilities share a common network infrastructure that is based on gigabit fiber core that provides desktop connections at speeds ranging from Fast Ethernet (100 Mbps) up to Gigabit Ethernet where necessary. The School's network attaches via a gigabit fiber connection directly to the campus gigabit backbone, which in turn routes traffic to Abilene (Internet 2), vBNS, and the Internet.

In addition to the shared network infrastructure, the core School of Computing facility supplies many centralized services, including shared disk space (4 Terabytes), time, web/cgi, ftp, firewall, backups, printing resources, and email. Most services run on Solaris-based hosts, ranging from Netra T1's to an Enterprise 5000. Several large-scale Solaris and Linux machines are also available for general use.

The instructional computing facility includes over 180 Unix, Linux, and Windows-based machines. Most of these machines are organized into three laboratories; the remainder are situated in graduate student offices. The NT Lab in EMCB 210 includes approximately 100 1.4 gigahertz Athlon-PCs. The electronic classroom in MEB 3225 contains 30 Pentium-based PCs arranged into a classroom configuration. The CES/Grad Lab in MEB 3161 contains 13 PCs based on Athlon 2100+ processors and GeForce 4 video cards.

The research computing facility is a heterogeneous mix of over 300 machines, including PC's, SGI, and Sun-based hardware. The research computing facility includes major laboratories devoted to computer-aided design and graphics, computer systems, asynchronous digital systems and VLSI, robotics and vision, scientific computing and imaging, and information retrieval and natural language processing. These research laboratories contain a wide array of specialized equipment, including

- an SGI Origin 3800 (32 processors);
- an SGI Origin 2000 Reality Monster (96 processors, 8 IR heads);
- a 200-node network testbed and emulation facility;
- an SGI Power Onyx (14 processors, 2 RE2 heads);
- a multi-source nonlinear video editing environment;
- a real-time signal processing lab;
- an image analysis lab;
- equipment for various types of custom hardware design;
- a Sarcos Dextrous Arm, Utah/MIT Dextrous Hand, and PUMA 560 robots; and
- a Sarcos Treadport locomotion interface, several SensAble Phantom haptic interfaces, Fakespace Responsive Workbench, nVision Datavisor HiRes, and a variety of position trackers.

The College of Engineering operates a research-scale integrated circuit (IC) fabrication facility used extensively by the School of Computing. Equipment for testing and debugging both internally and externally fabricated circuits is housed in an integrated circuit testing facility that contains state-of-the-art HP, Tektronix and Micromanipulator automated IC testing equipment.

### *Institutional Readiness*

Chris R. Johnson directs the School of Computing and has an executive committee comprised of two Associate Directors. This team meets weekly to provide leadership to the various efforts underway at the school. Supporting the Executive Committee on graduate education are two faculty committees: the Graduate Admissions Committee and the Graduate Studies Committee. The Graduate Admissions Committee seeks to recruit the best possible entering class of graduate students. The Graduate Studies Committee monitors the progress of individual students once they begin their studies at the School of Computing. A senior faculty member chairs each committee, and the membership has broad representation among the faculty. To ensure continuity in these key leadership roles, the committee chairs are two-year

assignments; further, the admissions director is appointed in odd years and the DGS in even years to ensure an overlap in institutional knowledge. The faculty committees are supported by a team of two full-time staff members reporting directly to the committee chairs (see previous section on student advisement for an example of how the staff and faculty efforts are coordinated). The administrative and oversight structure is in place to handle the growth in the graduate student population and administrative complexity of an additional academic degree program.

### **SECTION III: NEED**

#### ***Program Necessity***

The School of Computing was created to broaden its mission to a wider scope of computing, including:

- a greater range of undergraduate programs (e.g., a departmental Honors degree, which has since been established),
- multi-disciplinary programs: e.g., Computational Engineering and Science M.S. program (an existing program in which the SoC participates), Bioinformatics (under discussion), Software Engineering (under discussion), Computer Graphics and Visualization (proposed track within the Computing degree), and
- research institutes (e.g., the SCI Institute grew out of the SoC).

The current graduate degrees offered by the School of Computing include the M.E., M.S., M.Phil. and Ph.D. degrees—all in Computer Science. The School of Computing faculty studied the issue of including the interdisciplinary degrees described above as tracks in our current degrees and decided, after careful deliberation, that such an approach would not only damage the content of the Computer Science degree, but would not reflect the nature and substance of the new programs.

Four new faculty members who have been hired in scientific computing, visualization and graphics are already transferring graduate students from other institutions to work with them on multidisciplinary Computing problems and are recruiting students here. As a result, about fifteen new students both in the School of Computing and in the SCI Institute are working on multidisciplinary topics in addition to the students already here. The creation of an additional joint faculty position with Bioengineering will, when filled, add students to this group. The School of Computing is finding it increasingly difficult to accommodate students through unwieldy existing programs or specially tailored individual programs. We already have the faculty and the courses in place to provide the new degrees; we require only permission to institute our new degree structure. It is essential that we fulfill our promise to put these degrees in place to satisfy the demand we have anticipated and planned for and that we are now experiencing.

#### ***Labor Market Demand***

It is well known that an educated workforce will attract businesses to Utah; a workforce educated in technology will attract jobs that are well paid. Local industries recognize that multidisciplinary approaches to problems are the future of business growth in Utah. There is a need for graduates who have both an advanced level of computing and who can work in applications domains at a high level. This is particularly true in areas such as biomedical visualization and advanced biomedical computation. Similarly, the latest generations of computer games require high levels of computational and visualization skills to produce the

realistic and lifelike action now coming onto the marketplace. There are a number of Utah employers, many of which are spin-offs from the U of U, working at this overlap:

- Biotechnology companies such as Myriad and the Watson Labs.
- Companies using software engineering such as Novell, Altiris, LAN Desk, Legato and Attensity, emWare, Applied Signal Technology and Red Rock Software.
- Aerospace and military contractors, including L3 Communications, ATK Thiokol, and TRW, Inc.
- Specialist engineering companies, such as locally-owned Reaction Engineering International and Engineering Geometry Systems, and divisions of petrochemical corporations including BP and Sinclair Oil.
- Computer Gaming Companies such as Microsoft's Games Division, Saffire Software, and Sculptured Software.

These are only a few examples of many such companies with both large and small workforces who are making important contributions to the Utah economy.

At the national level, Computing M.S. and Ph.D. graduates will be highly sought by similar industrial concerns, the national research laboratories, and academia. Salaries for graduating Ph.D. students in such companies vary greatly depending on the individual and the area of work but are in the range of \$50,000 to \$100,000. The higher figures are less common but still used by employers such as DOE National Laboratories.

### *Student Demand*

Despite of the lack of degree programs that reflect their interests and the demands of the market, a growing number of students are responding to the interests of industry and funding agencies by specializing in multidisciplinary Computing and finding increasingly unsatisfactory ways to tailor their programs to our existing degrees. For example, about a dozen graduate students in the Computational Engineering and Science Program have expressed an immediate interest in a multidisciplinary Ph.D. program when polled at a recent meeting. This reflects the widespread and sustained student interest in the proposed new program. As was also noted above, students arriving with recently hired faculty have multidisciplinary research needs that will be best met by the new program. It is essential that we fulfill our promise to put these degrees in place to satisfy the demand for which we have anticipated and planned.

Our proposal is consistent with the creation of the School of Computing and the development of new degree programs and allows us to create new multidisciplinary programs in a sound academic way while responding quickly to present and emerging applications-driven opportunities. We must now begin to recruit the best students from appropriate bachelor's degree programs in order not to lose the momentum provided by our research funding and by faculty expansion in the School of Computing. Moreover, as noted above, students participating in these research areas with our faculty are at present limited to academic program choices that reflect neither the demands of employers in industry nor the actual breadth and multidisciplinary nature of their training and achievements. Our current students working on multidisciplinary problems are overburdened by trying to meet their own goals in addition to the traditional expectations within program structures that were not created to respond to their needs.

Last year, an external committee made up of nationally recognized leaders in Computer Science and an internal University committee reviewed the Graduate Program at the School of Computing. Using the

reports from the review committees along with materials submitted by the School of Computing, the Graduate Council at the U of U submitted their final review of the School's Graduate Program. In the Graduate Council's summary of School's Graduate Program under the Commendation section, they noted, "The proposal for the new M.S. and Ph.D. degrees in Computing builds on the applied and interdisciplinary strengths of the School and the University of Utah and provides an exciting opportunity for growth."

### *Similar Programs*

There are no comparable programs offered within the Utah System of Higher Education.

### *Collaboration with and Impact on Other USHE Institutions*

We anticipate that the greatest impact the proposed Computing degrees will have on other USHE institutions will be in offering a new option for which USHE institutions can prepare undergraduate students. Students in engineering and science disciplines at Utah sister institutions who wish to pursue multidisciplinary topics for their graduate studies will be prime candidates for this program.

### *Benefits*

By implementing this proposal, the University of Utah and USHE will capitalize on the University of Utah's initial investments in the School of Computing. Conversely, if we do not fulfill the demand for this program, other institutions will, and their students, businesses, and communities will reap the benefits. Though we were leaders in this area three years ago and are still ahead of other institutions, at this time our competitors, both national and international, are also reflecting this fundamental change in the research, teaching, and outreach aspects of our subject.

Currently, there are an increasing number of Colleges and Schools of Computing and one School of Informatics in the United States. There are numerous Schools of Computing throughout the world. Other institutions are creating new departments in some of these areas, e.g., scientific computing, robotics, etc. For example, Carnegie Mellon offers M.S. and Ph.D. degrees in its very broad School of Computer Science. The school houses the Center for Automated Learning and Discovery, the Department of Computer Science, the Entertainment Technology Center, the Institute for Software Research, the Human Computer Interaction Institute, the Language Technologies Institute, and the Robotics Institute. In a similar vein, Georgia Tech has a College of Computing with centers for Computer Systems, Graphics Visualization and Usability, and Information Security. The MIT Media Lab is world-renowned for its multidisciplinary work.

The specific areas of scientific computing and bioinformatics are experiencing major growth across the nation. In 1998, 31 graduate programs in computational science at U.S. universities were created. As of 2003, the number had grown to 47. For example, Florida State has launched a School of Computational Science with a large investment, as has UC Davis; other schools are devoting major resources to computing development (e.g., UCSD and Texas have created endowed chairs in the area). Bioinformatics departments are also being formed in such major institutions as the University of Maryland, UCSD, Stanford, UC Irvine, UC Santa Cruz, Yale, Georgia Tech, Indiana University, and RPI, among others. Rensselaer has invested heavily in its Master of Science and Doctor of Philosophy in Multidisciplinary Science. UC Davis has a Computer Science and Engineering Major Program.



In addition, since 1998, 16 new undergraduate degree programs in computational science have been created. We note that this only takes into account one aspect of the proposed Computing graduate degree; there are additional increases in other areas such as software engineering and computer graphics.

Utah has the existing potential to become a recognized powerhouse in Computing; this proposal will accelerate that development into a reality.

### *Consistency with Institutional Mission*

This Computing degree represents the University of Utah's highest priority doctoral request for the 2003-04 academic year. It is essential for the long-term health and growth of the School of Computing and the College of Engineering. The demand for the degree is high as are the potential rewards for the students who complete the degree.

The mission of the University of Utah is to educate the individual and to discover, refine, and disseminate knowledge. As a major teaching and research university, and as the flagship institution of the Utah state system of higher education, the University of Utah strives to create an academic environment in which the highest standards of scholarship and professional practice are observed and where responsibilities to students are conscientiously met. It recognizes the mutual relevance and interdependence of teaching and research as essential components of academic excellence.

The proposed degree also fits with the threefold mission of the College of Engineering. The faculty, staff, and students join to:

1. provide modern, relevant engineering education for undergraduates and graduates that is nationally recognized for its excellence;
2. conduct scholarly research involving both graduate and undergraduate students and make the results available to the industrial sector, government agencies, and the general public via presentations, publications, software, patents, technical advice, and graduates;
3. contribute directly to the economy of the State of Utah by providing a resource base for local industry and by assisting with the commercialization of new technologies to improve the quality of life in Utah and the nation.

As a multidisciplinary program originating in the School of Computing, the aim is to develop a graduate program that fits within the University and College Missions. In addition, it will be defined by its own mission statement: "To provide an internationally excellent graduate program in multidisciplinary computing that is broad in its applications, high in its level of academic achievement and capable of addressing the multidisciplinary challenges inherent in Science, Medicine and Engineering."

## **SECTION IV: PROGRAM AND STUDENT ASSESSMENT**

### *Program Assessment*

The metrics by which the Computing program will be assessed include creation of new tracks, level of faculty participation in tracks, student enrollment, and student graduation. Table 2 shows the goals that have been set for the first year and the fifth year of the Computing degree combined M.S. and Ph.D.

program. These goals will be incorporated into the School of Computing strategic planning process and reviewed annually as part of the ongoing commitment to program assessment within the School.

Goal	Year 1	Year 5
Tracks approved	2	2
Faculty participants	12	20
Students enrolled	12	40
Annual graduation rate	1	11

*Table 2: Assessment metrics*

### ***Expected Standards of Performance***

Graduates of the Computing MS and Ph.D. program will be held to the international standards of their respective degrees. At completion of a master's degree in computing, a student should be able to conduct independent research on a topic directed by an employer or senior academician. The holder of a Ph.D. is expected to possess the ability to lead an independent research program on the topic of his/her choice. These standards are assessed through the traditional examination process for all graduate-level programs, including the defense of an independent dissertation by the doctoral candidate.

### ***Student Assessment***

#### ***Formative Assessment***

Responsibility for formative assessment will rest with the student's advisor, the student's committee, and the DGS. Metrics will include grades in classes, due progress against degree milestones (program of study, oral exam, dissertation proposal, proposal, etc.), quality of ongoing research efforts, and participation in the intellectual life of the SoC.

#### ***Summative Assessment***

This will be measured in two ways. First, by the quality of the research performed while in graduate school (measured by how well the dissertation is received by the research community, publications produced, talks given, etc.). And second, by the success of the student in the years following graduation (measured by success in landing appropriate jobs, advancement in visibility and stature in the research community, post-graduation publication record, etc.)

### ***Continued Quality Improvement***

Issues identified by the formative assessment will become evident first. The Director of Graduate Studies and his/her committee will review the progress of each student each semester, based on the formative guidelines, and will flag problem areas for individual students. If the DGS discovers that certain kinds of problems are occurring widely, a system-wide correction will be devised.

Issues identified by the summative assessment will become evident only years down the road but are potentially much more serious. If problems with students' education are preventing them from advancing in the field, the entire School will have to become involved in revising the degree requirements and the delivery methods.

## SECTION V: FINANCE

### *Budget*

As we noted above, in 2000, the University of Utah responded to requests from students and industry by making the expansion of the Department of Computer Science into the School of Computing an institutional priority. Considerable resources from the College of Engineering, the Senior Vice President for Academic Affairs, and the Utah State Legislature supported this expansion; it resulted in the growth of the faculty of the School of Computing from 20 members in 2000 to 30 members in 2003. The intended results are well on their way to realization: the School of Computing is now advancing once again to the forefront of the emerging discipline of Computing, and is now poised to reassume the preeminent place it held in Computer Science in the 1960s.

Substantial resources are available to the School of Computing to facilitate growth in academic programs such as proposed here. In other words, the investment in this new degree program has already been made. The Computing degree program will be administered through the existing graduate student services mechanisms of the School of Computing, so no new staff will be required. The School of Computing has a shared commitment to admit a graduate class matched to the size of its resources so that essentially all entering students are awarded support for the first year of their programs. This helps make the program accessible to everyone admitted, especially that large percentage of Utah students who already have families to support and may find funding their ongoing educations challenging. Growth in the graduate programs of the School will result from the ramp-up of research funding of new faculty who have joined the School in the last three years. In FY02, the School generated funding of more than \$14M in research dollars beyond the state appropriation, largely from competitive grants funded by federal research agencies (National Science Foundation, National Institutes of Health, Department of Energy, and Defense Advanced Research Projects Agency). These funds primarily support graduate students and salaries for research staff. This figure does not yet reflect research income generated by recently hired faculty and so funding levels are expected to grow substantially in the next few years.

Table 3 presents the costs associated with supporting graduate students at the funding level that is the current norm in the Computer Science program. We expect students in the Computing degree to be treated comparably to students in the Computer Science degree programs.

	Year 1	Year 2	Year 3	Year 4	Year 5
Number of Students	12	20	30	35	40
Salaries & Wages	180,000	300,000	450,000	525,000	600,000
Benefits	16,200	27,000	40,500	47,250	54,000
Current Expense	0	0	0	0	0
Library	0	0	0	0	0
Equipment*	0	0	0	0	0
Travel*	0	0	0	0	0
<b>Total</b>	<b>196,200</b>	<b>327,000</b>	<b>490,500</b>	<b>472,250</b>	<b>654,000</b>

*Table 3: student support costs for the first 5 years of the graduate Computing degree programs.*

*\* Equipment and travel costs will vary by the individual needs of the student and are generally provided by external funding within the research mentor's program.*

### *Funding Sources*

No new state funds are requested in support of this program. Costs displayed in Table 3 will generally be born by external funding sought and obtained by the participating faculty, which includes a component to support graduate students. Some first-year students may be offered teaching assistantships if their skills match needs currently funded by state funds allocated to the School of Computing. To make an outstanding program, the faculty will seek external (federal and industrial) funding to support fellowships for recruiting top students.

### *Reallocation*

No internal reallocation in support of this program is requested.

### *Impact on Existing Budgets*

As noted above, substantial resources have been made available to the School of Computing to facilitate growth in academic programs such as proposed here. The Computing degree program will be administered through the existing graduate student services mechanisms of the School of Computing, and thus no new staff will be required. The School of Computing has a shared commitment to admit a graduate class matched to the size of its resources so that essentially all entering students are awarded support for the first year of their programs. Growth in the graduate programs of the School will result from the ramp-up of research funding of new faculty who have joined the School in the last three years. In FY02, the School generated expenditures of more than \$14M in research funding beyond the state appropriation, largely from competitive grants funded by federal research agencies (National Science Foundation, National Institutes of Health, Department of Energy, Defense Advanced Research Projects Agency). These funds primarily support graduate students and salaries for research staff. This figure does not yet reflect research income generated by recently hired faculty and so funding levels are expected to grow substantially in the next few years.

## APPENDIX A: CURRICULUM

We expect that, as new members join the School of Computing faculty, they will wish to offer additional courses at the graduate level. By organizing our programs into tracks, we will have the opportunity to focus and prioritize the need for new classes based on student demand and a rational, planned curriculum. We list below the existing courses offered within the School.

### *New Courses to be Added in the Next Five Years*

This course is currently offered as a special topic, and is an example of the types of courses that shall be developed to meet specific track needs.

**6XXX      Distributed and Parallel Computing      3 credits**  
The course consists of a theoretical and practical introduction to high performance parallel computing using shared and distributed memory computers.

### *All Program Courses*

**6010      Writing Research Proposals      2 credits**  
Fundamental aspects of writing computer science research proposals, including thesis, dissertation, and grant proposals. Form, style, substance, and marketing of effective proposals will be considered. Emphasis is placed on developing and presenting clear and compelling ideas. Substantial writing and class presentations is required of all participants. (This is a half-semester course.)

**6020      Conducting, Publishing, and Presenting Early-Career Research      3 credits**  
This is an independent study offering designed to encourage beginning graduate students to conduct, publish, and present original research early in their graduate careers. A graduate student can earn credit for CP SC 6020 by having a first-authored paper accepted for publication in a top-tier journal or conference and by subsequently presenting the published work in a one-hour research colloquium. The research must be conducted while a graduate student at Utah; the paper must be accepted within two years of enrolling in the graduate program; the journal or conference must be approved by the student's graduate committee; the colloquium must be presented as soon as possible after the acceptance of the paper; and the student must complete these requirements and register for CP SC 6020 within three years of enrolling in the graduate program. CP SC 6020 may not be repeated for credit.

**6100      Foundations of Computer Science      3 credits**  
Finite Automata and related topics (BDDs, Presburger Arithmetic, and decidable fragments of first-order logic). Automata on Infinite Words, connections with Specification and Verification of Systems. Push Down Automata, Turing Machines, Proofs by Reduction, Diagonalization, Problems in Computability. First-order Logic and Decidability. NP Completeness, P-space Completeness.

**6110      Formal Methods for System Design      3 credits**  
Study of methods for formally specifying and verifying computing systems. Specific techniques include explicit state enumeration, implicit state enumeration, automated decision procedures for first-order logic, and automated theorem proving. Examples selected from the areas of superscalar CPU design, parallel processor memory models, and synchronization and coordination protocols.

**6210      Advanced Scientific Computing I      3 credits**

An introduction to existing classical and modern numerical methods and their algorithmic development and efficient implementation. Topics include: numerical linear algebra, interpolation, approximation methods and parallel computation methods for nonlinear equations, ordinary differential equations, and partial differential equations.

**6220      Advanced Scientific Computing II      3 credits**

A study of the numerical solution of two and three dimensional partial differential equations that arise in science and engineering problems. Topics include: finite difference methods, finite element methods, boundary element methods, multigrid methods, mesh generation, storage optimization methods, and adaptive methods.

**6300      Artificial Intelligence      3 credits**

Introduction to field of artificial intelligence, including heuristic programming, problem-solving, search, theorem proving, question answering, machine learning, pattern recognition, game playing, robotics, computer vision.

**6310      Robotics      3 credits**

The mechanics of robots, comprising kinematics, dynamics, and trajectories. Planar, spherical, and spatial transformations and displacements. Representing orientation: Euler angles, angle-axis, and quaternions. Velocity and acceleration: the Jacobian and screw theory. Inverse kinematics: solvability and singularities. Trajectory planning: joint interpolation and Cartesian trajectories. Statics of serial chain mechanisms. Inertial parameters, Newton-Euler equations, D'Alembert's principle. Recursive forward and inverse dynamics.

**6320      Computer Vision      3 credits**

Basic pattern-recognition and image-analysis techniques, low-level representation, intrinsic images, "shape from" methods, segmentation, texture and motion analysis, and representation of 2-D and 3-D shape.

**6340      Natural Language Processing      3 credits**

Computational models and methods for understanding written text. Introduction to syntactic analysis, semantic analysis, discourse analysis, knowledge structures, and memory organization. A variety of approaches are covered, including conceptual dependency theory, connectionist methods, and statistical techniques. Applications include story understanding, fact extraction, and information retrieval.

**6350      Machine Learning      3 credits**

Techniques for developing computer systems that can acquire new knowledge automatically or adapt their behavior over time. Topics include concept learning, decision trees, evaluation functions, clustering methods, explanation-based learning, language learning, cognitive learning architectures, connectionist methods, reinforcement learning, genetic algorithms, hybrid methods, and discovery.

**6360      Virtual Reality      3 credits**

Human interfaces: visual, auditory, haptic, and locomotory displays; position tracking and mapping. Computer hardware and software for the generation of virtual environments. Networking and

communications. Telerobotics: remote manipulators and vehicles, low-level control, supervisory control, and real-time architectures. Applications: manufacturing, medicine, hazardous environments, and training.

**6470      Advanced Topics in Compilation      3 credits**

Compilation of modern languages. Optimization techniques, register allocation and instruction scheduling, garbage collection, exception handling. Linkers and late-stage compilation and optimization.

**6480      Data Communications and Networks      3 credits**

A comprehensive study of the principles and practices of data communication and networks. Topics include: transmission media, data encoding, local and wide area networking architectures, internetwork and transport protocols (e.g., IPv4, IPv6, TCP, UDP, RPC, SMTP), networking infrastructure (e.g., routers, name servers, gateways), network management, distributed applications, network security, and electronic commerce. Principles are put into practice via a number of programming projects.

**6520      Programming Languages and Semantics      3 credits**

Examination of the formal and pragmatic ideas behind programming language design. Imperative, functional, logic, object-oriented, and multi-paradigm languages. Lambda calculus, fixpoints, type systems, and predicate logic. Denotational semantics and models of concurrency.

**6530      Database Systems      3 credits**

Representing information about real world enterprises using important data models including the entity-relationship, relational and object-oriented approaches. Database design criteria, including normalization and integrity constraints. Implementation techniques using commercial database management system software. Selected advanced Topics such as distributed, temporal, active, and multi-media databases.

**6540      Human/Computer Interaction      3 credits**

Fundamentals of input/output devices, user interfaces, and human factors in the context of designing interactive applications.

**6610      Advanced Computer Graphics I      3 credits**

Interactive 3D computer graphics, polygonal representations of 3-D objects. Interactive lighting models. Introduction to interactive texture mapping, shadow generation, image-based techniques such as stencils, hidden-line removal, and silhouette edges. Introduction to image-based rendering, global illumination, and volume rendering.

**6620      Advanced Computer Graphics II      3 credits**

Introduction to ray-tracing. Intersection methods for 3-D objects, reflection and refraction. Introduction to surface and solid texturing. Introduction to continuous-tone pictures and the aliasing problem. Special effects such as soft shadows, depth-of-field, motion-blur, and indirect lighting.

**6630      Scientific Visualization      3 credits**

Introduction to the techniques and tools needed for the visual display of data. Students will explore many aspects of visualization, using a "from concepts to results" format. The course begins with an overview of the important issues involved in visualization, continues through an overview of graphics tools relating to

visualization, and ends with instruction in the utilization and customization of a variety of scientific visualization software packages.

**6650 Image Synthesis 3 credits**  
Using camera and sensor simulation along with physical simulation to generate realistic synthetic images.

**6670 Computer-Aided Geometric Design I 3 credits**  
**6680 Computer-Aided Geometric Design II 3 credits**

Introduction to current concepts and issues in CAGD systems with emphasis on free-form surface design; mathematics of free-form curve and surface representations, including Coons patches, Bezier method, B-splines, triangular interpolants, and their geometric consequences; classical surface geometry; local and global design tradeoffs and explicit and parametric tradeoffs; subdivision and refinement as techniques in modeling; current production capabilities compared to advanced research. Laboratory experiments with current CAD systems.

**6710 Advanced Integrated Circuit Design I 3 credits**

Introduction to basic concepts of the design of CMOS integrated circuits for students with a wide range of backgrounds. Static and dynamic properties of CMOS circuits, composite layout of CMOS circuits, and modeling of transistors for use in SPICE simulations. Commonly encountered CMOS circuits. Introduction to CMOS analog/digital circuits. Students complete design, composite layout, and digitization of a simple integrated circuit using computer-aided design tools.

**6720 Advanced Integrated Circuit Design II 3 credits**

Design of mixed signal (analog/digital) CMOS integrated circuits. Fundamental building blocks for analog circuits, including the basic principles of opamp, current mirror and comparator design. Basics of discrete-time signals and filters. Implementation of switched capacitor circuits and discussions of various implementations of D/A and A/D converters, over-sampled converters and phase locked loops.

**6740 Computer-Aided Design of Digital Circuits 3 credits**

Introduction to theory and algorithms used for computer-aided synthesis of digital integrated circuits. Topics include algorithms and representations for Boolean optimization, hardware modeling, combination logic optimization, sequential logic optimization and technology mapping.

**6750 Synthesis and Verification of Asynchronous VLSI Systems 3 credits**

Introduction to systematic methods for the design of asynchronous VLSI systems from high-level specifications to efficient, reliable circuit implementations. Topics include specification, controller synthesis, optimization using timing information, technology mapping, data path design, and verification.

**6770 Advanced Digital VLSI Systems Design 3 credits**

Full custom, high speed, high performance CMOS circuit design issues, methodologies, and techniques. Failure modes, modeling techniques, testing, clock skew analysis, clock distribution, power analysis, power line distribution, electrical rules checking, megacell design flow, and other important design issues.

**6810 Advanced Computer Architecture 3 credits**



Principles of modern high performance computer and micro architecture: static vs. dynamic issues, pipelining, control and data hazards, branch prediction and correlation, cache structure and policies, cost-performance and physical complexity analyses.

**6820 Parallel Computer Architecture 3 credits**

Architecture, design, and analysis of parallel computer systems: vector processing, data vs. control concurrency, shared memory, message passing, communication fabrics, case studies of current high performance parallel systems.

**6830 VLSI Architecture 3 credits**

Project-based study of a variety of Topics related to VLSI systems. Use of field programmable gate arrays to design, implement, and test a VLSI project.

**6930-6944 Seminar 1-3 credits**

Current Topics in Computer Science. May be repeated for credit.

**6950 Independent Study 1-4 credits**

**6960-6969 Special Topics 1-4 credits**

**6970 Master's Thesis Research 1-12 credits**

**6980 Faculty Consultation Master's 1-12 credits**

**7120 Information-Based Complexity 3 credits**

Analysis of optimal computational methods for continuous problems. Introduction to the general worst case theory of optimal algorithms, linear problems, and spline algorithms as well as selected nonlinear problems. Examples include optimal integration, approximation, nonlinear zero finding, and fixed points.

**7240 Sinc Methods 3 credits**

Sinc methods for solving difficult computational problems, such as partial differential and integral equation problems, that arise in science and engineering research. Emphasis on parallel computation. Applications vary, depending on participants in the class. Students are given projects--whenever possible in their areas of research--that lead to publishable research articles.

**7310 Advanced Robotics 3 credits**

Covers the kinematics, dynamics, and control of robotic manipulators. Projects controlling robots will be an integral part of the course.

**7460 Advanced Operating Systems 3 credits**

Practical distributed operating systems concepts from basics through the state of the art. Topics include interprocess communication, client-server systems, distributed shared memory, distributed file systems, distributed databases, portable computing, software fault tolerance, and wide-area (e.g. web) applications. Work includes individual oral presentations, a group project, and a written research report.

**7940 Seminar 1-3 credits**

May be repeated for credit.

7950	Independent Study	1-4 credits
7960	Special Topics	1-4 credits
7970	Ph.D. Dissertation Research	1-12 credits
7980	Faculty Consultation Ph.D.	1-12 credits
7990	Continuing Registration: Ph.D.	0 credits

## APPENDIX B: FACULTY PARTICIPANTS

All School of Computing Long-Term Instructional (LTI) faculty may participate in the Computing degree program as Track Faculty Committee members and as department members for issues requiring full faculty oversight.

Faculty from other departments may participate as Track Faculty Committee members, but must be LTI (i.e., regular faculty or designated LTI).

The tables below list all LTI faculty in the School of Computing, followed by those faculty in the Scientific Computing and Imaging Institute and other associated programs who may choose to participate in the tracks within the Computing programs.

Name	Type	Rank	Research Area
<b>School of Computing Assistant Professors</b>			
Rajeev Balasubramonian	Regular	Assistant	Computer architecture: clustered processors, memory hierarchy bottlenecks, instruction-level parallelism, power-efficient processors
Matthew Flatt	Regular	Assistant	Programming languages & systems
Sneha Kasera	Regular	Assistant	Computer networks & systems – mobile systems & wireless networks, network security
Michael Kirby	Regular	Assistant	Scientific computing & visualization
Emil Praun	Regular	Assistant	Computer Graphics
John Regehr			Embedded systems, consumer real-time, design & implementation of operating systems
Konrad Slind	Regular	Assistant	Formal Verification, higher order logic, functional programming
Cynthia Thompson	Regular	Assistant	Machine learning, natural language processing, & artificial intelligence
<b>School of Computing Associate Professors</b>			
Erik Brunvand	Regular	Associate	Computer architecture & VLSI systems
John Carter	Regular	Associate	Operating systems parallel & distributed computing, & multiprocessor computer architecture
Wilson Hsieh	Regular	Associate	Compilers, programming languages, systems, & architecture
Charles Hansen	Regular	Associate	Visualization, computer graphics, parallel computation, computer vision
Ellen Riloff	Regular	Associate	Natural language processing, information retrieval, & artificial intelligence
Peter Shirley	Regular	Associate	Computer graphics, visualization, visual perception, software methodologies for graphics
Claudio Silva	Regular	Associate	Scientific visualization, computer graphics, computational geometry
Ross Whitaker	Regular	Associate	Computer vision, visualization, & image processing

Name	Type	Rank	Research Area
<b>School of Computing Full Professors</b>			
Martin Berzins	Regular	Professor	Adaptive Numerical Methods & software, Parallel Algorithms, Computational Fluid & Solid Mechanics Applications.
Elaine Cohen	Regular	Professor	Computer graphics, scientific visualization, geometric modeling, & mechanical design
Al Davis	Regular	Professor	Parallel computer architecture asynchronous circuits & systems, high performance multiprocessor communications
Ganesh Gopalakrishnan	Regular	Professor	Formal verification, asynchronous circuits & systems
Tom Henderson	Regular	Professor	Computer vision, mobile robotics
Lee Hollaar	Regular	Professor	Digital intellectual property law
John Hollerbach	Regular	Professor	Robotics, teleoperation, virtual reality, & human motor control
Chris Johnson	Regular	Distinguished Professor	Scientific computing, visualization, imaging, & problem solving environments
Robert Kessler	Regular	Professor	Systems software & software engineering
Gary Lindstrom	Regular	Professor	Programming language design, specification & implementation
Rich Riesenfeld	Regular	Professor	Computer graphics, geometric modeling, design
Kris Sikorski	Regular	Professor	Parallel scientific computation & computational complexity
Frank Stenger	Regular	Professor	Numerical analysis
William Thompson	Regular	Professor	Computer vision, visual perception
<b>School of Computing Designated Long-Term Instructional Faculty</b>			
Art Lee	Clinical	Associate	Aspect-oriented programming, scientific data management, distributed object systems
David Hanscom	Clinical	Professor	Computer architecture & data communications
Joe Zachary	Clinical	Professor	Application of computers to education
Steven Parker	Research	Assistant	Parallel component architectures, scientific visualization, & computer graphics
Sam Drake	Research	Associate	Integrated process planning & computer aided manufacturing, design, industrial robotics
Jay Lepreau	Research	Associate	Operating systems, components & languages, networks, security
<b>Faculty from Other Academic Units</b>			
Sarah Creem-Regehr	Psychology	Assistant	Cognitive & neural mechanisms underlying: object & space perception, perception-action dissociations & interactions, visual & motor imagery, spatial cognition
Stephen C. Jacobsen	Mechanical Engineering	Professor	Robotics, teleportation, virtual reality, human motor control
Rob S. MacLeod	Bioengineering	Associate	Computational Electrophysiology

Name	Type	Rank	Research Area
Chris Myers	Electrical & Computer Engineering	Associate	Digital VLSI systems, computer architectures
Jeff Weiss	Bioengineering	Associate	Experimental & Computational Biomechanics, with applications in Orthopedics & Cardiovascular Mechanics

MEMORANDUM

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: University of Utah – Proposal to offer the Doctorate of Audiology (AuD) – Action Item

*Issue*

Officials from the University of Utah (UU) request to offer the Doctor of Audiology (AuD) Degree. The Regents' Program Review Committee approved the UU's Letter of Intent to offer the AuD on December 8, 2003 based on the institution's appeal to two categories of exception to the moratorium: Accreditation and Transfer, Restructuring or Consolidation of Existing Program.

*Background*

Changes in the health professions require practitioners who enter the professions to be highly qualified. Such is the case in Audiology. An aging population with complex audiological issues requires audiologists to be better prepared.

Currently, the UU offers a Master's Degree program. However, the national accreditor for Audiology, the American Speech-Language-Hearing Association (ASHA) has set new national standards for the training of Audiologists. ASHA 's standards now require the doctorate as the entry level credential for Audiologists. Programs that wish to retain their accreditation must be in the process of developing the doctoral degree program by 2007.

To meet accreditation guidelines, the UU is modifying its Master Degree program in Clinical Audiology. New courses and a modest number of new faculty will eventually be needed to meet the new outcome standards required by the accreditor. A four-year professional program beyond the baccalaureate in Audiology will confer the AuD. However, the current Master's Degree and Ph.D. Degrees will remain for those students who want to be trained in teaching and research. All students currently in the program will be able to complete their credential. The proposed program is expected to be fully funded through student credit hours and differential tuition.

The UU has the only Audiology program located directly in the health sciences. Thus, students would be trained in an interdisciplinary environment with the medical school and other allied healthcare professions. The proposed program complements the AuD program recently approved for Utah State University. The latter program is uniquely tied to deaf education. Faculty from both programs have committed to collaborating so that each program is a resource to the other, thus benefiting both students and faculty. Both programs would provide the citizens of Utah with rehabilitative and healthcare services for children and adults with hearing loss and deafness.

*Policy Issues*

The proposed program was reviewed by Utah State University (USU). USU faculty have been working collaboratively with UUs faculty as both programs have been developed and/or implemented. They agree to continue in this collaborative relationship and are very supportive of the UUs AuD Program. No concerns were raised by the other USHE institutions.

*Options Considered*

After Regents have reviewed the proposal from the University of Utah to offer a Doctorate in Audiology, they may raise questions, request additional information, deny the request, or approve the request during the June 3-4, 2004 meeting.

*Commissioner's Recommendation*

It is the recommendation of the Commissioner that the Regents review the proposal from the University of Utah for a Doctorate in Audiology, raise questions, and, if satisfied, approve the request.

---

Richard E. Kendell, Commissioner

REK/PCS  
Attachment

## SECTION I: THE REQUEST

The University of Utah requests approval to offer a Doctor of Audiology (AuD) Degree effective Fall 2004. This program was approved by the Institutional Board of Trustees.

## SECTION II: PROGRAM DESCRIPTION

### *Complete Program Description*

Audiology is one of the fastest growing healthcare professions in the United States (U.S. Department of Labor, 2002), offering a diverse range of practice settings and the opportunity to positively impact the lives of children and adults with hearing loss. At least 80 percent of audiologists work in healthcare settings today, providing both diagnostic and rehabilitative clinical services. Drawing upon the strengths of the location of the proposed program in the College of Health, the curriculum offers a broad range of clinical education and training. The professional doctorate (AuD) program is a 4-year post baccalaureate degree that is designed to meet all requirements for national accreditation and clinical certification in Audiology. The program is comprised of three years of didactic and practical experience, followed by a year of supervised clinical practice in the form of a residency. A total of 104 credit hours is required, of which 60 credits are didactic, six are research and 34 are clinical experiences. Students are required to pass a written comprehensive exam at the end of the 2<sup>nd</sup> year and complete a collaborative research project by the end of the 3<sup>rd</sup> year prior to commencing the residency. The proposed program also will admit qualified students who already have a Master's Degree in Audiology. The fourth year of clinical practice will be waived for post-Master's students who already hold licensure or certification in Audiology. The research requirement may also be waived for those students who have completed a Master's thesis.

### *Purpose of Degree*

The purpose of the AuD is to educate audiologists for professional practice as specialists in the evaluation and management of individuals with hearing impairment and balance disorders. Graduating students will be qualified to enter a wide range of professional careers in private practice, clinical settings in hospitals and outpatient facilities, educational settings, and industry. The professional doctorate will replace the Master's Degree as the entry-level degree for those who are pursuing clinical practice, while the M.S. and Ph.D. Degrees in Audiology will remain for individuals who are pursuing careers in research and academics. As a result of expanded and more in-depth didactic knowledge and practical experience, the clinical doctoral degree will confer a higher degree of professional autonomy compared to the traditional Master's Degree. Development of the AuD Degree will allow the Department of Communication Sciences and Disorders to meet recently established accreditation standards, without using the Ph.D. Degree, which is primarily a research and teaching degree in training clinicians. The professional doctorate model is based on approaches similar to those used by other health care professions including pharmacy, optometry and dentistry. The proposed program at the University of Utah is consistent with the national model, which requires four years of professional education beyond the baccalaureate degree.



Recognizing that there is a need for the clinical doctorate degree, while maintaining the integrity of the Ph.D., the two national audiology professional organizations (the American Speech-Language-Hearing Association [ASHA] and the American Academy of Audiology [AAA]) have mandated the creation of the professional doctorate and have provided guidelines for its establishment. By ASHA mandate, all graduates from the year 2007 to 2012 must have the *equivalent* of doctoral-level coursework and clinical training in order to qualify for national certification. Academic programs must meet the revised standards for accreditation as of 2007. Beginning in 2012, all graduates must have doctoral degrees to qualify for national certification. Thus, the Audiology program at the University of Utah (UU) must begin offering doctoral-level instruction to students entering the program in Fall of 2005 in order to meet the revised mandated standards by the year 2007 deadline.

Expected outcomes of an AuD program at the UU are that all graduating students will meet ASHA mandated requirements for entry to the practice of Audiology and that the program will be responsive to higher levels of training demanded today by employers of audiologists. The expanded program is also designed to be responsive to the needs of students who wish to enter a variety of employment settings. Providing students with greater depth and breadth of clinical training as well as research experience allows them to compete for careers in Audiology with more responsibility and greater personal and financial rewards. National data indicate that graduates of AuD programs are more likely to enter private practice independently as opposed to accepting employment under other professionals. Logically, because they can practice autonomously, private practice audiologists will be more likely to practice in smaller cities and towns, thereby increasing access to hearing healthcare services in rural areas. They have been more likely to obtain positions in academic training programs, which will increase clinical training capacity in academic programs.

### ***Admission Requirements***

Applications for admission to the AuD program will be reviewed by an admissions committee consisting of regular audiology faculty, at least one clinical audiology faculty member and at least one speech-language pathology faculty member. Admission requirements will be at least the minimum requirements of the Graduate School, and will be competitive based on the pool of applicants for any given year. The departmental deadline for applying to any of the graduate programs is February 1. A Letter of Intent (1-2 pages), undergraduate transcripts, GRE scores, three letters of recommendation, and a sample of scholarly writing will be required. In addition, if English is not the applicant's native language, the Test of English as a Foreign Language (TOEFL) and Test of Spoken English (TSE) will also be required. The entire application will be evaluated to determine the ability of the student to complete the program successfully. Appropriate undergraduate programs would be those found in traditional Colleges of Arts and Sciences, Education and Allied Health that include a solid foundation in the basic sciences such as biology, psychology, pre-nursing, pre-medicine, and engineering. Applications from traditionally under-represented groups are encouraged.

### ***Student Advisement***

Each student will be assigned an academic advisor, who must be an audiology tenure track faculty member and two additional committee members, one, of whom, may be a speech-language faculty

member, and one of whom, may be an auxiliary faculty member. The academic advisor will meet with each student at least once a semester to review academic coursework, plan future courses, plan and review clinical experiences, decide upon the research project, and fill out necessary paperwork including the Graduate School candidacy application, department program of study, and ASHA application for certification.

### *Justification for Number of Credits*

A study of existing AuD programs (n=26) was done to determine current offerings nationally. Standards published by ASHA for content areas were also reviewed to ensure that all required areas would be included in the planned program. The study of current programs showed that the median number of total required semester credits at the graduate level is 115 and the range is from 81 to 142 credits. The median number of didactic credit hours is 73 while the median number of clinical credits is 36. In addition, on average six research credits are also required. All but one of the programs require a research project, and many require comprehensive examinations. The AuD program at the University of Utah is designed to require approximately 104 semester credit hours, of which 64 are didactic, six are research, and 34 are clinical credits. Additionally, a preliminary written comprehensive examination will be required. The proposed program at the University of Utah exceeds the minimum requirements established by the American Speech-Language Hearing Association, and is comparable to other programs nationally.

### *External Review and Accreditation*

The proposed program will be submitted for accreditation by the American Speech-Language Hearing Association. The current Master's Degree program is accredited through the year 2004 and is scheduled for review in 2005. Accreditation is administered by the same body for both speech-language pathology and audiology in a joint process by the Council on Academic Accreditation (CAA). Thus, both programs are jointly submitted for a periodic accreditation review (every 8 years) by the Department of Communication Sciences and Disorders. The programs require similar documentation of enrollment and student performance, faculty changes, effort and activities, curriculum, compliance with outcome standards, clinical placements, evaluative procedures, etc. Combining the accreditation process reduces expenditures and time commitment for both disciplines.

In May, 2002, a consultant from the University of North Carolina, Chapel Hill assessed the potential of the University of Utah to offer a high quality doctoral level training program in Audiology. The report is contained in Appendix G. Several recommendations were made, and these have been addressed in this proposal.

### ***Recommendation 1. A minimum of two new full-time faculty positions should be added to the current audiology faculty.***

This recommendation has been addressed by requesting one new tenure track faculty, and one new clinical faculty member. In addition, several excellent adjunct faculty have begun providing teaching and clinical supervision to students in the past year to prepare for the new program inception.

***Recommendation 2. Clinical facilities must be identified elsewhere on campus or in an off-campus setting for comprehensive first and second year clinical education of AuD students.***

This recommendation has been addressed by the commitment of the Senior Vice President of Health Sciences to secure increased clinical space for the Department of Communication Disorders. This effort has moved forward and is expected to result in nearly 7,000 square feet of new space for the clinic, which will be located in Research Park, during the summer of 2004

***Recommendation 3. There is an urgent need for a one-time investment in new equipment pertinent to hearing aids and diagnostic audiology, with an annual recurring budget for equipment maintenance and periodic renewal.***

This recommendation has been addressed through equipment grants made in the past year as well as a budgetary line for equipment on an annual recurring basis.

***Recommendation 4. DCD should encourage the participation of representatives from key regional practicum sites in long-range planning.***

This recommendation has been addressed by developing an External Advisory Panel that will advise the program with regard to curriculum, practicum opportunities, student performance and community practice standards.

***Recommendation 5. The proposed curriculum should be carefully reviewed to ensure compliance with required "Knowledge and Skill Outcomes," as set forth in Standard IV, CCCA. In addition to curriculum content the review should include plans for formative and summative assessments.***

The curriculum has been designed to meet or exceed the standards of the Standard IV, CCA-A. Formative and summative assessments have been designed to meet these same outcomes as outlined on the "Knowledge and Skills Assessment" outcomes required by the new standard. These outcome standards (as shown in Appendix D) are noted in the proposed curriculum.

***Recommendation 6. Admission requirements and clinical evaluation of advanced standing students needs further elaboration and description.***

The post-Master's program has been designed so that Master's and AuD students will be individually assessed with regard to previous coursework. This allows each student to enter a program designed to "fill in the gaps" with new coursework and a clinical research project (if the student has not previously completed a Master's thesis). For post-Master's degree students, there will be a minimum requirement of one-year full-time residency within the AuD program, or an equivalent amount of part time study (2 semesters of full-time study, or approximately 24 semester credits in didactic coursework, not including research or practicum requirements). If the returning student completed a clinical fellowship year or holds current certification or licensure, then external practicum will be waived. Formative and summative evaluations will be similar to the post-baccalaureate students, and will be designed to identify knowledge and skill gaps that will be addressed with coursework.

***Recommendation 7. The Ph.D. track in Audiology should be retained.***

Strengthening the Ph.D. program is a goal of the department. The consultant recommended: "Once the AuD is implemented the Department should be able to accommodate several Ph.D. students in audiology. These students, whose professional goals are distinctly different from those of the typical AuD student, would bring clinical experience combined with a variety of academic and research interests. Considering the number of faculty positions anticipated in the coming years, demand for such a program at UU should be strong. In addition to student support from faculty grants, a revitalized audiology program at UU would be in a good position to seek extramural funding for a doctoral leadership training grant through the U.S. Department of Education".

In his summary statement, the consultant commented: "*There is great potential for an exemplary AuD program at the University of Utah. I was impressed by the willingness of local and regional institutions to collaborate and I was gratified by the enthusiastic support of university administrators at all levels. I commend the University for investing the time and effort needed to consider this new degree program. With additional faculty resources, expansion of Departmental clinical facilities, purchase of new instrumentation, and attention to specific details regarding curriculum and instruction, the University of Utah would be well positioned to offer a unique and distinctive AuD program, consistent with the missions of a world-class university and medical center.*"

***Projected Enrollment***

Students will be enrolled in a 4-year full-time program if they hold a baccalaureate degree and a 2-year part-time program for currently licensed audiologists with a Master's Degree. It is anticipated that an average of six full-time students will be admitted each year, similar to the current Master's program. Because the duration is four years, as compared to two years for the current Master's Degree program, enrollment by the end of the fourth year is projected to be 24 students. Enrollment during the first four years is detailed in Table I below. The total full-time graduate enrollment during the first year is projected to be 11 students, growing to 24 at the end of the first four years. It is projected that initiation of the AuD program will more than double current enrollment, due to the increased length, not due to increased enrollment of new students. Additional tuition revenue to offset additional expenses is covered by the increased length. Students currently enrolled in the Master's program at the time the AuD is initiated may apply for transfer. This will allow uninterrupted student enrollment during the transition, and will allow recent Master's students to attain AuD status with minimal disruption to their professional goals.

*Table I. Projected Enrollment Timeline (including transfer students from master's program)*

	2005-06	2006-07	2007-08	2008-09
1 <sup>st</sup> Year Students	6	6	6	6
2 <sup>nd</sup> Year Students	6	6	6	6
3 <sup>rd</sup> Year Students	3	3	6	6
4 <sup>th</sup> Year Students	0	3	3	6
Total Enrollment	15	18	21	24

The pool of prospective full-time students will consist of those who would ordinarily apply for a Master's Degree in Audiology, and in addition, students who are interested in doctoral level health care professions. Students who already possess Master's Degrees will receive advanced standing

in the program to account for graduate academic courses and professional experience already obtained. Surveys by the American Academy of Audiology indicate that there is a considerable number of people who are already in practice who would seek the new degree. Current projections indicate that by 2004, over 1700 practicing audiologists will be enrolled in part time AuD programs that already exist (Ault, Jones, & Windmill, 1999).

### *Expansion of Existing Program*

Current courses from the Master's Degree program will be selectively retained in the AuD program, while a substantial number of required courses are new. As discussed above, the expanded coursework and clinical training is designed to meet outcome standards established by the CAA. The length of the program will increase from two to four years. Currently, following the completion of the two year Master's Degree program, students seek employment as a clinical fellow for a minimum of nine months full-time practice under the supervision of a certified audiologist. These positions can be obtained anywhere nationally, and they are not currently administered by the academic training program. The AuD program incorporates the full-time supervised clinical practice year into a fourth year full-time clinical externship, under the aegis of the academic training program. Thus, our faculty become responsible for assuring the quality of the residency experiences and assisting students in securing these experiences. One additional year of coursework, a research project, written comprehensive exams, and at least one supervised full-time clinical placement during the 4<sup>th</sup> year are the major expansions of the existing program.

Students will be expected to rotate through a series of externship sites that provide both sufficient breadth and depth of experiences in medical and educational settings. Students will be placed at a minimum of four different sites prior to their fourth year, including hospitals, schools, private practices and both pediatric and adult settings.

### *Faculty*

#### **Full-time Faculty, Department of Communication Sciences and Disorders:**

##### **Audiology Faculty:**

Lisa L. Hunter, Ph.D. CCC-A, Associate Professor  
 Michelle L. Hicks, Ph.D. CCC-A, Assistant Professor  
 To be named, Ph.D. level, tenure track  
 Robert Wollenweber, M.A. CCC-A, Clinical Instructor  
 To be named, AuD or Ph.D. level, non-tenure track

##### **Speech-Language Faculty:**

Michael Blomgren, Ph.D. CCC-SLP, Assistant Professor  
 Kathy Chapman, Ph.D. CCC-SLP, Associate Professor  
 Janet Goldstein, M.S. CCC-SLP, Clinical Instructor  
 Cynthia Montana, M.S. CCC-SLP, Clinical Instructor  
 Mary Noyes, M.S. CCC-SLP, Clinical Instructor  
 Sean Redmond, Ph.D. CCC-SLP, Assistant Professor  
 Nelson Roy, Ph.D. CCC-SLP, Assistant Professor  
 Bruce Smith, Ph.D., Professor and Chair

Julie Wambaugh, Ph.D. CCC-SLP, Associate Professor  
Mary Louise Willbrand, Ph.D. CCC-SLP, Professor

**American Sign Language Program Faculty:**

Larry Forestal, Ph.D., Assistant Professor

**Auxiliary Faculty (Audiology):**

Joe Arnold, M.S., CCC-A, (Veteran's Administration Medical Center)  
Kim Davis, M.D. (Division of Otolaryngology, University of Utah Hospital)  
John Eichwald, M.S., (Utah Department of Health)  
Richard Harris, Ph.D. CCC-A (Brigham Young University)  
Leland Johnson, M.D. (Division of Otolaryngology, University of Utah Hospital)  
Michael Nilsson, Ph.D. (Sonic Innovations, Inc.)  
Michael Page, M.S., CCC-A (Primary Children's Medical Center)  
Loren Randolph, M.S., CCC-A (Veteran's Administration Medical Center)  
Rex Scott, M.S., CCC-A, (Audiology Associates of Salt Lake City)  
Nanette Sturgill, M.A., CCC-A, Clinical Instructor (Primary Children's Medical Center)  
Clough Shelton, M.D. (Division of Otolaryngology, University of Utah Hospital)  
Susan Sundstrom, M.A., CCC-A, (Veteran's Administration Medical Center)  
Don Worthington, Ph.D. CCC-A (IHC Hearing and Balance Center)

As listed above, current full-time Audiology faculty in the Department of Communication Sciences and Disorders include two doctoral level tenure-track faculty members, and one full-time clinical faculty member. Faculty expertise is also available within the Department in important related areas of study such as speech and language development and disorders, American Sign Language, speech and hearing sciences, and genetics of communication disorders.

In order to adequately support research, academic and clinical teaching needs to establish the AuD program, additional faculty positions specifically in Audiology will be required. The need for additional faculty results from doubling the duration of the program, adding 12 new didactic and 4four new clinical practicum courses. Based on careful analysis of the minimum needs for the program, one additional FTE regular faculty member is required to provide research, teaching, service and advising support for the expanded range of courses and experiences that will result from requiring a clinical doctoral degree for entry into the profession. One additional full-time clinical staff position at the AuD or Ph.D. level is required to provide teaching and support the expanded clinical supervision and placement needs. This position will be able to generate clinical revenue to help offset salary support. The Department is requesting less than twice the current level of faculty FTEs while anticipating more than double the current student credit hours.

***Staff***

The Department of Communication Sciences and Disorders employs three full-time staff, including an administrative assistant, an executive secretary, and a clinic receptionist and scheduler. Three part-time staff provide additional secretarial services. Program admission, accreditation and oversight are combined with the speech-language pathology program and these aspects will require similar administrative effort as currently expended. Program development will require additional faculty effort, which will be supplied by current and new faculty.

### *Library*

The J. Willard Marriott Library, a member of the Association of Research Libraries, ranks 41st of the 113 largest university research libraries in North America. It is a member of the Center for Research Libraries. Its collection includes 2.5 million volumes and 23,000 periodical subscriptions, of which 13,500 are e-journals. Other electronic resources include 20,000 e-books, and 350 electronic databases. Interlibrary loan requests totaled 27,000 in 2002, and most requests can now be supplied in electronic format.

In addition to offering information resources, the libraries encourage students beginning advanced degree programs to take advantage of in-depth research consultation. The libraries also offer regularly scheduled library instruction and technology training to help students become effective library users. The AuD program will utilize hard copy and on-line journals in the areas of acoustics, clinical audiology and otolaryngology.

Current journal and on-line resources in the combined library holdings at the Marriott Library, Eccles Health Science Libraries and Primary Children's Medical Center are sufficient for the AuD program. New journals will be added as necessary using the current budget that is earmarked for the Department of Communication Sciences and Disorders. Examples of the journals available from the above libraries to support the program are:

- Acta Oto-Laryngologica
- Advances in Oto-Rhino-Laryngology
- American Annals of the Deaf
- American Journal of Otology
- Annals of Oto-Rhino-Laryngology
- Archives of Otolaryngology-Head & Neck Surgery
- Audiology
- Audiology & Neuro-otology
- British Journal of Audiology
- Ear and Hearing
- Ear Clinics International
- Ear Nose and Throat Journal
- International Journal of Audiology
- International Journal of Pediatric Otorhinolaryngology
- Journal of Deaf Studies and Education
- Journal of the Acoustical Society of America
- Journal of Speech, Language and Hearing Research
- Journal of Speech and Hearing Disorders
- Journal of Neuro-Otology
- Journal of Laryngology and Otology
- Laryngoscope
- Otolaryngologic Clinics of North America
- Otolaryngology-Head and Neck Surgery
- Scandinavian Audiology
- Seminars in Hearing

### *Learning Resources*

The current University of Utah graduate program in Audiology is ranked in the top 40 programs nationally by U.S. News and World Report. There are 110 Master's Degree programs in Audiology in the United States. Thus, the potential for a more prestigious program at U. of U. is excellent with the addition of the AuD and appropriate resources needed to support it.

The Department of Communication Sciences and Disorders currently occupies the 12th floor and part of the 13<sup>th</sup> floor of the Behavioral Sciences building (approximately 6,000 square feet). The Audiology services of the University of Utah Medical Center, Primary Children's Medical Center and the Veteran's Administration Medical Center are within walking distance or shuttle service. In addition, the Department of Communication Sciences and Disorders has long standing arrangements with many other local professional sites for clinical practicum and off campus externships. The program will benefit from the expertise of adjunct faculty associated with the University of Utah Medical School, Veterans Administration Medical Centers in Salt Lake City, Utah Department of Health, as well as professionals in private practice, and other settings. These individuals support clinical education as well as providing specific lectures and demonstration in classes. A list of practicum sites with current contracts to provide clinical supervision is contained in Appendix E.

With regard to equipment acquisition, use and access, the Department of Communication Sciences and Disorders currently has clinic and research facilities that include contemporary audiology equipment and computer hardware and software. As identified in both the internal and external department Graduate Committee reviews, space is a critical issue limiting future growth of the Department as a whole, including Audiology. Current faculty offices, laboratory space and clinical facilities for Audiology are located on the 12<sup>th</sup> floor of the Social and Behavioral Science Building (SBEH). The Audiology Clinic contains two sound booths, and approximately 575 square feet. Approximately 700 patient visits are supplied by the Audiology Clinic annually. Currently, we have two audiology laboratories totaling approximately 550 square feet in space. There is a need for increased office, laboratory and clinical space as well as updated equipment (included in the requested budget) to support the AuD program. New space has been identified in Research Park, and tentative plans are being made to move the clinics to the new space in academic year 2004/2005. This will double the size of the current department space, improve parking and accessibility for patients, and will be adequate for the increased needs to support the AuD program as well as the speech-language pathology program.

## **SECTION III: NEED**

### *Program Necessity*

The profession of Audiology developed during the post World War II period due to a widespread need for hearing loss diagnosis and rehabilitation among veterans who suffered noise-related hearing loss. During the 1940's and 1950's, audiologists focused on behavioral hearing tests and rehabilitation services such as lip-reading instruction. During the 1940's, the American Speech-Language Hearing Association established the Bachelor's Degree as the entry level degree for Audiology. In 1962, ASHA raised the professional standard to the Master's Degree, reflecting the



increased professional demands and need for training that were placed on audiologists at that time. Early in the history of Audiology, many academic leaders recognized and advocated doctoral training as necessary for adequate preparation of audiologists.

Due to technological advances and expanded scope of practice, the American Speech-Language-Hearing Association mandated in 1997 that the academic equivalent of a doctoral degree be phased in as the entry level requirement for audiologists beginning in the year 2007, with doctoral degrees required by the year 2012. This change came about with the recognition that it has become increasingly difficult to provide adequate academic preparation and clinical experience within the accepted credit limits and time constraints of Master's Degree programs. A clinically competent audiologist must be prepared to work in outpatient and inpatient clinical facilities, rehabilitation centers, private practice, education and industry. The diverse nature of these work settings requires an audiologist to be a diagnostician, hearing conservationist, and a rehabilitationist. In addition to basic and advanced diagnostic testing and intervention procedures, graduate course material must provide a thorough understanding of electronics as it applies to amplification systems and cochlear implants, acoustics as it applies to industrial settings and classrooms, and the law as applied in industrial hearing conservation and the rights of those with hearing loss. Coursework must include anatomy, physiology, pharmacology, genetics and pathology of the auditory and balance mechanisms. Counseling principles and methods of non-medical rehabilitation of hearing loss are also critical. Graduate students must also have more extensive clinical training to complement these expanded academic demands. In recognition of the need for more comprehensive education and clinical experience, accredited programs in Audiology will be required to increase minimum coursework from 30 to 75 graduate semester credits (45 to 112.5 quarter credits) as well a new requirement that the training program supervise a full-time 4<sup>th</sup> year clinical externship. This effectively increases the number of supervised clinical practicum hours that students receive from the present minimum of 375 to approximately 2000 hours by the year 2007.

It must be emphasized that Audiology is a healthcare profession, and as such, the University of Utah is perfectly poised to offer world-class healthcare education and clinical training to students, owing to the relationship with the School of Medicine, the fact that our department is in the College of Health, and the rich availability of on-campus clinical sites and the collaboration we have established with these sites. It must also be emphasized that Audiology education at the University of Utah includes both a research degree at the Ph.D. level, and a professional degree, currently at the Master's Degree level. This model is similar to the College of Pharmacy, which provides both Ph.D. and Doctor of Pharmacy (Pharm.D.) Degrees. The Ph.D. in Audiology is analogous to the research Ph.D. offered in Pharmacy, and the AuD degree is analogous to the Pharm.D. degree. The rationale for the transition to the AuD is exactly the same as the rationale was two years ago for a transition from the baccalaureate degree in Pharmacy to the Pharm.D. Both changes were made as a result of transformations that had occurred in the profession, in the marketplace and by mandated changes in national accreditation standards necessitating that educational institutions develop programs capable of meeting current and future needs for the professions.

The University of Utah has offered graduate education for audiologists since 1956. The program has received continuous accreditation by the Council on Academic Accreditation of the American Speech-Language Hearing Association since its inception. Another Master's Degree program at Utah State University, received approval in May, 2002, to establish an AuD program. At the same

meeting, the Board of Regents was informed that the University of Utah would also be submitting a proposal in 2002-2003 academic year for a similar program upgrade. The third accredited program in Utah, at Brigham Young University, has recently ceased their graduate program in Audiology. Thus, only two audiology training programs rather than three will exist in Utah in the future. The Communication Sciences and Disorders faculty of the University of Utah includes individuals with national and international reputations who have demonstrated a serious commitment to the clinical practice of Audiology and Speech-Language Pathology. The Faculty believe strongly that the Audiology program is crucial to the overall quality of the Department of Communication Sciences and Disorders, and that accreditation standards should be met. In order to fill state and regional needs for audiologists and to maintain the UU mission to educate professionals to serve the needs of individuals with hearing, speech, and language disorders, it is critical that the University of Utah program maintain an accredited Audiology program that is upgraded to an AuD.

### *Labor Market Demand*

Currently there are approximately 14,000 audiologists in the United States. The 2001 Omnibus Survey by the American Speech and Hearing Association (ASHA, 2001) reported that almost 80 percent of audiologists work in healthcare settings (hospitals, physician's clinics, private practice, or other nonresidential health care facilities). From 1999 to 2001, audiologists reported a 74 percent increase in their caseload in high-technology hearing aids, supporting a trend towards increased need for knowledge in this area. They also reported a 27 percent increase in serving patients with cochlear implants, which require high levels of education and training by audiologists who serve this population. The age distribution of clients served by audiologists is concentrated below age 18 years (34% of caseload) and above age 65 (38% of caseload). Thus, there is a need for audiologists to receive specific education and training to serve pediatric and geriatric caseloads.

The 2002 Occupational Outlook Handbook published by the U.S. Department of Labor states that employment of audiologists is expected to *grow much faster than the average* for all occupations through the year 2010 because the growing population in older age groups is prone to medical conditions that result in hearing and speech problems. A number of factors contribute to this increased need for clinical audiologists, including the following:

1. Increased prevalence of hearing loss among the U.S. population and a concomitant increase in the use of hearing aids and other assistive listening devices
2. A significant aging of the overall population, with "baby boomers" reaching ages at which hearing loss becomes prevalent and impedes daily communication
3. An increase in newborn hearing screening programs nationwide (including Utah) coupled with an increase in the need for follow-up audiologic treatment and rehabilitation
4. A significant increase in the use of high technology and implantable devices to provide functional hearing to adults and children with severe to profound deafness
5. Increased emphasis on assessment of neurologically-related auditory processing disorders in school aged children

Hearing impairment is the third most prevalent chronic condition in the U.S. (Audiology Foundation of America, 1996). Consumers of audiology services are people with hearing loss, balance problems, and related conditions. There are an estimated 28 million people in the U.S. today who are affected by hearing loss (American Academy of Audiology, 1996). This number is expected to

increase to over 40 million people during the next 10 to 20 years as our national population continues to age. Based on a 1998 study, Popelka et al. concluded that: "Few older adults with hearing loss are currently utilizing hearing aids. Improved screening and intervention programs to identify older adults who would benefit from amplification are needed to improve hearing-related quality of life for this large segment of the population."

Similar needs exist for audiologists who can provide hearing services to children. Approximately 1.4 percent of the school-aged population has significant hearing loss, and need services of educational audiologists. Only 800 audiologists are currently employed in U.S. schools to serve more than 800,000 children with hearing loss (Johnson, 1999). The Educational Audiology Association estimates that 4,500 more audiologists are currently needed in educational settings alone (Johnson, 1999). The 1999 passage of Federal Legislation to support Universal Infant Hearing Screening will create an even greater need for audiologists as greater numbers of infants will be identified as needing services. Infant hearing screening is mandated in Utah, and since the birth rate in Utah is among the highest in the nation, increasing numbers of audiologists with training in pediatric diagnosis and habilitation are needed. Intervention for children who are identified with hearing loss is recommended by the American Academy of Pediatrics to begin prior to six months of age.

The U.S. Bureau of Labor Statistics has projected an overall growth rate across the U.S. of 39 percent for the occupational category *speech language pathologists and audiologists* between 1998 and 2008. The Western states including Nevada, Idaho, California, Arizona, New Mexico, and Colorado are projected to have much higher growth rates (50%) than the United States overall for speech pathologists and audiologists. There are currently 150 audiologists licensed to practice in Utah (Division of Occupational and professional Licensing, Utah Department of Commerce). The Mountain States within the "catchment area" (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Wyoming) have an additional 755 licensed or registered audiologists. California has 1,033 audiologists, and is included in this analysis because there is only one AuD program in the State of California (San Diego State/UC San Diego). Thus, California is an important market area for Utah.

Estimated growth for audiologists was calculated by assuming that the growth rates are equivalent to speech-language pathologists, and multiplying the current total of audiology jobs by the average growth rate in the Mountain West states and California (Table II). This assumption is reasonable given projected growth in the need for audiology due to increasing elderly population and infant hearing screening programs. There will be 985 projected new positions for audiologists between 1998-2008 for these states. Taking into account new positions plus attrition due to retirements, 134 annual openings are projected in these states each year. Currently, audiology training programs in these states produce only about 72 new graduates eligible for certification as audiologists each year. California will need 567 new audiologists in the 10-year period, or about 77 new audiologists per year with retirements. California Master's Degree programs are currently producing only 28 new audiologists per year. It is apparent that two AuD training programs in Utah will have more than an adequate market demand, especially if California is included in a marketing strategy. Coupled with the mandated upgrade to the equivalent of a doctoral degree for certification in Audiology by the year 2007, the projected need for audiologists places increasing demands on educational and clinical programs to include expanded academic and clinical training. At the present time, the State of Utah has one recently approved AuD program, and there are few

other accredited AuD training programs in the Pacific Northwest, Mountain States or California. The single current AuD program in Utah does not have the training capacity to meet the projected needs in Utah, especially for audiologists trained in medical settings.

*Table II. Western States Occupational Projection 1998-2008.*  
*<http://almis.dws.state.ut.us/occ/projections>*

State	1998 Employment	2008 Projected Employment	Quantity Employment Change	Average Annual Openings	Percent Employment Change
Arizona	164	246	82	11	51
California	1033	1600	567	77	55
Colorado	246	347	101	14	43
Idaho	50	82	32	4	60
Montana	57	69	12	3	29
Nevada	38	57	19	3	63
New Mexico	170	252	82	11	50
Utah*	150	225	75	9	50
Wyoming*	30	45	15	2	50
<b>Total</b>	<b>1938</b>	<b>2923</b>	<b>985</b>	<b>134</b>	<b>50</b>

*Note: Data for audiologists was extrapolated from the occupational category "Speech Pathologists and Audiologists". Audiologists are 12.6% of the total for that category.*

*\* Projections not available for these states. Current licensed audiologists were used as baseline (known data), and then average rates of neighboring states were used for the 10-year projection.*

### ***Student Demand***

Although published data are lacking, telephone contacts with several current AuD programs (USU, San Diego State, University of North Carolina-Chapel Hill, Northwestern University, University of Florida, University of Texas-Dallas) indicated that demand for AuD programs is strong, and that student applications have significantly increased both in number and quality for AuD programs compared to Master's Degree programs.

A survey of Utah audiologists published in 2001 (McCormick and Jenson, 2001) reported that the median length of time that respondents had been in practice was 17 years, ranging from two to 35 years. Eighty-two percent of respondents worked full-time, and 73 percent worked in healthcare settings. The majority of respondents (54%) agreed or strongly agreed that "Utah audiologists who do not eventually obtain an AuD will be hurt by consumer preference and managed care initiatives". Thus, it is apparent that currently practicing audiologists in Utah will also perceive a need to upgrade their degrees to an AuD, and some will enter training programs in the State to do so.

### ***Similar Programs***

At the present time, fifty-one AuD programs have been established and have received accreditation by the American Speech-Language Hearing Association. Most of the programs are in the East and Midwest, with few in the Mountain West or California. These programs are located at the following Universities:

Auburn University – Alabama	Wayne State University – Indiana
University of South Alabama	Western Michigan University
Arizona School of Health Sciences	University of Minnesota
Arizona State University	University of Southern Mississippi
University of Arizona	Southwest Missouri State University
California State University-UC San Diego	Washington University-St. Louis
University of Colorado-Boulder (Ph.D.)	Seton Hall University – New Jersey (D.Sc.)
University of Northern Colorado	University at Buffalo – SUNY
Gallaudet University – Washington, DC	East Carolina University
Nova Southeastern U – Florida	University of North Carolina - Chapel Hill
University of Florida	Northeast Ohio (Kent State/Akron)
University of South Florida	Ohio University
Rush University – Illinois	University of Cincinnati
Northern Illinois University	University of Oklahoma Health Sciences
Northwestern University	Bloomsburg University
Ball State University – Indiana	Pennsylvania College of Optometry
Indiana University	University of Pittsburgh
Purdue University/Indiana University Med Ctr	University of Memphis – Tennessee
University of Iowa	University of Tennessee-Knoxville
University of Kansas/KU Med Ctr	Vanderbilt University
Wichita State University	Texas Tech University
University of Louisville – Kentucky	University of North Texas
Louisiana State Univ Health Sciences Ctr	University of Arizona
Louisiana Tech University	University of Texas – Dallas
Towson University – Maryland	Utah State University
University of Maryland-College Park	James Madison University
Boston University (D.Sc.)	Washington State University
Central Michigan University	University of Wyoming (Ph.D)

***Collaboration with and Impact on Other USHE Institutions***

As discussed in the preceding sections, one other AuD program is currently offered in the state at USU. USU is in support of this proposal to offer an equivalent degree, consistent with the need to upgrade the UU's currently accredited Master's Degree program. A meeting was held at USU in March of 2002 to discuss our mutual proposals. Chairs and faculty of both programs agreed that the best course of action was to submit two proposals since both programs have long traditions of graduate education in Audiology, and the need to transition from the Master's degree to the AuD is based on identical rationale. In their final proposal to the Board of Regents, the proposal from USU stated:

**Collaboration with and Impact on Other USHE Institutions**

USU has been and will continue to be in direct contact with University of Utah counterparts with the intent of establishing and maintaining mutual support and collaboration in development and implementation of an AuD program at each institution. USU acknowledges that the University of Utah is proceeding to make a

similar proposal to the Board of Regents for approval of an AuD Program. USU is fully supportive of the development of an AuD program at the University of Utah (UU) and will assist in whatever way possible, i.e., curriculum development, resource sharing, externship site coordination, etc. USU is anxious to collaborate with UU. As there are few emerging AuD programs in the Western United States, it will be in the best interests of Utah and neighbouring states to have two strong in-state AuD programs."

UU faculty will collaborate with USU faculty to determine ways that the two programs can provide enhanced education and training to students in both programs. For example, USU has expertise in deaf education and educational Audiology that could augment the UU program. The UU has collaboration with the medical school and is planning medically-related specialty courses, such as balance disorders, cochlear implants and grand rounds in Audiology, that could be feasible to provide to USU students via videoconferencing Courses. Some courses could be offered via intensive summer institutes, which would also be attractive for continuing education to professionals in the field. These possibilities and others are attractive ways in which the two programs can collaborate to the benefit of both programs to reduce unnecessary duplication.

### *Benefits*

Establishing the AuD program offers numerous benefits to the Department, the University and the community. The Department will benefit as it will remain a viable, productive hearing science and audiology training program. If the AuD program is not approved and developed, this would result in the loss of the clinical training program in Audiology with a resulting loss of clinic income, student credit hours and differential tuition to the Department and the University. It would also limit the number of audiology students seeking admission to only the USU program, which plans to admit six students per year. As a result, the number of practicing audiologists entering the community and region would be reduced.

### *Consistency with Institutional Mission*

The mission of the University of Utah is to educate the individual and to discover, refine, and disseminate knowledge. As a major teaching and research university, the flagship institution of the Utah state system of higher education, the University of Utah strives to create an academic environment where the highest standards of scholarship and professional practice are observed and where responsibilities to students are conscientiously met. It recognizes the mutual relevance and interdependence of teaching and research as essential components of academic excellence.

## **SECTION IV: PROGRAM AND STUDENT ASSESSMENT**

### *Program Assessment*

**Accreditation:** The program has applied for re-accreditation by the American Speech-language Hearing Association (ASHA), and a site visit will occur in 2004. A "substantive change plan" is in

the process of being submitted to ASHA for the AuD degree in order to allow accreditation of the new program in anticipation of University and Regents' approval.

**National Ranking:** Measures that will be used to assess success of the program will include monitoring the pass rate on the national Praxis exam in audiology, monitoring national rankings, research grant funding and student involvement in publications. Within the first five years of the program, our goals are to improve our ranking into the top 25 programs in the nation, maintain program accreditation by the American Speech-Language Hearing Association, achieve a 95% pass rate by our graduates taking the Audiology Praxis exam, secure an increase in external grant funding that can be used to support students, and increase student and faculty publications as a result of the required research component of the program. In order to ensure responsiveness to and collaboration with community audiology leaders, as well as a high quality and superior educational program, a Community Advisory Panel (Appendix F) has been established to provide external advice and consultation. It is anticipated that the Panel will work closely with faculty and administration in developing the program, and continuously monitoring it once the program has been established. The Panel is composed of distinguished professionals working in private practice, medical settings and government agencies. These audiologists have a commitment to improving the future of the profession and ensuring that educational programs are of high quality. The Advisory Panel will periodically review curriculum and external clinical experiences to ensure the program incorporates knowledge and skills consistent with current best practices of the profession. The quality of the AuD program will be assessed in multiple ways. Accreditation of the program by ASHA will verify that the program is meeting requisite standards. Ability of students to pass the national Praxis exam in audiology will be monitored over time. University-mandated internal and external program reviews of the department will continue to occur.

### *Expected Standards of Performance*

Outcome standards for Audiologists that have been established by ASHA will be used to determine if students are learning the requisite knowledge and demonstrating clinical skills necessary to enter the profession. These standards are outlined in Appendix D. These outcome standards will be covered both by coursework and by practicum experiences. The standards will be used within the practicum evaluation forms submitted by internal and external clinical supervisors. These forms include evaluation of background knowledge and application of this knowledge to specific clinical skill areas using a Likert-type scale that delineates levels of expected performance.

It is expected that students will maintain a B average (3.0 on a 4.0 scale) throughout their program. If more than two "C" grades are obtained in required courses or if the GPA drops below 3.0, the student will be placed on academic probation and may be required to repeat courses that are related to specific clinical practice areas. In addition, the student will be considered "at risk" for practicum work in that same clinical area unless the course is repeated with a grade of B- or higher. Students at risk will be monitored closely to ensure that their clinical skills are practiced in the area at risk. Faculty committees will monitor progress of all students with an evaluation of academic, clinical and research performance during Spring semester of each year. An AuD student review form will be completed by the committee, reviewed with the student by the advisor, and a copy placed in the student's file.

### *Student Assessment*

Both summative and formative assessments will be utilized to evaluate knowledge and skills delineated by ASHA standards for certification in Audiology (see Appendix D). Formative assessments will include course examinations, written assignments, laboratory experiences, and practicum supervisor evaluations. Summative assessments include the written comprehensive examination and oral examination defense, which will be part of the research project. The Student Assessment Committee will provide ongoing evaluation of faculty teaching performance in all courses, and this information will be actively reviewed by the Audiology Program Director and the Department Chair to ensure that teaching standards are high and that teachers are responsive to the needs of students and are committed to high quality standards. Documentation of formative assessments will be maintained by the Department. Formative assessment of students in relation to national standards is provided by the Audiology Praxis exam, a nationally standardized written examination for certification in Audiology. Students will take this exam at the end of their fourth year practicum experience.

### *Continued Quality Improvement*

An Advisory Panel, made up of audiologists from diverse practice settings, has been established and has met once to provide input to the program. The panel members have expressed willingness to assist in program development and continuous quality monitoring. These professionals have all participated for many years in the Master's program by providing clinical practicum experiences. The advisory panel represents all four major training sites (University of Utah Hospital Division of Otolaryngology, Primary Children's Medical Center Audiology, Veteran's Administration Medical Center Audiology, Utah Department of Health) which will be regular rotations for students. The Advisory Panel will meet twice a year to review the program and make recommendations.

In addition, the quality of the training program will be assessed in an ongoing fashion through questionnaires to former students. One year after students have graduated, questionnaires will be sent to them and to their employers to learn what strengths and weaknesses employers note in our graduates and what skills and knowledge students might feel they were lacking in the "real world" workforce. This information will be discussed by the faculty as a whole, and will be used by the Audiology faculty to modify course and practicum content in an ongoing attempt to make the program responsive to the needs of students and employers.

## **SECTION V: FINANCE**

### *Budget*

The budget for the program is detailed in Tables III-V. Table III provides calculations for projected Student Credit Hour (SCH) increases owing to the increased length of the program. The revenue is calculated across the first four years of the program based on current SCH revenue amounts per credit. Table IV includes several sections and also is designed to illustrate the "ramp-up" period of



the first four years of the program. The first section of Table IV shows the projected enrollment across the first four years. The second section of Table IV shows the projected SCH revenue (taken from Table I); the projected differential tuition, based on current tuition rates multiplied by the number of students; projected new clinical revenue produced by the addition of a new clinical supervisor; then subtractions for current SCH and differential tuition revenue. Projected new revenue from differential tuition, student credit hours and clinical revenue totals approximately \$145,000 per year by the fourth year of the program. A line titled **Total New Revenue (New Minus Current Revenue)** gives the new revenue expected in this program to support new expenses. In the third section, "New Expenses", the budget for new faculty requested, new equipment and supplies and new adjunct teaching effort is detailed. There is no request for new support staff, travel or library materials, since the current budget is sufficient from the Master's and Ph.D. programs. There is a need for growth in faculty and staff based upon the new courses and clinical training that is required to meet the new accreditation standards, as well as to compete nationally with current AuD programs. Based on the required curriculum, one new tenure track research/teaching position and one new clinical teaching position to cover additional required teaching and clinical supervision load will be needed. Volunteer effort by community clinicians will be maintained as in the current Master's program. Finally, adjunct teaching will provide a means to supplement the full-time faculty effort for specialty courses.

By the third operational year of the program, new revenue will cover new expenses, if an average of 6 new students per year are enrolled. This is a reasonable number based on data from current Master's Degree program showing an average of 6 students per year through the year 2000 enrolled. Table V gives the total "start-up" request across the first four years of the program, at which point the program is expected to be self-sustaining. The Department of Communication Disorders will fund 1/3 of the start-up from internal funds, the College of Health has agreed to fund 1/3, and the Vice President of Health has agreed to fund 1/3 of the start-up costs.

### *Funding Sources*

As outlined above, funding sources for the program include increased tuition income to the University and Department due to the additional length of the program, from two to four years. Student credit hour allocations also increase due to the higher level of coursework required by the program (Doctoral level as opposed to Master's level). Differential tuition will also be charged at the approved rate. The rationale for differential tuition is to help offset increased expenses to the program for clinical supervision, equipment and supplies. Clinical income will also increase owing to the addition of one new clinical faculty line to supervise student training at the doctoral level. Using a conservative figure of six new students per year entering the program, the ongoing new revenue generated by the program is estimated at \$148,000 per year. The cost of hiring two new faculty positions, one at the tenure track level and one at the clinical faculty level total approximately \$133,000 per year in salary and fringe benefits. We are requesting an equipment and supply budget of \$15,000 per year for the first three years of the program to provide a one-time infusion into the program, and \$10,000 per year thereafter. Total new expenditures budgeted equal anticipated revenue. The Department will market the program throughout the nation, but particularly in the Western states. The marketing strategy will use relatively low-cost but targeted methods, such as e-mail announcements to program directors, brochures to all undergraduate

programs in speech and hearing, website enhancements, and announcements in professional publications. A development and marketing budget was provided by the previous dean, of which \$6,000 is remaining. In summary, financial projections indicate that sufficient new income should result from a conservative estimate of 6 new students per year to offset additional needed faculty lines and equipment.

**Reallocation**

There will be no internal reallocation of existing funds to support the program, other than the modest amount requested for the start-up period.

*Table III. Projected New Revenue Calculation (SCH Worksheet)*

Course Level	Current Credits (M.A.)	Proposed Credits (AuD)
5000	6	0
6000	20	35
7000	26	73
<b>Total credits</b>	<b>52</b>	<b>108</b>

Program Year	2005-06	2006-07	2007-08	2008-09
YR 1 students	6	6	6	6
6000 credits	26	26	26	26
7000 credits	0	0	0	0
YR 2 students	6	6	6	6
6000 credits	9	9	9	9
7000 credits	24	24	24	24
YR 3 students	3	3	6	6
6000 credits	0	0	0	0
7000 credits	22	22	22	22
YR 4 students	0	3	3	6
6000 credits	0	0	0	0
7000 credits	0	27	27	27
6000 Revenue <sup>2</sup>	22050	22050	22050	22050
7000 Revenue <sup>2</sup>	44100	61110	74970	91980
<b>Total Revenue</b>	<b>\$66,150</b>	<b>\$83,160</b>	<b>\$97,020</b>	<b>\$114,030</b>

1: Assumptions: 6 new students entering per year, 50% of current M.S. students transition to 3<sup>rd</sup> year and 4<sup>th</sup> years.

2: Student credit hours for 6000 and 7000 level courses multiplied by the number of students taking courses each year; then multiplied by 6000 level = \$105, 7000 level = \$210



Table IV. Personnel, equipment and supply budget

	AuD Budget				
<i>Students:</i>	2005-06	2006-07	2007-08	2008-09	ongoing
1st year AuD	6	6	6	6	6
2nd year AuD plus M.A. 2nd year	6	6	6	6	6
3rd year AuD	3	3	6	6	6
4th year AuD	0	3	3	6	6
<b>Total Students</b>	<b>15</b>	<b>18</b>	<b>21</b>	<b>24</b>	<b>24</b>
 <i>Revenue:</i>					
SCH Revenue (See SCH worksheet)	66,150	83,160	97,020	114,030	114,030
Differential Tuition	51,780	62,136	72,492	82,848	82,848
New Clinic Revenue (produced by AuD supervisor)	25,000	25,000	25,000	25,000	25,000
<b>Total Revenue</b>	<b>142,930</b>	<b>170,296</b>	<b>194,512</b>	<b>221,878</b>	<b>221,878</b>
Current Differential Tuition	34,520	34,520	34,520	34,520	34,520
Current SCH Revenue	39,300	39,300	39,300	39,300	39,300
<b>Total New Revenue (New Minus Current Revenue)</b>	<b>69,110</b>	<b>96,476</b>	<b>120,692</b>	<b>148,058</b>	<b>148,058</b>
 <i>Expenses:</i>					
New TT faculty (55,000, 33% fringe)	0	73,150	73,150	73,150	73,150
Temporary Adjunct Teaching	15,000	0	0	0	0
New Clinical Instructor (AuD @45,000 and 33% fringe)	59,850	59,850	59,850	59,850	59,850
Equipment/Supplies/Repairs	15,000	15,000	15,000	10,000	10,000
<b>Total New Expenses</b>	<b>89,850</b>	<b>148,000</b>	<b>148,000</b>	<b>143,000</b>	<b>143,000</b>
<b>(deficit) vs. balance</b>	<b>(20,740)</b>	<b>(51,524)</b>	<b>(27,308)</b>	<b>5,058</b>	<b>5,058</b>

*Assumptions:*

Program starts accepting AuD students in Fall 2005  
 6 new AuD students enroll per year  
 50% of current master's students enter AuD program  
 CSD Differential tuition = \$1726 per semester

*Notes:*

*Library: Current budget is sufficient, therefore, no additional funding is requested.*

*Staff: No additional support staff are requested to support the program.*

*Travel: Current department travel budget is sufficient, no additional travel requested.*

*Table V. Start-up Request for AuD Program*

Program Year	2005	2006	2007	2008	Ongoing
Total Students	15	18	21	24	24
Total New Revenue	69,110	96,476	120,692	148,058	148,058
Total New Expenses	89,850	148,000	148,000	143,000	143,000
(deficit) vs. balance	(20,740)	(51,524.00)	(27,308)	5,058	5,058
Start-up Request	21,000	52,000	27,000	0	0
Total over 3 years:			100,000		

### *Impact on Existing Programs*

The current Master's and Ph.D. programs in Audiology will be retained as options for students who prefer an academic training program that will prepare them for careers in research and education. The academic and clinical training are integrally linked and students should have frequent opportunities for interaction. Current experience is that students sometimes opt for a Ph.D. program after having more exposure to research, learning, and discussion with faculty. Course sequence are designed so that a student could switch from the AuD to the Ph.D. program without losing course credits. The Master's Degree program will over time be replaced by the AuD program, but having the Master's option allows students who become unable to complete the entire AuD program to leave with a credential that will enable them to work in a related area to Audiology (such as industry). Thus, while the enrollment in the Master's program will largely switch over to the AuD program, the option for the Master's Degree will be maintained until there is enough information to determine whether it should be discontinued. The Ph.D. program will benefit from the additional faculty hired for the AuD program, as resources will be shared across the two doctoral programs.

## APPENDIX A: CURRICULUM

The curriculum for the AuD in Communication Sciences and Disorders was developed to provide students with a strong foundation for clinical practice. This curriculum includes a core of required courses which follow the guidelines recommended by ASHA and AAA for graduate education and clinical certification in Audiology. The proposed course work meets all of the requirements for the new certification standards set by the American Speech-Language Hearing Association. At the end of their second year of the program, AuD students take comprehensive examinations in the areas of diagnostics, aural rehabilitation, hearing science and amplification to gain acceptance into the third year of study.

### **New Courses to be Added in Next Five Years**

<i>Course Level</i>	<i>Course title</i>	<i>Credits</i>
CMDIS 6xxx	Advanced Anat & Phys Hearing	3
CMDIS 6xxx	Physiologic Audiologic Assessment	3
CMDIS 6xxx	Audiologic Instrumentation	2
CMDIS 6xxx	Adv Aural Hab and Rehabilitation	3
CMDIS 7xxx	Advanced Seminar Amplification	3
CMDIS 7xxx	Seminar Implantable Aud Prostheses	3
CMDIS 7xxx	Interdisciplinary Topics	3
CMDIS 7xxx	Research Project	6
CMDIS 7xxx	Professional Practice Aspects	2
CMDIS 7xxx	Audiology Grand Rounds	2
CMDIS 7xxx	Audiology Traineeship	Variable

## APPENDIX B: PROGRAM SCHEDULE

Course #	Title	Credits	Instructor
<b>Year 1 - Fall</b>			
CMDIS 6510	Behavioral Audiologic Assessment	3	Hunter
CMDIS 7930	Advanced Research Methods	3	Thibeault
CMDIS 6xxx	Advanced Anat & Phys Hearing	3	Hicks
CMDIS 6-7000	Elective	3	Staff
CMDIS 6720	Audiology Apprenticeship	1	Wollenweber
Total credits		13	
CMDIS credits		10	
Other credits		3	
	*Or equivalent statistics course		
<b>Year 1 - Spring</b>			
CMDIS 6610	Principles of Amplification	3	Hicks
CMDIS 6xxx	Physiologic Audiologic Assessment	3	Hunter
CMDIS 5340	American Deaf Community, Culture, Hist	3	Forestal
PT TH 5090	Neuroanatomy	4	Phys Therapy
CMDIS 6720	Audiology Apprenticeship	1	Wollenweber
Total credits		14	
CMDIS credits		10	
Other credits		4	
<b>Year 1 - Summer</b>			
CMDIS 6xxx	Audiologic Instrumentation*	2	New AuD
CMDIS 6720	Audiology Apprenticeship	2	Wollenweber
Total credits		4	
CMDIS credits		4	
Other		0	
<b>Year 2 - Fall</b>			
CMDIS 7850	Seminar Pediatric Audiology	3	Hunter
Ed Ps 6010	Statistics and Res Design	3	Educational Psychology*
CMDIS 7860	Balance Disorders	3	Worthington
CMDIS 7xxx	Advanced Seminar Amplification	3	Nilsson
CMDIS 6xxx	Audiology Internship	2	New AuD/Wollenweber
Total credits		14	
CMDIS credits		14	
Other credits		0	
<b>Year 2 - Spring</b>			
CMDIS 7050	Electrophysiologic Measures	3	Hunter
CMDIS 7xxx	Seminar Implantable Aud Prostheses	3	New PhD

CMDIS 6xxx	Adv Aural Habilitation & Rehabilitation	3	New PhD
CMDIS 6xxx	Audiology Internship	2	New AuD/Wollenweber
CMDIS 7xxx	Research Project	2	Staff
Total credits		13	
CMDIS credits		13	
Other credits		3	
***	Written Comprehensive Exam		
<b>Year 2 - Summer</b>			
CMDIS 7xxx	Professional Practice Aspects	2	New AuD
CMDIS 6xxx	Audiology Externship	2	New AuD/Wollenweber
Total credits		4	
CMDIS credits		4	
Otol credits		0	
<b>Year 3 - Fall</b>			
CMDIS 7420	Psychophysiologic Mech & Acoustics	3	Hicks
CMDIS 7820	Genetics of Comm Disorders*	3	Chapman/Thibeault
CMDIS 7xxx	Audiology Grand Rounds	1	Staff
CMDIS 7720	Audiology Externship	3	New AuD
CMDIS 7xxx	Research Project	2	Staff
Total credits	* or equivalent genetics course	12	
CMDIS credits		12	
Other credits		0	
<b>Year 3 - Spring</b>			
Otol 7xxx	Med Aspects/Temporal Bone Anat	3	Shelton
CMDIS 7xxx	Interdisciplinary Topics in Audiology	3	Mahoney
CMDIS 7xxx	Audiology Grand Rounds	1	Staff
CMDIS 7720	Audiology Externship	3	New AuD
CMDIS 7xxx	Research Project	2	
Total credits		12	
CMDIS credits		9	
Other credits		3	
***	Oral Comprehensive Exam		
<b>Year 3 - Summer</b>			
CMDIS 7xxx	Audiology Traineeship	6	New AuD
<b>Year 4 - Fall</b>			
CMDIS 7xxx	Audiology Traineeship	6	New AuD
<b>Year 4 - Spring</b>			



CMDIS 7xxx	Audiology Traineeship	6	New AuD
Total credits	Overall Program	104.0	

## APPENDIX C: FACULTY

Bruce Smith, Ph.D. (University of Texas), Professor and Department Chair, Speech-Language Pathology, 1201 BEH S, 581-6783. Email: [bruce.smith@hsc.utah.edu](mailto:bruce.smith@hsc.utah.edu)

Michael Blomgren, Ph.D. (University of Connecticut), CCC-SLP, Assistant Professor, Speech-Language Pathology, 1203 BEH S, 585-6152. Email: [michael.blomgren@health.utah.edu](mailto:michael.blomgren@health.utah.edu)

Kathy Chapman, Ph.D. (Purdue University), CCC-SLP, Associate Professor and Director of Graduate Studies, Speech-Language Pathology, 1205 BEH S, 587-9076. Email: [kathy.chapman@health.utah.edu](mailto:kathy.chapman@health.utah.edu)

Larry Forestal, Ph.D. (New York University), Assistant Professor and Director of Sign Language Program. Email: [lawrence.forestal@health.utah.edu](mailto:lawrence.forestal@health.utah.edu)

Michelle Hicks, Ph.D. (Arizona State University), CCC-A, Assistant Professor, Audiology, 1220 BEH S. Email: [michelle.hicks@health.utah.edu](mailto:michelle.hicks@health.utah.edu)

Lisa Hunter, Ph.D. (University of Minnesota), CCC-A, Associate Professor, Audiology, 1221 BEH S. Email: [lisa.hunter@health.utah.edu](mailto:lisa.hunter@health.utah.edu)

Geary McCandless, Ph.D. (Wayne State University), CCC-A, Professor Emeritus, Audiology, 1222 BEH S, 581-6727. Email: [geary.mccandless@health.utah.edu](mailto:geary.mccandless@health.utah.edu)

Sean Redmond, Ph.D. (University of Kansas), CCC-SLP, Assistant Professor, Speech-Language Pathology, 1204 BEH S, 585-6284. Email: [sean.redmond@health.utah.edu](mailto:sean.redmond@health.utah.edu)

Nelson Roy, Ph.D. (University of Wisconsin - Madison), CCC-SLP, Assistant Professor, Speech-Language Pathology, 1219 BEH S, 585-0428. Email: [nelson.roy@health.utah.edu](mailto:nelson.roy@health.utah.edu)

Susan Thibeault, Ph.D. (University of Wisconsin - Madison), CCC-SLP, Research Assistant Professor, Speech-Language Pathology, 1221 BEH S, Email: [susan.thibeault@hsc.utah.edu](mailto:susan.thibeault@hsc.utah.edu).

Julie Wambaugh, Ph.D. (Pennsylvania State University), CCC-SLP, Associate Professor and Director of Undergraduate Studies, Speech-Language Pathology, 1205 BEH S, 585-6164. Email: [julie.wambaugh@health.utah.edu](mailto:julie.wambaugh@health.utah.edu).

Mary Louise Willbrand, Ph.D. (University of Missouri, Columbia), CCC-SLP, Professor, Speech-Language Pathology, 1201 BEH S, 581-6725. Email: [mary.willbrand@health.utah.edu](mailto:mary.willbrand@health.utah.edu)

### **Clinical Faculty:**

Janet Goldstein, M.S. (University of Utah), CCC-SLP, Speech-Language-Audiology Clinic Director, 1310 BEH S, 585-6215. Email: [janet.goldstein@health.utah.edu](mailto:janet.goldstein@health.utah.edu)

Robert Wollenweber, M.S. (Utah State University), CCC-A, Audiology Clinic Coordinator, 1213  
BEH S, 581-3506. Email: [robert.wollenweber@health.utah.edu](mailto:robert.wollenweber@health.utah.edu)

Mary Foye, M.S. (Purdue University), CCC-SLP, Clinic Supervisor.

Cynthia Grzeskowiak Montana, M.A. (Wayne State University), CCC-SLP, Clinic Supervisor.

## APPENDIX D: NEW AUDIOLOGY STANDARDS

### (Updated 11/19/03)

The Council on Professional Standards in Speech-Language Pathology and Audiology (Standards Council) of the American Speech-Language-Hearing Association (ASHA), which was sunset in December 2000, was responsible for developing standards for clinical certification and for monitoring those standards. That is, the Standards Council developed new standards in response to changes in the scope of practice, to protect consumers, and to promote quality services. In January 2001 the Council For Clinical Certification (CFCC) was established and assumed both the standard-setting and implementation functions. After finalization of the standards, the CFCC began the development of the implementation language, which clarifies or interprets the standards.

The Standards Council developed an action plan to identify the "...academic, clinical practicum and other requirements for the acquisition of critical knowledge and skills necessary for entry-level, independent practice of audiology." As a part of that plan, ASHA commissioned the Educational Testing Service to conduct a skills validation study for the profession of audiology.

Following a review of the data provided by the skills validation study, practice-specific literature, feasibility studies and other pertinent information, the Standards Council published proposed standards for widespread peer review in October 1996.

Standards Council considered all comments submitted in response to the call. The Council proposed significant changes and distributed a revised document for widespread peer review in July 1997. The standards were modified on the basis of the second round of peer review and were adopted by the Standards Council in September 1997, to be implemented in 2007.

The 2007 Standards for the Certificate of Clinical Competence in Audiology are intended to make the scope and level of professional education in audiology consistent with the scope of practice of the profession. The standards address the significant discrepancies between the level of preparation and requirements for practice that were identified in the skills validation study.

### *Overview of Standards*

Salient features of the new standards for entry-level practice include the following:

- A. A minimum of 75 semester credit hours of post- baccalaureate study that culminates in a master's, doctoral, or other recognized academic degree. The graduate education in audiology must be initiated and completed in a program accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.
- B. The requirement for a doctoral degree is mandatory for persons who apply for certification after December 31, 2011.

- C. The standards do not stipulate the specific courses or practicum experiences that are required. The applicant will be required to demonstrate that the educational program granting the post-baccalaureate degree assessed the acquisition of knowledge and skills.
- D. Practicum experience that is equivalent to a minimum of 12 months of full-time, supervised experience.
- E. Skills in oral and written communication and demonstrated knowledge of ethical standards, research principles, and current professional and regulatory issues.
- F. A maintenance of certification requirement (Standard VI) that goes into effect on January 1, 2003.

***Standards and Implementations for the Certificate of Clinical Competence in Audiology***

**NOTE:** Standards I-V are effective as of January 1, 2007. Standard VI (Maintenance of Certification requirement) becomes effective on January 1, 2003.)

***Applicants for Initial Certification***

Individuals applying for initial certification before January 1, 2007, may be able to apply under either the 1993 or the 2007 Standards, depending on when they began their graduate program of study. Please refer to the chart below that describes the scenarios and standards under which individuals may apply for certification.

Applicant Began Graduate Program Under Which Standards (1993 or 2007)?	And Completed Program Under Which Standards (1993 or 2007)?	And Applies for Certification When?	Applicant Applies for Certification Under Which Standards (1993 or 2007)?
1. 1993	1993	Before 1/1/07	1993 Standards
2. 1993	1993	After 1/1/07	1993 Standards (through 12/31/07); then 2007 Standards, beginning 1/1/08
3. 1993	After program evaluated by CAA under 2007 Standards	Before 1/1/07	Either 1993 or 2007 Standards (through 12/31/07)
4. 1993	After program evaluated by CAA under 2007 Standards <ul style="list-style-type: none"> <li>• But completed before 1/1/07</li> <li>• But completed after 1/1/07</li> </ul>	After 1/1/07	a. Either 1993 or 2007 Standards (through 12/31/07) b. Either 1993 or 2007 Standards (through 12/31/07)
5. 2007	Before 1/1/07	Before 1/1/07	2007 Standards
6. 2007	Before 1/1/07	After 1/1/07	2007 Standards

**Note:** Applicants who graduate from CAA-accredited doctoral programs and apply for certification under the 1993 standards before December 31, 2007, may request a waiver of the clinical fellowship requirement, based on the equivalent professional clinical experience they received as part of the doctoral program (see scenarios 1-4 above).

### ***Applicants for Reinstatement***

Individuals who were previously certified and who let their certification lapse must meet the 2007 standards if they wish to reinstate certification on or after January 1, 2007.

The Standards for the Certificate of Clinical Competence in Audiology are shown in bold. The implementation guidelines are shown in regular type following each related standard.

### ***Standard I: Degree***

- Applicants for certification must have a minimum of 75 semester credit hours of post-baccalaureate education culminating in a doctoral or other recognized graduate degree. The course of study must address the knowledge and skills pertinent to the field of audiology. This transitional standard will be in effect from January 1, 2007, through January 1, 2012, at which time applicants for certification must have a doctoral degree.

### **Implementation:**

Verification of the graduate degree is required of the applicant before the certificate is awarded. Degree verification is accomplished by submitting (a) an application signed by the director of the graduate program, indicating the degree date, and (b) an official transcript showing that the degree has been awarded. Individuals educated in foreign countries must submit official transcripts and evaluations of their degrees and courses to verify equivalency.

The graduate program director must verify satisfactory achievement of the knowledge and skills requirements.

### ***Standard II: Institution***

- The graduate degree must be granted by a regionally accredited university.

### **Implementation:**

The University must be accredited by one of the following: Commission on Higher Education, Middle States Association of Colleges and Schools; Commission on Institutions of Higher Education, New England Association of Schools and Colleges; Commission on Institutions of Higher Education, North Central Association of Colleges and Schools; Commission on Colleges, Northwest Association of Schools and Colleges; Commission on Colleges, Southern Association of Colleges and Schools; and Accrediting Commission for Senior Colleges and Universities, Western Association of Schools and Colleges.

Individuals educated in foreign countries must submit documentation that course work was completed in an institution of higher education regionally accredited or recognized by the appropriate regulatory authority for that country.

- The graduate education in audiology must be initiated and completed in a program accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.

**Implementation:**

Satisfactory completion of academic course work, clinical practicum, and knowledge and skills requirements must be verified by the signature of the program director or official designee of a CAA- accredited program or a program admitted to CAA candidacy. The graduate education program in audiology must be accredited by the CAA.

**Automatic Approval.** If the graduate education program of study is completed in a CAA- accredited program and if the program director verifies that all knowledge and skills requirements have been met under current standards, approval of the application is automatic, in accordance with the time lines stipulated in the chart above.

**Evaluation Required.** The following categories of applicants must submit a completed application for certification and a completed Knowledge and Skills Acquisition (KASA) form for evaluation by the Council For Clinical Certification (CFCC):

- A. those who apply after the dates stipulated in the chart above
- B. those who were graduate students and who were continuously enrolled in a CAA-program that had its accreditation withdrawn during the applicant's enrollment
- C. those who satisfactorily completed graduate course work, clinical practicum, and knowledge and skills requirements in the area for which certification is sought in a program that held candidacy status for accreditation
- D. those who satisfactorily completed graduate course work, clinical practicum, and knowledge and skills requirements in the area for which certification is sought at a CAA- accredited program but (1) received a graduate degree from a program not accredited by CAA; (2) received a graduate degree in a related area; or (3) received a graduate degree from a non-U.S. institution of higher education.

***Standard III: Program of Study***

- Applicants for certification must complete a program of graduate study (a minimum of 75 semester credit hours) that includes academic course work and a minimum of 12 months' full-time equivalent of supervised clinical practicum sufficient in depth and breadth to achieve the knowledge and skills outcomes stipulated in Standard IV. The supervision

must be provided by individuals who hold the Certificate of Clinical Competence (CCC) in the appropriate area of practice.

**Implementation:**

The program of study must address the knowledge and skills pertinent to the field of audiology. The applicant must maintain documentation of course work demonstrating that the requirements in this standard have been met. The minimum 75 semester credit hours may include credit earned for course work, clinical practicum, research, and/or thesis/dissertation. Verification is accomplished by submitting an official transcript indicating that the minimum credit hours have been completed.

Clinical practicum must be approved by an academic program. The applicant must maintain documentation of time spent in supervised practicum, verified by the program in accordance with Standard IV.

Students shall participate in practicum only after they have had sufficient preparation to qualify for such experience. Students must obtain a variety of clinical practicum experiences in different work settings and with different populations so that the applicant can demonstrate skills across the scope of practice in audiology. Acceptable clinical practicum experience includes clinical and administrative activities directly related to patient care. The aggregate total of clinical experiences should equal 52 work weeks. A week of clinical practicum is defined as a minimum of 35 hours per week in direct patient/client contact, consultation, record keeping, and administrative duties relevant to audiology service delivery. Time spent in clinical practicum experiences should occur throughout the graduate program.

Supervision must be sufficient to ensure the welfare of the patient and the student in accordance with the ASHA Code of Ethics. Supervision of clinical practicum must include direct observation, guidance, and feedback to permit the student to monitor, evaluate, and improve performance and to develop clinical competence. The amount of supervision must also be appropriate to the student's level of training, education, experience, and competence. Supervisors must hold a current CCC in the appropriate area of practice. The supervised activities must be within the scope of practice of audiology to count towards certification.

***Standard IV: Knowledge and Skills Outcomes***

- Applicants for certification must have a foundation of prerequisite knowledge and skills.
- Applicants for certification must have acquired knowledge and developed skills in four areas: foundations of practice, prevention and identification, evaluation, and treatment.

**Implementation:**

The applicant shall assess results that demonstrate acquisition of knowledge and skills delineated in Standards IV-A, IV-B, IV-C, IV-D, and IV-E, respectively. This documentation must be maintained and verified by the program director or official designee and shall be made available upon request.



***Standard IV-A: Prerequisite Knowledge and Skills***

- A1. The applicant must have prerequisite skills in oral and written or other forms of communication.

**Implementation:**

The applicant must demonstrate communication skills sufficient to achieve effective clinical and professional interaction with clients/patients and relevant others. For oral communication, the applicant should demonstrate speech and language skills in English, which, at a minimum, are consistent with ASHA's most current position statement on students and professionals who speak English with accents and nonstandard dialects. For written communication, the applicant must be able to write and comprehend technical reports, diagnostic and treatment reports, treatment plans, and professional correspondence.

Individuals educated in foreign countries must meet the criteria required by the International Commission of Healthcare Professions (IHP) in order to meet this standard.

- A2. The applicant must have prerequisite skills and knowledge of life sciences, physical sciences, behavioral sciences, and mathematics.

**Implementation:**

The applicant must demonstrate through transcript credit (which could include course work, advanced placement, CLEP, or examination of equivalency) knowledge and skills in the areas delineated in this standard. Appropriate course work could include human anatomy and physiology, neuroanatomy and neurophysiology, genetics, physics, inorganic and organic chemistry, psychology, sociology, anthropology, and non-remedial mathematics. The intent of this standard is to require students to have a broad liberal arts and science background, in addition to knowledge of life sciences and physical sciences specifically related to communication sciences and disorders. Therefore, science courses in speech-language pathology may **not** be counted for certification purposes in both this category and the professional areas. In addition to transcript credit, applicants may be required by their graduate program to provide further evidence of meeting this requirement.

***Standard IV-B: Foundations of Practice***

The applicant must have knowledge of:

- B1. Professional codes of ethics and credentialing
- B2. Patient characteristics (e.g., age, demographics, cultural and linguistic diversity, medical history and status, cognitive status, and physical and sensory abilities) and how they relate to clinical services
- B3. Educational, vocational, and social and psychological effects of hearing impairment and their impact on the development of a treatment program
- B4. Anatomy and physiology, pathophysiology and embryology, and development of the auditory and vestibular systems
- B5. Normal development of speech and language

- B6. Phonologic, morphologic, syntactic, and pragmatic aspects of human communication associated with hearing impairment
- B7. Normal processes of speech and language production and perception over the life span
- B8. Normal aspects of auditory physiology and behavior over the life span
- B9. Principles, methods, and applications of psychoacoustics
- B10. Effects of chemical agents on the auditory and vestibular systems.
- B11. Instrumentation and bioelectrical hazards
- B12. Infectious/contagious diseases and universal precautions
- B13. Physical characteristics and measurement of acoustic stimuli
- B14. Physical characteristics and measurement of electric and other nonacoustic stimuli
- B15. Principles and practices of research, including experimental design, statistical methods, and application to clinical populations
- B16. Medical/surgical procedures for treatment of disorders affecting auditory and vestibular systems
- B17. Health care and educational delivery systems
- B18. Ramifications of cultural diversity on professional practice
- B19. Supervisory processes and procedures
- B20. Laws, regulations, policies, and management practices relevant to the profession of audiology
- B21. Manual communication, use of interpreters, and assistive technology

**Implementation:**

The applicant must demonstrate the acquisition of the knowledge referred to in this Standard.

***Standard IV-C: Prevention and Identification***

The applicant must be competent in the prevention and identification of auditory and vestibular disorders. At a minimum, applicants must have the knowledge and skills necessary to:

- C1. Interact effectively with patients, families, other appropriate individuals, and professionals
- C2. Prevent the onset and minimize the development of communication disorders
- C3. Identify individuals at risk for hearing impairment
- C4. Screen individuals for hearing impairment and disability/handicap using clinically appropriate and culturally sensitive screening measures
- C5. Screen individuals for speech and language impairments and other factors affecting communication function using clinically appropriate and culturally sensitive screening measures
- C6. Administer conservation programs designed to reduce the effects of noise exposure and of agents that are toxic to the auditory and vestibular systems

**Implementation:**

The applicant must demonstrate the acquisition of the knowledge and skills referred to in this Standard.

***Standard IV-D: Evaluation***

The applicant must be competent in the evaluation of individuals with suspected disorders of auditory, balance, communication, and related systems. At a minimum, applicants must have the knowledge and skills necessary to:

- D1. Interact effectively with patients, families, other appropriate individuals and professionals
- D2. Evaluate information from appropriate sources to facilitate assessment planning
- D3. Obtain a case history
- D4. Perform an otoscopic examination
- D5. Determine the need for cerumen removal
- D6. Administer clinically appropriate and culturally sensitive assessment measures
- D7. Perform audiologic assessment using physiologic, psychophysical and self-assessment measures
- D8. Perform electrodiagnostic test procedures
- D9. Perform balance system assessment and determine the need for balance rehabilitation
- D10. Perform aural rehabilitation assessment
- D11. Document evaluation procedures and results
- D12. Interpret results of the evaluation to establish type and severity of disorder
- D13. Generate recommendations and referrals resulting from the evaluation process
- D14. Provide counseling to facilitate understanding of the auditory or balance disorder
- D15. Maintain records in a manner consistent with legal and professional standards
- D16. Communicate results and recommendations orally and in writing to the patient and other appropriate individual(s)
- D17. Use instrumentation according to manufacturer's specifications and recommendations
- D18. Determine whether instrumentation is in calibration according to accepted standards

**Implementation:**

The applicant must demonstrate the acquisition of the knowledge and skills referred to in this Standard.

***Standard IV-E: Treatment***

The applicant must be competent in the treatment of individuals with auditory, balance, and related communication disorders. At a minimum, applicants must have the knowledge and skills necessary to:

- E1. Interact effectively with patients, families, other appropriate individuals, and professionals
- E2. Develop and implement treatment plan using appropriate data
- E3. Discuss prognosis and treatment options with appropriate individuals
- E4. Counsel patients, families, and other appropriate individuals

- E5. Develop culturally sensitive and age-appropriate management strategies
- E6. Collaborate with other service providers in case coordination
- E7. Perform hearing aid, assistive listening device, and sensory aid assessment
- E8. Recommend, dispense, and service prosthetic and assistive devices
- E9. Provide hearing aid, assistive listening device, and sensory aid orientation
- E10. Conduct aural rehabilitation
- E11. Monitor and summarize treatment progress and outcomes
- E12. Assess efficacy of interventions for auditory and balance disorders
- E13. Establish treatment admission and discharge criteria
- E14. Serve as an advocate for patients, families, and other appropriate individuals
- E15. Document treatment procedures and results
- E16. Maintain records in a manner consistent with legal and professional standards
- E17. Communicate results, recommendations, and progress to appropriate individual(s)
- E18. Use instrumentation according to manufacturer's specifications and recommendations
- E19. Determine whether instrumentation is in calibration according to accepted standards

**Implementation:**

The applicant must demonstrate the acquisition of the knowledge and skills referred to in this standard.

***Standard V. Assessment***

- Applicants for certification must demonstrate successful achievement of the knowledge and skills delineated in Standard IV by means of both formative and summative assessments.

***Standard V-A: Formative Assessment***

- Applicant must meet the education program's requirements for demonstrating satisfactory performance through ongoing formative assessment of knowledge and skills.

**Implementation:**

Formative assessment yields critical information for monitoring an individual's acquisition of knowledge and skills. Therefore, to ensure that the outcomes stipulated in Standard IV-B, IV-C, IV-D, and IV-E are effectively pursued in a systematic manner, academic and clinical educators must have assessed developing knowledge and skills throughout the applicant's program of graduate study. Applicants may also be part of the process through self-assessment. Applicants and program faculties should use the ongoing assessment to help the applicant achieve requisite knowledge and skills. Thus, assessments should be followed by implementation of strategies for acquisition of knowledge and skills.

The applicant must adhere to the academic program's formative assessment process and will maintain records verifying ongoing formative assessment. The applicant shall make these records available to the Council For Clinical Certification upon its request. Documentation of formative

assessment may take a variety of forms, such as checklists of skills, records of students' progress in clinical skill development, portfolios, and statements of achievement of academic and practicum course objectives, among others.

***Standard V-B: Summative Assessment***

- The applicant must pass the national examination adopted by ASHA for purposes of certification in audiology.

**Implementation:**

Summative assessment is a comprehensive examination of learning outcomes at the culmination of professional preparation. Evidence of a passing score on the ASHA-approved national examination in audiology must be submitted to the ASHA National Office by the testing agency administering the examination.

***Standard VI: Maintenance of Certification (effective January 1, 2003)***

- Demonstration of continued professional development is mandated for maintenance of the Certificate of Clinical Competence in Audiology. This standard will take effect on January 1, 2003. The renewal period will be three years. This standard will apply to all certificate holders, regardless of the date of initial certification.

**Implementation:**

Individuals who hold the Certificate of Clinical Competence (CCC) in Audiology must accumulate 30 contact hours of professional development over the 3-year period in order to meet this standard. At the time of payment of the annual certification fee, individuals holding the CCC in Audiology must acknowledge that they agree to meet this standard. At the conclusion of the renewal period, certified individuals will verify that they have met the requirements of the standard. Individuals will be subject to random review of their professional development activities. If renewal of certification is not accomplished within the 3-year period, certification will lapse. Re-application for certification will be required, and certification standards in effect at the time of re-application must be met.

Continued professional development may be demonstrated through one or more of the following options:

- Accumulation of 3 continuing education units (CEUs) (30 contact hours) from continuing education (CE) providers approved by the American Speech-Language-Hearing Association (ASHA). ASHA CEUs may be earned through group activities (e.g., workshops, conferences), independent study (e.g., course development, research projects, internships, attendance at educational programs offered by non-ASHA CE providers), and self-study (e.g., videotapes, audiotapes, journals); or
- Accumulation of 3 CEUs (30 contact hours) from a provider authorized by the International Association for Continuing Education and Training (IACET); or

- Accumulation of 2 semester hours (3 quarter hours) from a college or university that holds regional accreditation or accreditation from an equivalent nationally recognized or governmental accreditation authority; or
- Accumulation of 30 contact hours from employer-sponsored in-service or other continuing education activities that contribute to professional development.

Professional development is defined as any activity that relates to the science and contemporary practice of audiology, speech-language pathology, and speech/language/hearing sciences and results in the acquisition of new knowledge and skills or the enhancement of current knowledge and skills. Professional development activities should be planned in advance and based on an assessment of knowledge, skills, and competencies of the individual and/or an assessment of knowledge, skills, and competencies required for the independent practice of any area of the professions.

For the first renewal cycle beginning January 1, 2003, applications for renewal will be processed on a staggered basis, determined by initial certification dates. For individuals initially certified before January 1, 1980, professional development activities must be completed between January 1, 2003 and December 31, 2005; for individuals initially certified between January 1, 1980 and December 31, 1989, professional development activities must be completed between January 1, 2004 and December 31, 2006; and for individuals initially certified after January 1, 1990, professional development activities must be completed between January 1, 2005 and December 31, 2007. All individuals will have a three-year period to complete the process for renewal of certification.

**APPENDIX E: LIST OF EXTERNAL PRACTICUM SITES AND SUPERVISORS WITH CURRENT  
CONTRACTS FOR EXTERNSHIPS IN AUDIOLOGY**

**Alta View Ear, Nose and Throat**  
Alan Anderson

Kurt Randall

**Alta View Hospital**  
Robert Baird

**Audiology Associates**  
P.K. Iwamoto, Rex Scott

**Utah State Health Dept., Bureau of  
Communication Disorders**

**Cottonwood Hospital**  
Robert Baird

**Davis County School District**  
Laura Dewsnup

**Granite School District**  
Janene Radley

**Hearing Zone (3 locations)**  
Alan Young  
David Robinson

**IHC Hearing and Balance Center**  
Don Worthington

**Jordan School District**  
Susan Corth  
Susan Hutchins-Baker  
Kathy Olympia

**Jordan Valley Regional Med Ctr**  
Pam Cronin

**LDS Hospital**  
Mike Walker

**McKay-Dee Regional Med Ctr**  
Steve Harward

**Nebo School District**

Alan Gurney  
Candy Brown

**Primary Children's Medical Center**

Nanette Sturgill  
Michael Page

**Provo School District**

Patty Harrington

**Salt Lake Regional Med Ctr**

Stephanie Peart

**Salt Lake School District**

Laurie Redd

**University of Utah Hospital**

Lisa Dahlstrom  
Stacey Butler

**Utah Department of Health - Hearing  
Speech and Vision Services**

**Utah School for the Deaf & Blind**

Christine Reese  
Dale Lisonbee  
Katie Tonkovich

**Utah Valley Regional Med Ctr**

Kelly Dick

**Veteran's Administration Medical Center**

Joe Arnold  
Vera Draper  
Loren Randolph  
Susan Sundstrom

**Weber School District**

Heidi Sullivan



**APPENDIX F: AUD PROGRAM COMMUNITY ADVISORY PANEL**

**Members (listed alphabetically):**

**Richard Harward, M.S.**  
Utah Department of Health  
Hearing, Speech and Vision Services  
44 Medical Drive  
Salt Lake City, UT 84114  
[tmmahoney@utah.gov](mailto:tmmahoney@utah.gov)

**Nanette Sturgill, M.S. CCC-A**  
Primary Children's Medical Center  
Suite 4400  
100 N. Medical Drive  
Salt Lake City, UT 84113  
[pcnnewbe@ihc.com](mailto:pcnnewbe@ihc.com)

**Michael Nilsson, Ph.D.**  
Sonic Innovations  
2795 East Cottonwood Parkway, Suite 660  
Salt Lake City, UT 84121-7036  
[mnilsson@sonici.com](mailto:mnilsson@sonici.com)

**Christine Reese, M.S.**  
Utah School for the Deaf and Blind  
2870 Connor Street  
Salt Lake City, UT 84109  
[christiner@usdb.org](mailto:christiner@usdb.org)

**Clough Shelton, M.D.**  
Division of Otolaryngology, University  
Hospital  
50 North Medical Drive  
Internal: 3C120 - SOM  
Salt Lake City, UT 84132  
[estelle.kirkham@hsc.utah.edu](mailto:estelle.kirkham@hsc.utah.edu)

**Susan Sundstrom, M.S., CCC-A**  
Veterans Healthcare System  
Audiology/Sp Pathology  
500 Foothill Blvd. (112AS)  
Salt Lake City, Utah 84148  
[Susan.Sundstrom@med.va.gov](mailto:Susan.Sundstrom@med.va.gov)

**Don Worthington, Ph.D.**  
IHC Hearing and Balance Center  
230 South 500 East Suite 150  
Salt Lake City, UT 84102  
[hbdworth@ihc.com](mailto:hbdworth@ihc.com)

## APPENDIX G. EXTERNAL CONSULTANT REPORT

### Review of Proposed Doctor of Audiology (AuD) Degree Program Department of Communication Disorders College of Health, University of Utah, Salt Lake City, UT

**Reviewer:**

Jackson Roush, Ph.D.  
Professor and Director  
Division of Speech and Hearing Sciences  
The University of North Carolina School of Medicine  
Chapel Hill, NC 27599  
Telephone: 919 966 9467  
Email: jroush@med.unc.edu

#### *Introduction*

This report is based on a site visit, April 28-30, 2002, and a draft document describing the proposed AuD program. The site visit included meetings with faculty from the Department of Communication Disorders (DCD) and with representatives from the local academic/professional community that included Dr. Steven Gray and Dr. Clough Shelton of the Department of Otolaryngology; Dr. Don Worthington of the IHC Hearing and Balance Center; Dr. Thomas Mahoney, Director of the Communication Disorders Program at the Utah Department of Health; Ms. Nan Newberg, Director of Audiology Services, Primary Children's Medical Center; and Ms. Susan Sundstrom, Director of Speech Pathology and Audiology Services at the Salt Lake Veteran's Administration Medical Center. I also met with several current first and second-year audiology graduate students. Everyone I met was well informed, interested in the process, and forthright in their responses to questions.

The proposal to replace the master's degree with a professional doctorate comes in response to changes in certification and accreditation standards set forth by the American Speech-Language-Hearing Association (ASHA) and the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA). In 1997, the Council on Professional Standards of ASHA finalized new standards for obtaining the Certificate of Clinical Competence in Audiology (CCCA). Beginning in 2007, applicants for the CCCA must complete a minimum of 75 semester credit hours of post-baccalaureate study culminating in a doctoral or equivalent academic degree. On January 1, 2012, a doctoral degree will be required for those who apply for clinical certification in audiology (audiologists already licensed/certified will not be required to earn a doctoral degree). Although the specific degree designator is unspecified, the AuD is widely recognized as the preferred credential for students seeking a career in clinical practice. This change is the culmination of several years of investigation that began with a skills validation study and ended with extensive peer review. Audiology programs not offering a doctoral degree by 2012 will no longer qualify for accreditation; however, the transition will occur earlier since there will be little demand for master's programs as the deadline approaches and as new AuD programs become available.

### *Strengths of the Proposed Program*

There is excellent potential for a strong and mutually beneficial collaborative relationship with the University of Utah Medical Center and Department of Otolaryngology. The university hospital serves a large and diverse patient population. The University Hospital and Primary Children's Medical Centers together employ nine audiologists qualified to serve as clinical supervisors. There is great potential for collaboration in teaching and research. Dr. Clough Shelton, a nationally recognized otoneurologist, expressed strong interest in supporting the development of a first-rate academically oriented audiology program. Furthermore, he has expressed willingness to collaborate in both research and clinical endeavors. The recent development of a DCD-based intervention program for children with cochlear implants is a good example of a mutually beneficial clinical program. Collaborative faculty research projects currently planned or underway include submission of an NIH application in the area of otitis media, a doctoral thesis in cochlear implants, a current NIH grant in cleft palate directed by Dr. Kathy Chapman, and several projects related to voice disorders under the direction of Drs. Steven Gray, Nelson Roy and Susan Thibeault. Dr. Gray, an otolaryngologist and clinical researcher, noted the importance of audiology at UU goes beyond the new degree program per se, and includes the need for a strong academic base relevant to the advancement of clinical research in hearing loss.

***The Department has recently added an outstanding new faculty member in audiology with experience in research and clinical practice.***

Dr. Lisa Hunter, who joined the faculty in January, 2002, brings expertise in research and clinical teaching. Although she has not previously been involved in audiology graduate education she has quickly identified the issues critical to a successful degree program. Moreover, Dr. Hunter has already forged supportive relationships with several key individuals on campus and in the region. Her eight-year history as a faculty member in Otolaryngology at the University of Minnesota, with expertise in pediatric audiology and otitis media, brings new opportunities for collaboration with the Department of Otolaryngology and with other centers including University Hospital, Primary Children's and the VA Medical Center.

In addition to the collaborators noted above there are several outstanding researchers on campus and two audiology faculty at Brigham Young University who have expressed willingness to assist with the AuD program.

- Rick Rabbit, Ph.D., Associate Professor of Bioengineering and Neuroscience Program. Dr. Rabbitt's work focuses on mechanisms of hearing and balance in vertebrates, and on electrophysiology and brain mapping studies. His interests are relevant to the AuD program; he has reportedly expressed interest in providing lectures within inter-disciplinary courses.
- Tom Parks, Ph.D., George and Lorna Wilder Professor of Neuroscience. Dr. Park's main interest is in developmental neurobiology with a current focus on developmental changes in structure and function of auditory neurons. His interests are relevant to the AuD program, he has reportedly expressed interest in providing lectures within inter-disciplinary courses.

- David McPherson, Ph.D. and Richard Harris, Ph.D., Department of Communication Disorders, Brigham Young University, are also valuable resources. Dr. McPherson has expressed interest in teaching for the CDC. His research interests are in electrophysiology of the human auditory system. Dr. Harris' areas of expertise are hearing aids and hearing science, both of which would be valuable to the AuD curriculum.

***The facilities of the Behavioral Sciences Building are suitable for clinical teaching and laboratory experiences in conjunction with academic coursework.***

Although there is a need for new instrumentation, dedicated space is available for clinical teaching activities in the Behavioral Sciences Building. Also, the DCD has convenient access to a well-equipped lecture hall and various sized classrooms offering up-to-date classroom technology and web-based instruction. Unfortunately, the Behavioral Science Building is not well suited for clinical service. Faculty, students, and community professionals have all emphasized the need for new clinical space. Additionally, there is inadequate space for students to store needed materials and to work at desks or carrels, as detailed in the most recent external review.

***The campus and SLC region has a variety of excellent practicum sites potentially available to AuD students in the second, third, and fourth years.***

University Hospital  
Primary Children's Medical Center  
Veteran's Administration Medical Center  
Utah Department of Health  
IHC Hearing and Balance Center  
Jordan Schools  
Salt Lake Schools  
Utah School for the Deaf  
Salt Lake Regional Hospital  
Miscellaneous private facilities in Salt Lake area  
Miscellaneous private facilities in Provo area

It is important to emphasize that all of the first year students, and some of the second year students will require placement in the department's clinical facility. All of the 3<sup>rd</sup> year students, and some of the fourth year students will be placed in the above sites. Thus, at any one time, if the program admits 6-8 students per year, all of the 3<sup>rd</sup> year students and a few 2<sup>nd</sup> and 4<sup>th</sup> year students will have space to accommodate their needs in the Salt Lake and Provo area without the need to travel to distant sites. Some 4<sup>th</sup> year students will need to find full-time placements outside the immediate area, but this is a common scenario among AuD programs and one that is viewed favorably by many students. There are few if any universities in the mountain states region with stronger or more diverse placements on campus and in their surrounding areas.

***The proposed program has the enthusiastic support of University administrators and SLP faculty.***

Dr. John Dunn, Dean of the College of Health Sciences, understands the issues relevant to graduate education in audiology and appears fully committed to building an excellent program. The Chair of CDC, Dr. Mary Louise Willbrand, is also strongly committed to preserving audiology within

the Department and has given a considerable amount of time, energy, and resources to that end. In my meeting with speech pathology faculty I sensed a strong desire to retain audiology within the Department and to develop a program of excellence. The new CDC chair, Dr. Bruce Smith, was not on campus during my visit, but he has reportedly been briefed on the AuD proposal by Drs. Dunn and Willbrand.

### *Concerns*

#### *Faculty resources are insufficient.*

Graduate education in audiology is time consuming and labor intensive. The breadth of topic areas now within the audiology scope of practice requires a relatively large and diverse faculty with complementary areas of expertise. Furthermore, the UU plan calls for scholarly research activities beyond those required of the clinical program including the possibility of a Ph.D. or joint AuD / Ph.D. program. Although the projected enrollment of 6-8 AuD students per year is modest, faculty resources are clearly insufficient for a program capable of achieving the goals set forth by Dr. Hunter and colleagues.

#### *Department clinical facilities in the Behavioral Sciences Building are poorly suited for clinical services.*

As noted above, departmental facilities are well suited for teaching labs and clinical simulations but are inadequate and inappropriate for student practicum and delivery of clinical services to the public. The amount of space is severely limited, in need of repairs, and poorly configured for clinical use. These issues were detailed by previous site visitors and this reviewer fully agrees with their assessment and recommendations regarding the needs of the audiology program. The Department-based clinical facilities are not unlike many that were created in the 1970's as graduate programs in speech pathology and audiology were established. But contemporary audiology education requires facilities that can serve as a model for delivery of comprehensive clinical services. Graduate students in an institution of UU's caliber expect facilities that are not only well equipped but functional and well suited for clinical practice. Not surprisingly, current students expressed disappointment in clinical opportunities available through the DCD. The AuD program, if approved, would have 12-16 students total requiring local/regional practicum opportunities. The first two semesters (at least) require a clinical setting geared specifically to the educational needs of entry-level students. It is difficult, if not impossible, to provide these educational experiences without clinical facilities designed by and under the administrative control of Departmental faculty and staff.

### *Other Considerations*

#### *Adequacy of Proposed Curriculum*

The proposed curriculum is comprehensive and covers most of the coursework required by the new ASHA/CAA accreditation standards. There are, however, some areas that need careful examination to ensure coverage of all required content areas. Also, there does not appear to be a specific plan for assessing student performance. Formative and summative evaluations are required by the new standards for graduate students beginning in the fall semester, 2003. If the AuD program is approved it will need to develop appropriate instruments (or adapt existing instruments) for compliance with the new standards.

### ***Adequacy of Current Faculty***

As noted above, faculty resources are insufficient. Two tenure track faculty (Alvord and Hunter) and one clinical faculty member (Wollenwebber) are insufficient even for the current master's program. Comments from students and area professionals were mixed. Students were uniformly positive in their assessment of Dr. Hunter noting that she brings clinical experience, skillful classroom teaching, and a supportive attitude. Students described Mr. Wollenwebber as an excellent clinician, dedicated to students and patients. But they reported that he is challenged by inadequacy of departmental clinical facilities and lack of support staff to cover even the modest number of patients currently seen there. Dr. Alvord was described by students as a considerate person; however, concerns were noted regarding lack of preparation, questionable expertise in some areas of teaching, lack of enthusiasm regarding student research interests, and competing priorities related to off-campus clinical practice. They noted, however, that when Dr. Alvord was available for clinical instruction he was perceived as an effective clinician and practicum supervisor.

Representatives from the campus and local professional community were candid in their assessment of UU audiology faculty noting that several outstanding individuals had been associated with the program. But it was noted that in recent years faculty availability and expertise had dwindled to a point where the quality and reputation of the program were in serious question. Moreover, prior to Dr. Hunter's arrival there was apparently little interaction between UU faculty and the academic/professional community. Consequently, several of the local clinical programs developed cooperative relationships with other universities. Although these outside relationships have been positive, the program representatives I met conveyed a strong desire to see the University succeed in its efforts to rebuild an outstanding audiology program.

### ***Need for the Proposed Program***

It is difficult to predict long-term demand for audiologists, particularly in view of future changes in certification standards. Recent reports in the literature predict both an undersupply and oversupply of audiologists. The situation in Utah is somewhat unique, since most of the new AuD programs are in the eastern U.S. Utah State University has reportedly been authorized to establish a new AuD program; however, the Brigham Young audiology program has been discontinued. All things considered, the need for a strong academically oriented and medically based audiology program in the mountain states region appears strong.

### ***Student Demand***

Across the U.S. some AuD program directors have reported a drop in applications to AuD programs in the past 1-2 years; however, this has not been our experience in North Carolina. The new AuD program at UNC Chapel Hill, scheduled to begin in fall, 2002, received approximately 70 applications for 10 openings. This is a larger number of applications than we ever received for our M.S. audiology program (which was discontinued this year). Moreover, the quality of the applications was very high. Most of the AuD programs in the U.S. are anticipating relatively small enrollments ranging from 6-12 students per year. At this time there are few AuD programs in mountain states and only one proposed in California (San Diego State University). Assuming the DCD audiology program can build a strong reputation of excellence, these facts, combined with the popularity of Salt Lake City, bode well for student demand.

### ***Master's-to-Doctoral Degree Program***

Little detail was provided regarding the curriculum and program of instruction for experienced (master's-level) professionals who wish to pursue the AuD through UU. The projected demand seems modest considering the number of master's-level audiologists in the state. Although the University will have more freedom in curriculum design (since these individuals already hold licensure/certification) additional planning is needed for this aspect of the program.

### ***Continuation of the Ph.D. in Audiology***

Until the AuD is firmly established priority must be given to the clinical (AuD) program. There is, however, an urgent need to prepare researchers and educators for careers in academia. Several professional organizations have raised serious concerns regarding the anticipated shortage of Ph.D.s to fill academic positions in the next 5-10 years. Ph.D. and AuD programs, drawing on the many resources of the University and academic community, could be complementary and mutually beneficial. Although only a few Ph.D. students could be accommodated, retaining the Ph.D. track would help recruit and retain top faculty while advancing the scientific missions of the Department and College of Health Sciences. Furthermore, because most Ph.D. students are already licensed and certified audiologists they can assist with teaching and clinical supervision. Once the AuD is implemented, UU would be ideally suited to offer a combined AuD/Ph.D. for those students who wish to combine clinical education with a more traditional program of research.

### ***Recommendations***

#### ***1. A minimum of two new full-time faculty positions should be added to the current DCD audiology faculty.***

The best course of action, in my opinion, would be to pursue one tenure-track Ph.D. position at the level of associate or full professor. This person could help build the scholarly research base and engage in collaboration with other investigators on campus. The other new faculty position would logically be a full-time faculty member with an AuD (or PhD with clinical experience), capable of providing expertise in clinical teaching and clinical program development.

In addition to the establishment of new positions the University should evaluate current faculty to determine if they are optimally deployed with regard to expertise and departmental needs. Given the many challenges of developing a first-rate audiology program, it is imperative that each faculty member contribute fully to the educational and scholarly missions of the program.

#### ***2. Clinical facilities must be identified elsewhere on campus or in an off-campus setting for comprehensive first and second year clinical education of AuD students.***

This is imperative for clinical education. Although there are several clinical programs on campus, they require students to arrive with basic proficiencies. Furthermore, these facilities can accommodate only a few students at a time. Considering the potential for income from hearing aid dispensing, a self-supportive program should be possible, especially if space can be provided in a setting that allows shared overhead.

***3. There is an urgent need for a one-time investment in new equipment pertinent to hearing aids and diagnostic audiology, with an annual recurring budget for equipment maintenance and periodic renewal.***

Appropriate and up-to-date instrumentation is essential not only for delivery of clinical services but for laboratory instruction and clinical simulations. New equipment is especially needed for hearing aid selection/fitting/analysis and for diagnostic audiology procedures.

***4. DCD should encourage the participation of representatives from key regional practicum sites in long-range planning.***

An AuD Advisory Board, as proposed in the draft document, is a good idea. Local professionals expressed a desire to see a nationally ranked audiology program and they appear willing to assist in this effort. But they want to be convinced that the program is committed to excellence. The Advisory Board could be effective in rebuilding loyalty to the Department and to assist with reclaiming practicum opportunities now being occupied by students from other universities. The Board could also strengthen relationships needed to gain access to patient populations for clinical research.

***5. The proposed curriculum should be carefully reviewed to ensure compliance with required "Knowledge and Skill Outcomes," as set forth in Standard IV, CCCA.***

In addition to curriculum content the review should include plans for formative and summative assessments.

***6. Admission requirements and clinical evaluation of advanced standing students needs further elaboration and description.***

There is need for clarification regarding the minimum number of credit hours required for advanced standing (master's-to-doctoral) AuD students and how decisions will be made regarding admission and programs of study. It may be advisable to defer this component until the bachelor's entry-level program is fully implemented.

***7. The Ph.D. track in Audiology should be retained.***

Once the AuD is implemented the Department should be able to accommodate several Ph.D. students in audiology. These students, whose professional goals are distinctly different from those of the typical AuD student, would bring clinical experience combined with a variety of academic and research interests. Considering the number of faculty positions anticipated in the coming years, demand for such a program at UU should be strong. In addition to student support from faculty grants, a revitalized audiology program at UU would be in a good position to seek extramural funding for a doctoral leadership training grant through the U.S. Department of Education.

***Final Comment***

There is great potential for an exemplary AuD program at the University of Utah. I was impressed by the willingness of local and regional institutions to collaborate and I was gratified by the enthusiastic support of university administrators at all levels. I commend the University for investing the time and effort needed to consider this new degree program. With additional faculty resources, expansion of Departmental clinical facilities, purchase of new instrumentation, and



attention to specific details regarding curriculum and instruction, the University of Utah would be well positioned to offer a unique and distinctive AuD program, consistent with the missions of a world-class university and medical center.

Respectfully Submitted,

---

Jackson Roush, Ph.D.  
June 25, 2002

## REFERENCES

American Speech-Language Hearing Association (2000). Incidence and prevalence of hearing loss and hearing aid use in the United States. *Communication Facts, 1-2*. Rockville, MD: American Speech-Language and Hearing Association.

American Speech-Language Hearing Association (2001). Omnibus Survey, ASHA leader.

Audiology Foundation of America (1996). Wanted: audiologists and lots of them. *Torchbearer, 2*, Summer.

Best Graduate Schools, Health Specialties: Audiology (2001) U.S. News.com  
<http://www.usnews.com/usnews/edu/beyond/gradrank/gbaudio.htm>.

Council on Graduate Program in Communication Sciences and Disorders (1999). Survey on Undergraduate and Graduate Programs in the United States. Retrieved March 12, 2000 from [http://www.cgpcsd.org /](http://www.cgpcsd.org/)

Johnson, C. D., (1999) Putting the "education" in audiology: How are we doing? *Educational Audiology Review, 16: 4*, 32-35.

**9.2.2. Signature Page to Accompany Proposals Requiring Board Approval.** This signature page, with all appropriate signatures included, should be sent to the Commissioner's Office and kept on file at the proposing institution.

Institution Submitting Proposal: **University of Utah**

College, School or Division in Which Program Will Be Located: **College of Health**

Department(s) or Area(s) in Which Program Will Be Located: **Communication Sciences and Disorders**

Program Title: **Doctor of Audiology Program**

Recommended Classification of Instructional Programs (CIP) Code: **\_\_ \_\_ . \_\_ \_\_ \_\_ \_\_**

Area(s) of Emphasis or Academic Specialty: **Audiology**

Certificate, Diploma and/or Degree(s) to be Awarded: **AuD (Doctor of Audiology)**

Proposed Beginning Date: **August, 2005 (Fall Semester)**

**Institutional Signatures** (as appropriate):

Department Chair	Dean, College of Health
Applied Technology Director	Graduate School Dean
Chief Academic Officer	President
Date	

**MEMORANDUM**

May, 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: **Utah State University – Request to Offer a Doctorate of Theory and Practice of Professional Communication – Action Item**

*Issue*

Officials from Utah State University (USU) request to offer a Ph.D. degree program in Theory and Practice of Professional Communication (TPPC). USU prepared this proposal prior to the moratorium and, consequently, had to delay its presentation to the Regents. However, on April 5, 2004 the Program Review Committee approved USU's Letter of Intent.

*Background*

The primary purpose of the proposed TPPC program is to prepare college-level instructors and researchers for English departments. These instructors and researchers would be specialists in professional communication. The proposed Ph.D. degree program is a natural outgrowth of the Utah State University English Department's 20-year history of working with the relationship of writing and technology in the academy and the workplace. Its purpose is to address burgeoning demand for researchers and teachers within the field of English and in appropriate areas of the contemporary workplace.

The proposed program is designed to fill a growing demand in higher education institutions for Ph.D.-credentialed instructors and researchers in professional communication. Specifically, English departments in colleges and universities are expanding course offerings and programs in the interrelated sub-areas of professional communication, such as technical communication, business communication, scientific communication, professional writing, and online communication, and are seeking qualified applicants from English department Ph.D. programs.

The proposed TPPC Ph.D. program addresses employment needs in academic and corporate organizations across the nation. The two areas in which the proposed program concentrates its efforts are: (1) workplace communication-focused research and (2) professional communication and writing education in online environments. Faculty expect to attract students from within the region and around the country.

USU officials state that internal reallocation precludes the need for new funding to begin and continue the proposed program. In addition, all interested and qualified students who enter the program will be offered teaching assignments. The Department of English would use these students in lieu of term lecturers who are hired each year, thereby offering graduate student support and reducing the costs of term lecturers. The full budget explanation is in the attachment.

*Policy Issues*

There were no concerns raised by the other USHE institutions.

*Options Considered*

After the Regents have reviewed the proposal from Utah State University to offer a Ph.D. degree in Theory and Practice of Professional Communication, they may raise issues, request additional information, deny the proposal, or approve it during the April meeting.

*Commissioner's Recommendation*

It is the recommendation of the Commissioner that the Regents review the request from Utah State University to offer a Ph.D. degree in the Theory and Practice of Professional Communication and, if satisfied, approve the program beginning Fall, 2005.

REK/PCS  
Attachment

---

Richard E. Kendell, Commissioner

**ACADEMIC, APPLIED TECHNOLOGY AND STUDENT SUCCESS COMMITTEE**

**ACTION ITEM**

*Request to Offer a Ph.D. Degree in the Theory and Practice of Professional Communication*

Utah State University

Prepared for  
Richard E. Kendell  
by  
Phyllis C. Safman

May 26, 2004

REK/PCS  
Attachment

## SECTION I: THE REQUEST

Utah State University requests approval to offer a Ph.D. in Theory and Practice of Professional Communication (TPPC), effective Fall 2005. This program was approved by the institutional Board of Trustees on February 25, 2002.

## SECTION II: PROGRAM DESCRIPTION

### *Complete Program Description*

The Theory & Practice of Professional Communication (TPPC) degree is designed to meet the interests and needs of students throughout the state, nation, and world who aspire to conduct advanced study of and research into the communicative practices of workplaces and the professions. Specifically, the program is designed for preparing Ph.D.s to conduct such research and teach related courses within departments of English. For a brief overview of such programs and their distinct identity within the contemporary academy (e.g., their disciplinary separation from departments of journalism, speech communication, mass communication, and communication design), see Appendix E.

This Ph.D. degree is a natural outgrowth of the Utah State University English Department's 20-year history of working with the relationship of writing and technology in the academy and the workplace. It is a degree program initiated to address burgeoning demand for researchers and teachers within the field of English and in appropriate areas of the contemporary workplace.

Students with a master's degree pursue this doctoral degree in order to become academic instructors/researchers in English departments or to move into high-level positions in the workplace (administrative or research). Within higher education, the demand for Ph.D.-credentialed individuals in English departments has outpaced the number of available applicants since the mid-1990s. In 2001, for example, English departments are advertising more than 90 positions that graduates of this Utah State University doctoral program would be qualified to fill. The number of qualified Ph.D.s graduating nationwide this year, however, is estimated to be only 30. Outside higher education, Ph.D.s in this area, from English departments, have routinely been able to secure jobs as consultants, corporate researchers, and communication specialists.

Graduates with the proposed degree will be qualified to compete for the growing number of English department faculty positions within higher education, such as those listed every year in the *MLA Job Information List*. In particular, graduates will be qualified for teaching positions in English departments that Ph.D. candidates from other disciplinary backgrounds do not typically seek and are seldom qualified to fill. A 2001 study (Cook, Thralls, and Zachry) of placement trends for doctoral students in this field coming out of English departments demonstrates that such Ph.D.s are also successful in finding professional positions in non-academic settings, including Fortune 500 companies, such as IBM, and consulting firms.

The TPPC program extends Utah State's accomplishments in two areas by offering a unique Ph.D. program that addresses employment needs in academic and corporate organizations across the nation. The two areas in which this program concentrates its efforts are (1) workplace communication-focused research and (2) professional communication and writing education in online environments. With strong faculty expertise and the growing research facilities/opportunities available in these areas at Utah State, the

University offers a Ph.D. degree that will attract students from within the region and, given the limited number of programs with such expertise, from around the country.

Students in the program complete a minimum of 60 approved semester credits in addition to a master's degree. (Coursework used to fulfill the requirements of a master's degree may not be used to complete the requirements for this Ph.D. program.) These credit hours include a minimum of 33 credit hours in the required 7000-level *core courses*:

Engl 7000	Advanced Research Methods (3 credits)
Engl 7440	Advanced Seminar in Culture & Professional Communication (3 credits)
Engl 7480	Advanced Seminar in Technology & Writing (3 credits)
Engl 7860	Teaching Technical Writing (3 credits)
Engl 7890	Advanced Seminar in the Theory & Practice of Written Communication (3 credits)
Engl 7900	Research Internship (6 credits)
Engl 7970	Dissertation Research (minimum of 12 credits)

Remaining credit hours are selected by individual Ph.D. students and approved by their supervisory committees for inclusion on their programs of study. To fulfill these requirements, students (with approval from their supervisory committees) select courses from two categories to complement their research, teaching, and career objectives. The first category is a list of 7000-level graduate courses offered by the Department of English. The second category includes graduate-level courses offered outside the Department of English. Students may take up to 18 credit hours from this second category with written approval from their supervisory committees.

All 7000-level core courses in the doctoral program are offered solely on the campus of Utah State while students are in residency. (A minimum of three consecutive semesters in residency is required by the USU School of Graduate Studies, with a minimum of two semesters to be completed before enrollment for dissertation credits.) With approval from their supervisory committees, students may complete up to 12 credit hours of their additional 7000-level coursework requirements via the English Department's existing online graduate degree programs. Online and on-campus classes are all assessed using University instruments to ensure the quality of student learning and instructional practices throughout the degree program.

Ph.D. students are offered department-funded Graduate Instructorship positions with required preparatory coursework in teaching professional communication and with mandatory faculty supervision. Upon completing departmental requirements, these Ph.D. students will be eligible to teach undergraduate courses, including Introduction to Professional Writing, and Professional Writing Technologies. These monitored teaching opportunities are a valuable part of the preparation of Ph.D. students who plan to enter the field of teaching in higher education upon completing their degrees. Ph.D. students also have the opportunity to participate in funded research projects associated with the program and its faculty, including projects associated with The Usability Research and Evaluation Laboratory, and The 3GB Technologies Group. These research entities, all of which are engaged in projects that extend beyond the State of Utah, will enhance Ph.D. research at Utah State and recruitment of the best potential students for the program.

Since 1992, the Department of English has dedicated resources to creating an infrastructure to support this proposed degree (see Appendix C). During this time, the Department has hired seven tenure-track specialists in professional communication and an additional six tenure-track faculty members who



specialize in complementary areas (e.g., writing theory). The Department's most recent hires in this area include a senior-level researcher in professional communication with experience in the development and administration of one of the most successful Ph.D. programs in this area (Iowa State University).

The English Department faculty who will teach in the proposed program have published in all of the leading professional communication journals, which define this area of study:

- *Business Communication Quarterly*
- *IEEE Transactions on Professional Communication*
- *Journal of Business Communication*
- *Journal of Business and Technical Communication*
- *Journal of Computer Documentation*
- *Journal of Technical Writing and Communication*
- *Technical Communication*
- *Technical Communication Quarterly*
- *Text and Technology*

In 2003, after a competitive selection process, Utah State University became the institutional home of one of the oldest and most widely cited international research journals in this field, *Technical Communication Quarterly*, establishing the institution as a research leader in this area.

In addition, Utah State English Department faculty members also serve as contributing editors or editorial board members for four more of these journals. Department faculty publications have appeared in monographs and in prominent national research journals that routinely publish articles related to the field of professional communication (e.g., *Rhetoric Review*, *JAC: A Journal of Composition Theory*, and *WPA: Writing Program Administration*). During the 1990s, faculty from the Utah State Department of English served as editors-in-chief for three of the journals above.

With this publication history and with the related positions that participating faculty hold in this field's national organizations (e.g., The Council of Programs in Technical and Scientific Communication, The International Association for Business Communication Research Committee, The Association for Teachers of Technical Writing Research Committee), English Department faculty at Utah State have a high profile and influential presence in the field of professional communication that extends beyond the state and region.

### *Purpose of Degree*

The primary purpose of the proposed program is to prepare college-level instructors and researchers for English departments. These instructors and researchers will be specialists in professional communication as it is defined by the scope of research in the field's journals listed above and by the Ph.D.-granting institutions in the field (see Appendix E). Graduates of this program will be able to compete successfully with those of existing programs (e.g., University of Minnesota, Carnegie Mellon University, Iowa State University, Rensselaer Polytechnic Institute, and Purdue University) for the growing number of academic positions in this area. Graduates of the program may also elect to use this degree to find a position in the professional workplace, though this is anticipated to represent a small percentage of the total Ph.D. population.

### ***Admission Requirements***

Applicants for admission to the TPPC program must have a master's degree in a subject area that will complement their professional reason(s) for earning a Ph.D. in Theory and Practice of Professional Communication. Students entering the doctoral program must complete 6000-level prerequisites in theory (Engl 6410) and portfolio (Engl 6490) if they have not done so prior to entering the program. These two courses can be included on a student's program of study only if they are completed after the student is admitted to the Ph.D. program.

Students must have scores on the verbal and either the quantitative or analytical portions of the Graduate Record Examination (GRE) at or above the 40<sup>th</sup> percentile. TOEFL scores are required for international candidates, with a minimum score of 600 deemed acceptable. A Test of Written English is also required for international candidates with a minimum score of five.

In addition to established School of Graduate Studies requirements, the Department requires students to submit:

- two 10- to 15-page writing samples of graduate work completed during or after their master's degree
- a 4+ page projected research and career agenda

The Graduate Program Committee in the Department of English will screen applicants once during the year and rank applicants in anticipation of admitting four students to the program per year. No applicants will be considered until all required information arrives in the School of Graduate Studies or a formal petition to review a nearly complete file is made and approved.

### ***Student Advisement***

The Department's Director of Graduate Studies will serve as an advisor for program applicants and first-year students. At the end of their first year, students will select a member of the Department's designated faculty (see Appendix C) to serve as their Supervisory Committee Chair; that faculty member will then serve as the student's primary advisor for course selection and research project development. Prior to taking their comprehensive examination, Ph.D. students will form their complete supervisory committee and will receive additional mentoring from those committee members during the process of conducting their formal doctoral dissertation research.

Ph.D. students working as Graduate Instructors in the Department will receive additional advising from the faculty member supervising related undergraduate teaching.

### ***Justification for Number of Credits***

The number of credits required for the proposed degree program is in accordance with policies established by The School of Graduate Studies at Utah State University. The number of required credits is sufficient for ensuring that students will have formal learning experiences in a range of theory and research practices related to the field of study. In addition, sufficient hours are provided for students to develop their own area(s) of specialization within the field.

The requirement that Ph.D. students take a minimum of 33 credit hours in 7000-level core courses will ensure that the doctoral program provides students with a clearly defined, coherent program of study. The additional 27 credit hours in the program (18 of which may be completed through supervisory committee-approved coursework outside the English Department) will provide students with the opportunity to tailor their doctoral studies in ways appropriate to complement their teaching, research, and professional career goals.

Ph.D. students' research experiences will be defined primarily through the 21 credit hours (minimum) in research theory and practice coursework (see Appendix A) that they are required to take. These courses are designed to ensure that doctoral students are exposed to a range of applicable research practices and are able to conduct their own research projects before exiting the program. As part of their programs of study, students will complete coursework in three required research courses. The first of these required courses is Engl 7000, Advanced Research Methods, in which students examine and compare methods for conducting quantitative and qualitative research in professional communication. The second required course is Engl 7900, Research Internship, in which students develop and conduct an extended field research project, using appropriate research methods to study the communicative practices of an actual workplace organization. This class culminates with the students' production of articles developed for publication in one of the field's journals (see Appendix E). The third required course is Engl 7970, Dissertation Research, in which students work with their supervisory committees to design and conduct research that contributes knowledge to the field of professional communication. Additional research coursework may be completed in Engl 7420, Usability Studies & Human Factors in Professional Communication.

### *External Review and Accreditation*

During the 2000-2001 academic year, a panel of external specialists reviewed the Department of English at Utah State. As part of this review, a specialist in the area of the proposed Ph.D. participated on the external review team. The external team observed that:

We are favorably impressed by the imaginativeness of the possible new doctoral program in professional and technical communication. Building on existing strengths of the department, it would fill a distinctive niche in doctoral offerings nationwide. To prepare itself to offer the Ph.D., the department is creatively exploring ways to increase the preparation that its master's-level programs already provide for doctoral study, and it is designing an intriguing array of doctoral-only seminars.

The entire assessment text prepared by the external review team is available on the Department of English website (<http://www.english.usu.edu/2000Review/>).

There is no formal, special professional accreditation body that accredits programs such as the one proposed. However, the Department of English will include one or more nationally recognized area specialists in its periodic external review teams to ensure that the most appropriate people review the program on a periodic schedule of at least once every five years.

### *Projected Enrollment*

Below are the number of student FTE enrollments and the mean student FTE to faculty FTE ratio for each of the first five years of the program.

2005-2006		2006-2007		2007-2008		2008-2009		2009-2010	
Student FTEs	Mean Student FTE to Faculty FTE Ratio	Student FTEs	Mean Student FTE to Faculty FTE Ratio	Student FTEs	Mean Student FTE to Faculty FTE Ratio	Student FTEs	Mean Student FTE to Faculty FTE Ratio	Student FTEs	Mean Student FTE to Faculty FTE Ratio
4	2 : 1	8	4 : 1	12	6 : 1	16	8 : 1	16	8 : 1

### *Expansion of Existing Programs*

The proposed Ph.D. program will not require an expansion in the size of pre-existing classes. The program will not increase the number of graduate students in the Department of English because the number of students in the Department's existing master's degree programs will be reduced by the number of students admitted to the Ph.D. program.

### *Faculty*

Hiring additional faculty during the first five years will not be necessary to offer this program. However, as faculty members listed in Appendix C of this proposal leave Utah State University, they must be replaced with specialists in this area to ensure continuity in the Ph.D. program.

### *Staff*

Staff support for the proposed TPPC program will be handled with resources in the Department of English. To supplement staff resources available to the Department's Director of Graduate Studies, the Department is expanding its administrative assistance support, dedicating a portion of that expanded time to processing records and applications to support the Ph.D. program. This expansion means that the Department will provide approximately 50% of a full-time staff member's time to support the work of the Director of Graduate Studies. Budget resources required for this expansion will be handled with Department of English funds.

### *Library*

Utah State's libraries hold a strong catalog of book titles in the area of the proposed degree program. To assess the holdings of Utah State's libraries in this area, the Department compared current holdings to the most comprehensive bibliography in the field, *The St. Martin's Bibliography of Scientific and Technical Communication*. Utah State libraries hold over 85 percent of the titles listed in that bibliography. Faculty requests for new titles (approximately 25 titles per year) in this area are routinely filled by Utah State libraries. Utah State libraries also currently subscribe to all of the most commonly referenced journals in professional communication, but the faculty will request that one additional journal be added to the library's subscription list.

Faculty and staff at Utah State's libraries continue to upgrade online facilities to ensure virtually the same access to library resources (interlibrary loan and online full-text databases) as that which is available to on-campus students. Online students in Utah State classes currently receive access to course readings through the library's efficient e-reserve system and online graduate students engaged in library research receive excellent support from library staff. Although only a small portion of the program involves online classes, those instructors will take advantage of these and additional library services and resources to ensure that students have access to extensive and up-to-date research in the field to support their preparation for examinations and for dissertation research.

### *Learning Resources*

Ph.D. students will have opportunities to participate in unique research activities available at research facilities associated with the Department of English (computer lab classrooms, the Interactive Media Research Lab, and the Usability Research and Evaluation Lab). These research activities will complement the faculty expertise and curriculum strengths in the Department: workplace-focused graduate research and the theory and practice of online education and training in writing and professional communication. No new research facilities will be required to offer the proposed degree program, though internal and external funding support for the existing research facilities will significantly enhance the program's ability to offer research opportunities to attract new students to the program.

The TPPC program will make extensive use of Web-based communications systems for the limited number of courses in its curriculum that may be offered online. The English Department at Utah State has a national reputation for its achievements in online education and will continue to provide its students in the State of Utah, across the U.S., and around the world with state-of-the-art, Web-based instruction. For example, since 1997 the Department has offered its entire master's program in Technical Writing online and has now established a track record of successful student placement in career-related fields.

Most of the equipment for teaching such online classes is already in place, and the Department of English has an ongoing, cooperative relationship with a leading-edge e-learning development company, 3GB Technologies (for more information, see the 3GB website at <http://www.3gb.com>). By extending this relationship with 3GB Technologies through additional course offerings and by supporting doctoral research in the area of online writing and professional communication instruction through a cooperative relationship with The Center for Online Education at USU, the Ph.D. program should have more than adequate computer resources at its disposal to offer the required instructional support.

### *Institutional Readiness*

The administrative structures already in place to serve the Department's M.A./M.S. graduate programs will be sufficient for supporting the proposed program. As noted above, additional office assistance will be allocated to support this administrative work.

## SECTION III: NEED

### *Program Necessity*

The proposed program is designed to fill a growing demand in higher education institutions for Ph.D.-credentialed instructors and researchers in professional communication. Specifically, English departments in colleges and universities are expanding course offerings and programs in the interrelated sub-areas of professional communication (e.g., technical communication, business communication, scientific communication, professional writing, and online communication) and are seeking qualified applicants from English department Ph.D. programs. As discussed below, colleges and universities around the country are currently experiencing an ongoing and growing shortage of qualified Ph.D.s to teach professional and technical communication courses.

The proposed Ph.D. program curriculum and research requirements are specifically designed to address these hiring needs.

### *Labor Market Demand*

Within higher education, the ongoing demand for Ph.D.s in the area of specialization far exceeds the number of degrees being awarded. This trend has been documented and discussed in a number of research journal articles. See, for example, Brooks, Yancey, and Zachry (2002); Cook, Thralls, and Zachry (2003); and Rude and Cook (2004).

During the 2000-2001 hiring cycle, for example, more than 60 English department academic positions in this field at US institutions were unable to recruit qualified applicants for their open positions; consequently, many of these institutions had to re-open their job searches for entry-level faculty while others began recruiting already established teachers/researchers from other institutions. During the 2002 hiring cycle, only 29 percent of the 69 nationally advertised positions for specialists in professional/technical communication were filled by someone with such a degree (Rude and Cook). As in previous years, there simply were not enough people with doctoral degrees in this area to fill the available jobs. Consequently, the other 71 percent of these advertised positions either went unfilled or were filled by people whose credentials did not match the qualifications (e.g., degree field, research area) in the job advertisements. The proposed Ph.D. program at Utah State University is designed to help fill this inadequately addressed national demand for credentialed professors in professional/technical communication.

Professional organizations such as the Association of Teachers of Technical Writing (ATTW) have identified a shortage of qualified instructors for the growing number of professional and technical communication programs at colleges and universities around the country. As an organization, ATTW (the largest U.S. organization devoted to the teaching of professional and technical communication) recently discussed this shortage of Ph.D.s. Below are representative quotes from this discussion, which involved professors and administrators of professional and technical writing programs around the country.

- A former president of ATTW who is also a professor of professional communication at Virginia Tech University noted "The demand for Ph.D.s in technical communication is way out of sync with supply." She also observed that intellectual and financial "incentives for graduate students are needed along with more capacity to educate them."

- An assistant vice provost at North Carolina State University argued that academics in this field should be open to opportunities “for expanding the number of programs offering doctoral degrees in technical and professional communication.”
- A former president of ATTW (who is also a Professor of Rhetoric & Professional Communication at University of Delaware) discussed the increasing demand in industry for Ph.D.’s in this field, noting that “there are some very keen people beginning to understand what knowledge products mean in their business contexts and why they need to devote resources to creating new workspaces for communicators” with Ph.D. credentials.
- The director of technical and professional communication at Michigan State University argued that “from the English [Department] standpoint, it would make sense for them to shore up eroding graduate programs by developing what is clearly a thriving area of study. I know that some Departments of English are already committed to moving in this direction. All too many are resistant to the idea.”
- The chair of the Technical Communication Department in the School of Engineering at Mercer University noted “we must have more Ph.D. degree-granting programs around the country.”

Since 1995, all of the graduates from programs like that being proposed at Utah State have been hired for teaching positions in higher education or for specialist positions in other organizations. These hiring trends, which have only recently been documented (Cook, Zachry, and Thralls), show that similar programs (e.g., University of Minnesota, Carnegie Mellon University, Iowa State University, Rensselaer Polytechnic Institute, Purdue University, and Texas Tech University) have had no difficulty placing their graduates. Prominent English departments hiring such graduates recently include University of Central Florida, Northeastern University, University of Washington, University of Nebraska, University of Texas at Austin, University of New Mexico, University of California at Santa Barbara, University of Nevada, and University of Colorado. In addition, a number of positions at similar institutions have gone unfilled in recent years, including at schools such as Penn State University and Texas Tech University.

While the primary purpose of the proposed program will be to prepare Ph.D.s for teaching and research positions within English Departments in higher education, a secondary need for Ph.D.s in this field exists in the workplace. Part of the population in the proposed degree program would include students seeking positions in large corporations that hire high-level professional communication experts. In corporate and industry settings, Ph.D. credentials are often required for those in the field who develop and direct usability labs, direct a department of writers, or manage communication initiatives or cultural change initiatives within a company. Such a credential is also useful for those who are responsible for taking the lead in researching communication practices within a company or an industry. Finally, people who want to make a career in training and consulting often find that a Ph.D. is quite helpful to establish the credentials and credibility they need to secure contracts. The trend of hiring Ph.D.s for high-level jobs in this field has been documented during the 1990s by the Society for Technical Communication, which has tracked the growing number of Ph.D.s who work in industry for salaries consistently higher than those in the field with only a bachelor’s or master’s degree.

Although Utah State does not yet offer such a Ph.D. degree, the Professional and Technical Writing Curriculum Committee at Utah State has met with hiring representatives from IBM every year since 1997. These representatives consistently indicate that they routinely hire Ph.D.s in this area and would be

interested in interviewing applicants with such a credential. This movement by industry was confirmed by the President of ATTW in a November 2000 message to the organization, where he noted that

IBM has always been on the lookout for Ph.D.s. They don't know exactly what they will do with them, but they don't pass up chances to hire. Even when IBM had a big hiring freeze for several years in the early 80s, they continued to hire information developers with advanced degrees. When we asked several IBM sites (labs as opposed to mfg sites) about their need for Ph.D.s when we were setting up the case for our degree [at New Mexico State University], they said they could easily and would willingly hire 1-2 new Ph.D.s per year from our program.

Recently graduated Ph.D.s from programs at other universities have been heavily recruited by other large corporations, including Lucent Technologies and Hewlett Packard. Many other prominent Ph.D.s have left academic positions to join corporate organizations, including IBM, A.T. Kearney, Inc., and F. Hoffmann-LaRoche Pharmaceuticals.

### *Student Demand*

In February 2001, the Professional & Technical Writing Curriculum Committee at Utah State surveyed three groups via their email distribution lists to discover levels of interest in the Ph.D. program. These groups included members of the Intermountain Chapter of the Society for Technical Communication, master's students in Utah State's Theory & Practice of Writing program, and master's students in Utah State's Technical Writing program (who are from states across the U.S.). Thirty-six potential students said that they would like to apply to such a degree program if it were available within the next two years.

Although this survey was an informal study, it does suggest a high level of interest in the program. Since conducting this survey, the Department of English has been contacted by several additional potential applicants who have heard about the proposed program via word of mouth. The Department now has more than 50 people requesting application information if the program is approved.

During the 2003 calendar year, the Department received many letters of interest in the proposal from people outside higher education, wherein industry representatives stress market need. For example, a recruitment representative for IBM notes, "we need more Ph.D. level professionals doing research and developing solutions for IBM and the industry.... I would be delighted if we could interview Ph.D.s from your program when we recruit at USU each year." Other professionals from Utah-based companies ranging from The Leavitt Group in St. George to Hill Air Force Base in Ogden talk about the lack of a Ph.D. program in this area within the state. As one writer notes, "anyone interested in pursuing an advanced degree (Ph.D.) in technical communication must leave the state."

These letters include correspondence from individuals living in Utah locations such as Salt Lake City, Delta, Ogden, and Pleasant Grove—as well as regional locations such as Bozeman, Montana, and Tucson, Arizona—who expressed interest in starting the program as soon as 2003. People interested in applying for the program include individuals who are now working as engineering planners, medical technology supervisors, web coordinators, and publications managers.

In letters of support for the proposal, representatives from other universities note that there are simply not enough Ph.D.s being produced in this area to fill the number of open positions every year within higher



education—let alone the demand in industry. The proposed Ph.D. at Utah State is designed to address these critical hiring needs, allowing the institution and the state to assume a leadership role in this area of higher education.

### *Similar Programs*

Among schools in the Western Interstate Commission for Higher Education, there are several Ph.D. programs in Rhetoric and Composition (e.g., Washington State University, University of Oregon, University of Arizona, and University of Nevada-Reno). None of these programs, however, emphasizes professional and technical writing as a primary area of concentration in its program of study. Two institutions in the Western region of the U.S. do offer somewhat similar programs: New Mexico State University and Texas Tech University. These programs are far enough removed from northern Utah that they appeal to a different demographic base of potential students, and only Texas Tech University offers a significant portion of its program online. In addition, several recent faculty departures from New Mexico State University reported in *The Chronicle of Higher Education* suggest that continuation of the NMSU program is uncertain because the current shortage of Ph.D.s in this field makes hiring multiple replacement faculty members in a timely fashion difficult.

Similar programs outside the Western U.S. include Iowa State University, University of Minnesota, Purdue University, Rensselaer Polytechnic Institute, Carnegie Mellon University, Michigan Tech University, University of Central Florida, and Penn State University. Each of these programs has unique characteristics based primarily on the faculty available for teaching and supervising Ph.D. research. Likewise, the proposed program at Utah State is configured around the strengths of its faculty, allowing the program to offer strong concentrations in (1) workplace communication-focused research and (2) the Theory & Practice of Professional Communication education in online environments.

### *Collaboration with and Impact on Other USHE Institutions*

This Ph.D. program will prepare students to fill teaching and research positions that no other higher education institution in Utah has a program dedicated to filling.

The most comparable Ph.D. program in the state is the on-campus doctoral program in Rhetoric and Composition at the University of Utah, which differs in both purpose and intended audience. With its emphasis on rhetoric and composition, the University of Utah's program is offered in conjunction with the University Writing Program. The University of Utah has students complete core coursework in areas—literary studies and composition theory—that are not part of the proposed Utah State Ph.D. degree. And, although there is some overlap in the area of rhetorical theory studies between the two Ph.D. programs, the core curriculum for the Utah State program requires studies in distinctly different areas: theory and research in professional communication, technology studies, and workplace practices and approaches.

Because of these differences, there will be no negative impact on the Rhetoric and Composition doctoral program at the University of Utah when the TPPC program is offered at Utah State. However, opportunities do exist for forms of collaboration between the two programs in the future. For example, semester-based faculty exchanges between the two programs could prove beneficial. In addition, because a limited number of hours can be transferred into these two doctoral programs, individual students from either program might elect to complete a course at the other institution with approval from their supervisory committees.

***Benefits***

The Ph.D. program will draw significant national attention to Utah State University as a provider of qualified applicants to fill the growing job market for teachers and researchers at national higher education institutions. In addition, Utah higher education will benefit because the program will draw regional and national graduate students to another program at one of its top research institutions.

Offering this program, Utah State University will also capitalize on faculty hires and development of institutional resources in this area since 1992. The infrastructure for offering this program has been developed already, without requiring a new allocation of institutional or state resources to begin offering a new Ph.D. degree that promises to have a national presence.

***Consistency with Institutional Mission***

The TPPC program is commensurate with Utah State's role as the State's Land Grant Institution because it is designed to provide high-quality graduate instruction through a specialized academic program with the potential for national acclaim.

Graduates of the program will be qualified to serve the educational and professional needs of the people of Utah, the nation, and the world by participating in leading-edge applied research into theory and practice of professional communication. This goal will be achieved by building an active graduate research program around the faculty expertise and research resources already in place at Utah State. Through this program, then, Utah State will graduate members of the next generation of academic and workplace professionals in this field who will carry the institution's commitment to excellence beyond the state of Utah.

A majority of the existing Ph.D. programs in this field are at land grant universities where such programs readily complement the land grant emphases and mission. Utah State is now well positioned to become one of these leading institutions in the field.

**SECTION IV: PROGRAM AND STUDENT ASSESSMENT**

***Program Assessment***

The goals for the program and assessment processes are described in the table below.

<b>Program Goals</b>	<b>Assessment Processes</b>
Provide quality, dynamic instruction for Ph.D. students	<ul style="list-style-type: none"> <li>• Student course evaluations for every class will be conducted, with overall results to be formally reviewed by a faculty committee</li> <li>• Peer observation and review of Ph.D.-level courses will be conducted by members of the degree program's faculty (see Appendix C) on a yearly basis</li> </ul>
Ensure timely progress of students through the program	<ul style="list-style-type: none"> <li>• Beginning with their second year in the program, Ph.D. students will be annually reviewed by a faculty supervisory committee to monitor progress through the program and provide appropriate mentoring</li> </ul>

Place graduates in wide range of tenure-track teaching positions at regional and national institutions of higher education	<ul style="list-style-type: none"> <li>• A formal system of tracking student placement will be instituted and reviewed every two years by the faculty</li> </ul>
Provide students with a solid understanding of current theory in the field	<ul style="list-style-type: none"> <li>• Students will complete a comprehensive exam, covering reading materials selected by the faculty</li> </ul>
Support leading-edge doctoral research in the field	<ul style="list-style-type: none"> <li>• On an annual basis, designated faculty (see Appendix C) will review dissertation research being conducted in the program and evaluate opportunities being provided for students</li> </ul>
Support the development of teaching excellence by Ph.D. candidates	<ul style="list-style-type: none"> <li>• Graduate instructors will be reviewed once per semester by a designated member of the faculty</li> <li>• Graduate instructors will participate in a peer-review system on an annual basis</li> </ul>

### *Expected Standards of Performance*

Upon successfully completing the Ph.D. program, graduates will

- Have earned a minimum of a 3.0 GPA in 60 credits of graduate coursework beyond their master's degree
- Have completed a comprehensive exam, demonstrating mastery over research and theory in the field
- Have conducted an original, large research project contributing to knowledge in the field
- Be qualified to be hired as a teacher and/or researcher at an institution of higher education
- Know how to develop and conduct research projects

These standards of performance reflect the expectations of Ph.D. graduates from programs comparable to that being proposed.

### *Student Assessment*

Assessment of students in individual courses will be the responsibility of individual members of the faculty teaching these courses. Additional student assessment will occur at three predefined junctures in the Ph.D. program, as described below.

#### *1. Qualifying Examination*

At the end of their first year in the Ph.D. program, students will complete an individual portfolio of their professional work and the academic papers they have completed in their courses and revised with the help of faculty and peers. Designated members of the faculty (see Appendix C) will review and approve these portfolios before the student may proceed through the degree program.

#### *2. Comprehensive Examination*

At the end of their course work, students will write a comprehensive exam (three essays that show their grasp of the field) and orally present one of these essays to a group of faculty and peers in the program.

The student's supervisory committee will be responsible for reviewing this examination, discussing it orally with the student, and determining if the student is ready to proceed to the dissertation research phase of the TPPC program.

### *3. Dissertation Defense*

At the end of each student's first year in the program, he or she will choose a major professor (see Appendix C for a list of faculty eligible to serve in this role) and begin exploration of possible dissertation topics. The student will constitute a supervisory committee comprising faculty members inside and outside the department of English interested in and able to help with the dissertation.

This committee will be composed of five members, all of whom must have doctoral degrees and be approved by the dean of the School of Graduate Studies in accordance with the Utah State University General Catalog:

- three members of the faculty from the written communication areas of the Department of English (see Appendix C for the list of faculty from this area)
- one additional faculty member from the Department of English
- one faculty member from outside the Department of English

The committee will be responsible for approving the student's course of study after the qualifying examination is passed and for drawing up and administering the comprehensive examination. This committee will also serve as the examining committee for a final oral examination. Students will choose the members of this committee after the qualifying examination has been passed.

After passing the comprehensive examination, the student will begin full-time work on the dissertation. Early in the dissertation process, the student will develop a formal dissertation proposal comprising a definition of the problem to be explored, a methodological or theoretical section, and a working annotated bibliography. With the chair's approval, the proposal will be submitted to all members of the supervisory committee for their approval. A copy of the sign-off sheet and the approved proposal will be placed in the student's departmental file. During this period, the student enrolls in English 7970 (Dissertation Research); a minimum of 12 credits of English 7970 is required. Students who have reached ABD (all but dissertation) status need to register for a minimum of 3 credits of 7970 each semester until they complete the dissertation and pass the final oral examination; the dissertation must be completed and approved within the timeframe established by the School of Graduate Studies at Utah State.

After the dissertation is completed, the student will defend the dissertation in a final oral examination.

### *Continued Quality Improvement*

A subgroup of the designated faculty within the department (see Appendix C) plus at least one faculty member outside the department will meet annually to review all assessment data collected since their last meeting and to make formal, written recommendations to the faculty designated in Appendix C. These faculty members will then respond to these recommendations in writing, implementing curricular, administrative, and other changes as voted on by the faculty. All assessment documents, subgroup recommendations, and faculty responses will be made available to external reviewers who will assess the program at least once every five years.

## SECTION V: FINANCE

### *Budget*

The proposed program at Utah State requires no new funding. The English Department has already covered all preliminary costs for proposal and curriculum development. In addition, implementation and ongoing expenses for the proposed program will be paid for through internal departmental budget reallocations as described later in this section.

The student population of the program when it reaches capacity will be 16 students. To maintain this size, the program will admit only four students each year and will provide appropriate mentoring, assessment, and guidance to ensure that students are completing the degree in four years.

All students admitted to the program will receive training in teaching and will be expected to develop this knowledge during two years of mentored and assessed classroom teaching within the Department of English. When the program is running at capacity, eight students at a time will be working as Graduate Instructors at a .5 time appointment. (In Year 1 of the program, the English Department will provide support for only the four students entering the program.)

The proposed yearly budget for the TPPC Ph.D. program is summarized below. These expenditures and revenues are routine, annual budgetary items associated with the proposed Ph.D. program.

Proposed Expenditures		Proposed Revenue	
1. Regular Faculty FTE	0	24. Tuition and Fees	\$ 0
2. Adjunct/Wage Related FTE	0	25. Sales and Services	0
3. Teaching Assistants FTE (8 Grad Instructors at .5 FTE)	4	26. Other Sources	0
4. Executives FTE	0	<b>27. Total Deducted Credits</b>	<b>\$ 0</b>
5. Staff FTE	0	28. Federal Appropriations	0
<b>6. Total FTE</b>	<b>4</b>	29. Land Grant Trust Funds	0
7. Regular Faculty	0	30. Mineral Lease Funds	0
8. Adjunct/Wage Related	0	<b>31. Total Other Revenues</b>	<b>\$ 0</b>
9. Teaching Assistants	82,240	32. Uniform School Fund	0
10. Executives	0	33. Income Tax Fund	0
11. Staff	0	34. General Fund	0
12. Wage Payroll	0	<b>35. Total State Funds</b>	<b>\$ 0</b>
<b>13. Total Salaries &amp; Wages</b>	<b>\$ 82,240</b>	<b>36. Total Revenues</b>	<b>\$ 0</b>
14. Employee Benefits	0		
16. Travel	4,000		
17. Current Expense	0		
18. Fuel and Power	0		
19. Equipment	4,000		
<b>20. Total Non-Personnel Services</b>	<b>\$ 8,000</b>		
<b>21. Total Expenditures</b>	<b>\$ 90,240*</b>		

*\*See discussion of department budget reallocation below.*

### *Funding Sources*

Revenues to support the new program will be money recovered from a reallocation of Department of English funds.

### *Reallocation*

Costs associated with Ph.D. student teaching salaries, research-related travel, and computer equipment will be funded by reducing through natural attrition the number (and associated costs) of term lecturers in the Department.

Currently, approximately 10 term lecturers must be replaced on an annual basis to teach a variety of courses in the Department, including a large number of writing courses. This natural attrition will provide funded slots for incoming and continuing Ph.D. students to work as Graduate Instructors in the Department. This reallocation will directly cover expenditures associated with Ph.D. teaching salaries, travel, and computer equipment.

By using trained and mentored Ph.D.-level Graduate Instructors to teach entry-level courses (e.g., English 1010, 2010, 3400 and 3410), the Department will be able to reallocate some current faculty teaching assignments from those undergraduate courses to graduate courses in the area. This reallocation will provide the Ph.D. students with needed classroom experiences, as well as providing faculty time for teaching in the new 7000-level curriculum.

In addition, the Department will reduce the size of its master's degree programs in Theory & Practice of Writing and in Technical Writing by the number of students enrolled in the Ph.D. program (maximum size of the Ph.D. program is 16 students). This reallocation of class space and teaching time will ensure that the new program does not overextend faculty in the Department who will be contributing to this program. The Department will further help ensure that faculty contributing to the program in key areas (administration, oversight of Graduate Instructors, curriculum development/assessment, dissertation supervision) do not become overextended through appropriate course releases.

No new equipment, materials, or faculty are required to offer the program. Since the early 1990s, the Department has focused on developing resources that would allow it to offer this degree program, and it is now well positioned to begin offering the program without a new investment of state funds. The coursework for the proposed program primarily involves a combination of existing courses that have been redesigned over the last few years in anticipation of offering this degree program. Some of the courses in the program will be cross-listed graduate courses (6000 level and 7000 level) with enhanced learning and performance requirements for doctoral students. In addition, as described in the complete proposal, three new courses will be added to the department's curriculum to support the program; however, these new courses will be handled through the standard rotation of faculty teaching assignments.

### *Impact on Existing Budgets*

The impact on the Department's existing budget will be neutral. Funds presently allocated to term lecturers will be gradually reallocated to support the doctoral students.

**APPENDIX A: PROGRAM CURRICULUM***New Courses to be Added in the Next Five Years*

Seven new, additional courses will be added.

<b>Course Number</b>	<b>Title</b>	<b>Credit Hours</b>	<b>Description</b>
Engl 7000	Advanced Research Methods	3	Examines and compares methods for conducting research in professional communication including a survey of major quantitative and qualitative methodologies.
Engl 7440	Advanced Seminar in Culture & Professional Communication	3 (varied topics; repeatable for up to 6 credits)	Covers topics in rhetorical, critical, and cultural theory with an emphasis on their application to contemporary practices in social organizations.
Engl 7480	Advanced Seminar in Technology & Writing	3 (varied topics; repeatable for up to 6 credits)	Study of theoretical aspects of technologies affecting writing in professional contexts. Course topics may include an examination of the history of computing, rhetorics of hypertext, or theories of communication in virtual space.
Engl 7890	Topical Seminar in the Theory & Practice of Written Communication	3 (varied topics; repeatable for up to 6 credits)	Seminars in various areas of communication theory and practice including current and historical topics, major figures, and theoretical perspectives.
Engl 7920	Directed Study	1-6	Customized study or readings for graduate students on topics not covered in regular courses. Prerequisite: Approval of proposal written by student in consultation with instructor.
Engl 7970	Dissertation Research	12	Individual work on research problems in the Ph.D. program. Prerequisite: Instructor's approval.
Engl 7990	Continuing Graduate Advisement	0-12	Prerequisite: Instructor's approval.

In addition to these new courses, the English Department will also add 7000-level cross listings for 11 of its current 6000-level graduate courses. These 7000-level cross-listed courses will include additional requirements and course objectives that define doctoral-level scholarship to ensure appropriate preparation for the academic jobs this degree is designed to fill. These additional requirements will typically include additional research work, annotated bibliographies, and/or formal presentations of additional work.

*All Program Courses*

Students in the Ph.D. program will be offered the following courses for their degree program.

Course Number	Title	Credit Hours
Engl 6410 <sup>1234</sup>	Theory & Research in Professional Communication	3
Engl 6490 <sup>134</sup>	Portfolio	3
Engl 7000 <sup>12</sup>	Advanced Research Methods	3
Engl 7400 <sup>4</sup>	Advanced Editing	3
Engl 7420 <sup>24</sup>	Usability Studies & Human Factors in Professional Communication	3
Engl 7430 <sup>4</sup>	Publications Management	3
Engl 7440 <sup>1</sup>	Advanced Seminar in Culture & Professional Communication	3 (varied topics; repeatable for up to 6 credits)
Engl 7450 <sup>4</sup>	Reading Theory & Document Design	3
Engl 7460 <sup>4</sup>	Studies in Digital Media	3
Engl 7470 <sup>4</sup>	Studies in Specialized Documents	3
Engl 7480 <sup>1</sup>	Advanced Seminar in Technology & Writing	3 (varied topics; repeatable for up to 6 credits)
Engl 7830 <sup>4</sup>	Rhetorical Theory	3
Engl 7840 <sup>4</sup>	Theory & Practice of Online Education in Writing	3
Engl 7850 <sup>4</sup>	Advanced English Theory & Methods	3
Engl 7860 <sup>1</sup>	Teaching Technical Writing	3
Engl 7890 <sup>1</sup>	Topical Seminar in the Theory & Practice of Written Communication	3 (varied topics; repeatable for up to 6 credits)
Engl 7900 <sup>12</sup>	Research Internship (workplace field research practices)	6
Engl 7920	Directed Study	1-6
Engl 7970 <sup>12</sup>	Dissertation Research	12 (+)
Engl 7990	Continuing Graduate Advisement	0-12

---

<sup>1</sup> Required courses.

<sup>2</sup> Courses used to fill the requirement for a minimum of 21 hours in research theory and practice coursework.

<sup>3</sup> Prerequisite for taking qualifying exam.

<sup>4</sup> Course may be taken online with approval of supervisory committee. Total credit hours taken online may not exceed 12.



## APPENDIX B: PROGRAM SCHEDULE

Term <sup>5</sup>	Hypothetical Schedule	Total Hypothetical Credits Earned	Classes Being Offered <sup>6</sup>	
F'05	6410 (3) 7450 (3) 7000 (3)	9	6410 Theory & Rsrch in Pro Comm 7450 Reading Thry & Doc Design 7460 Studies in Digital Media	7840 Thry & Prctice of Online Tchng 7000 Advanced Research Methods
S'06 <sup>7</sup>	7460 (3) 7860 (3) 7890 (3)	18	7400 Advanced Editing 7430 Publications Management 7460 Studies in Digital Media	7850 Advncd Engl Theory & Mthds 7860 Teaching Technical Writing 7890 Seminar in Thry & Practice
F'06	7460 (3) 7840 (3) 7480 (3)	27	6410 Thry & Rsrch in Pro Comm 7460 Studies in Digital Media 7470 Studies in Specialized Docs	7840 Thry & Prctice of Online Tchng 7000 Advanced Research Methods 7480 Seminar in Technology & Writing
S'07	7420 (3) 7830 (3) 7440 (3)	36	7400 Advanced Editing 7420 Usability Studies & Hmn Factors 6460 Studies in Digital Media	7830 Rhetorical Theory 7860 Teaching Technical Writing 7440 Seminar in Culture & Pro Comm
F'07	7900 (6) 7480 (3)	45	6410 Thry & Rsrch in Pro Comm 7450 Reading Theory & Doc Design 7460 Studies in Digital Media	7840 Thry & Prctice of Online Tchng 7000 Advanced Research Methods 7480 Seminar in Technology & Writing
S'08 <sup>8</sup>	7850 (3) 7920 (3)	51	7400 Advanced Editing 7430 Publications Management 7460 Studies in Digital Media	7850 Advncd Engl Theory & Mthds 7860 Teaching Technical Writing 7440 Seminar in Culture & Pro Comm
F'08	7970 (6)	57	6410 Thry & Rsrch in Pro Comm 7460 Studies in Digital Media 7470 Studies in Specialized Docs	7840 Thry & Prctice of Online Tchng 7000 Advanced Research Methods 7440 Seminar in Culture & Pro Comm
S'09 <sup>9</sup>	7970 (6) <b>Defend dissertation</b>	63	7400 Advanced Editing 7420 Usability Studies & Hmn Factors 7460 Studies in Digital Media	7830 Rhetorical Theory 7860 Teaching Technical Writing 7440 Seminar in Culture & Pro Comm
F '09			6410 Thry & Rsrch in Pro Comm 7450 Reading Theory & Doc Design 7460 Studies in Digital Media	7840 Thry & Prctice of Online Tchng 7000 Advanced Research Methods 7480 Seminar in Technology & Writing

<sup>5</sup> This table presents courses offered during regular fall/spring terms. At least one additional course will be available for students during summer terms every year.

<sup>6</sup> Engl 6490 (Portfolio), Engl 7900 (Research Internship), Engl 7920 (Directed Study), and Engl 7970 (Dissertation Research) can be taken any fall or spring semester.

<sup>7</sup> Also must take the qualifying exam.

<sup>8</sup> Also must take the comprehensive exam.

<sup>9</sup> Graduate from program.

## APPENDIX C: FACULTY

The faculty listed below would participate in supervisory committees for students.

**Cheryl E. Ball** ('04); Assist. Prof.; Ph.D. 2004 Michigan Technological Univ.; new media.

**Kelli Cargile Cook** ('00); Assist. Prof.; Ph.D. 2000 Texas Tech Univ.; professional comm. & online pedagogy.

**Brock Dethier** ('97); Assist. Prof.; Ph.D. 1978 Univ. of Virginia; English ed..

**Kathryn R. Fitzgerald** ('96); Assoc. Prof.; Ph.D. 1994 U of U; English ed. & rhetorical theory.

**Patricia M. Gantt** ('99); Assoc. Prof.; Ph.D. 1993 Univ. of North Carolina; English ed..

**Keith Grant-Davie** ('91); Assoc. Prof.; Ph.D. 1985 Univ. of Cal. (San Diego); rhetoric & composition theory.

**David E. Hailey, Jr.** ('94); Assoc. Prof.; Ph.D. 1994 Univ. of N.M.; professional comm. & interactive media.

**Christine Hult** ('85); Prof.; Ph.D. 1982 Univ. of Michigan; online writing & composition.

**Thomas Kent** ('01); Prof.; Ph.D. 1980 Purdue Univ.; rhetorical theory.

**Joyce Kinkead** ('82); Prof.; Ph.D. 1979 Texas A&M-Commerce; writing program administration, personal narrative, & English ed..

**John E. McLaughlin** ('94); Assoc. Prof.; Ph.D. 1987 Univ. of Kansas; linguistics & professional comm..

**Sonia Manuel-Dupont** ('85); Assoc. Prof.; Ph.D. 1985 Univ. of Kansas; linguistics & technical writing in the disciplines.

**Lynn Langer Meeks** ('94); Prof.; Ph.D. 1985 Ariz. St. Univ.; English ed. & writing instruction.

**Ryan Moeller** ('04); Assist. Prof.; Ph.D. 2004 Univ. of Arizona; rhetoric & technology.

**Ronald R. Shook** ('83); Assoc. Prof.; Ph.D. 1981 Indiana Univ. of Pennsylvania; professional comm. & publications design.

**Jennifer Sinor** ('00); Assist. Prof.; Ph.D. 2000 Univ. of Michigan; Writing theory.

**Charlotte Thralls** ('01); Prof.; Ph.D. 1984 Purdue Univ.; organizational comm. & rhetorical theory.

**Mark Zachry** ('98); Assoc. Prof.; Ph.D. 1998 Iowa St. Univ.; user-centered design & workplace comm..

## APPENDIX D: DESCRIPTION OF COURSES

Course Number	Title	Credit Hours	Description
Engl 6410 <sup>10111213</sup>	Theory & Research in Professional Communication	3	Introduction to contemporary theories of written discourse; emphasis on the implications of these theories for research in professional communication.
Engl 6490 <sup>101213</sup>	Portfolio	3	Design and preparation of a portfolio containing at least five documents, each accompanied by a justification and analytical discussion. Includes a defense at the qualifying exam stage.
Engl 7000 <sup>1011</sup>	Advanced Research Methods	3	Examines and compares methods for conducting research in professional communication including a survey of major quantitative and qualitative methodologies.
Engl 7400 <sup>13</sup>	Advanced Editing	3	Examines complex roles editors assume in creating technical and non-technical documents. Principal components include working with the substance of documents, mediating the writer-reader relationship, and exemplifying the application of rhetorical theory in editing.
Engl 7420 <sup>1113</sup>	Usability Studies & Human Factors in Professional Communication	3	Examines the concepts and practices of usability studies and human factors in the design and production of print and online documents. Emphasis is placed on developing objectives, criteria, and measures for conducting tests in the lab and field.
Engl 7430 <sup>13</sup>	Publications Management	3	Covers processes for developing and producing publications, including information development cycles, supervision, and budgets.
Engl 7440 <sup>10</sup>	Advanced Seminar in Culture & Professional Communication	3 (varied topics; repeatable for up to 6 credits)	Covers topics in rhetorical, critical, and cultural theory with an emphasis on their application to contemporary practices in social organizations.
Engl 7450 <sup>13</sup>	Reading Theory & Document Design	3	Examines how reading theory interacts with the rhetoric of graphics, layout, and type to influence the way documents are designed for maximum information and readability.
Engl 7460 <sup>13</sup>	Studies in Digital Media	3	Focuses on the production of advanced digital media documents. During this course, students examine theories underlying such publications, plus related hardware and software. Topics vary.

<sup>10</sup> Required courses.

<sup>11</sup> Courses used to fill the requirement for a minimum of 21 hours in research theory and practice coursework.

<sup>12</sup> Prerequisite for taking qualifying exam.

<sup>13</sup> Course may be taken online with approval of supervisory committee. Total credit hours taken online may not exceed 12.

Course Number	Title	Credit Hours	Description
Engl 7470 <sup>13</sup>	Studies in Specialized Documents	3	Focuses on the writing and design of specific genres in professional communication. Genres include environmental impact statements, software documentation, proposals, manuals, annual reports, newsletters, and fact sheets. Topics vary.
Engl 7480 <sup>10</sup>	Advanced Seminar in Technology & Writing	3 (varied topics; repeatable for up to 6 credits)	Study of theoretical aspects of technologies affecting writing in professional contexts. Course topics may include an examination of the history of computing, rhetorics of hypertext, or theories of communication in virtual space.
Engl 7830 <sup>13</sup>	Rhetorical Theory	3	Covers intellectual traditions of rhetoric from classical times to the present. Students study major theories, theoreticians, and controversies in the field, developing an understanding of rhetoric as a study of relations between discourse, knowledge, and power.
Engl 7840 <sup>13</sup>	Theory & Practice of Online Education in Writing	3	Examination of principles and their implementation in online writing instruction. Emphasis is placed on writing instruction within English departments.
Engl 7850 <sup>13</sup>	Advanced English Theory & Methods	3	Focuses on theory and practice in teaching English. Explores various philosophical positions in the field and examines their practical implications.
Engl 7860	Teaching Technical Writing	3	Prepares students to teach professional and technical writing courses at the undergraduate level.
Engl 7890 <sup>10</sup>	Topical Seminar in the Theory & Practice of Written Communication	3 (varied topics; repeatable for up to 6 credits)	Seminars in various areas of communication theory and practice including current and historical topics, major figures, and theoretical perspectives.
Engl 7900 <sup>1011</sup>	Research Internship	6	Application of workplace field research theory and methods in an actual workplace setting.
Engl 7920	Directed Study	1-6	Customized study or readings for graduate students on topics not covered in regular courses. Prerequisite: Approval of proposal written by student in consultation with instructor.
Engl 7970 <sup>1011</sup>	Dissertation Research	12	
Engl 7990	Continuing Graduate Advisement	0-12	

## APPENDIX E: TITLE OF PROPOSED PH.D. PROGRAM

The title of the proposed Ph.D. program, *Theory & Practice of Professional Communication* (TPPC), reflects the contemporary direction of this area of academic specialization. As discussed below, this area of study has evolved rapidly over the last 20 years and the title of an advanced graduate degree program in this area should demonstrate an awareness of this evolution if it is going to attract the best students from around the state and the country.

Until the mid-1980s, technical writing was a specialized vocational activity. When this activity became the subject of academic research (and with the nearly concurrent emergence of desktop publishing), the term *technical writing* was largely abandoned in favor of *technical communication*. This new term was favored because it more accurately represented the media (print, digital, oral) and symbolic forms (textual and visual) with which trained professionals worked in contemporary organizations.

A second shift occurred in the early 1990s as the information that most of these professionals worked with could not exactly be described as technical. Trained professionals were being asked to publish training materials, vision statements, policy manuals, user help systems, newsletters, and white papers—both offline and online. Dividing communication into categories such as technical, scientific, business, organizational, and managerial artificially fragmented the shared body of knowledge that these professionals were drawing on as they were trained in the academy and as they practiced in the workplace. Certainly the job titles that communication specialists in organizations were being assigned no longer reflected these categories. For these reasons, the term *professional communication* was widely adopted in the 1990s.

With the rise of professional communication as an academic subject during the last 20 years, scholarly research took a decidedly theoretical and social turn. While a few studies are still conducted into micro-textual issues (e.g., sentence length, graph design, and effective fonts for online publications), most research now examines professional communication issues on a larger scale (e.g., discourse communities within multi-national companies, single-sourcing content for publications in multiple media venues, the origins of hypertext in modular document design, and the role of gendered language in the history of consumer instructional manuals).

In addition, recent changes in communication technology have shifted the work of professional communication away from text production only to more complicated and inter-related activities. Such professionals are now often responsible for structuring organizational databases with information in mark-up languages so that the information can be published with relative ease via print publications, organizational websites, and personal digital appliances. Others in the profession are responsible for conducting product and user research in corporate labs, using varied forms of technology to work with cross-disciplinary or international teams.

The work that professional communicators are now expected to perform looks very little like that done by technical writers at the height of the Cold War. As contributors to the information economy, these professionals now must work with varied symbolic forms and with complex technologies. In addition, they are expected to think like someone trained in the humanities, understanding the social aspects and implications of the work they do.

The proposed Ph.D. program will thus function as an independent program as defined by the teaching and research expertise of the faculty offering the program (see Appendix E). The following sections of this appendix provide additional background information about why the name of the proposed Ph.D. program is appropriate for a new degree to be offered in this area.

The table below identifies universities offering a Ph.D. in this area. No program offers a Ph.D. degree called *Technical Writing*. Most degree titles include the word *communication*, and all institutions have additional academic units/degrees that include the term *communication* in their titles.

University	Department Offering the Ph.D. Degree	Title of Ph.D. Degree	Other Departments/Degrees on Campus
Carnegie Mellon Univ.	English	Rhetoric	Communication Design (in School of Design)
Iowa St. Univ.	English	Rhetoric & Professional Communication	<ul style="list-style-type: none"> <li>• Speech Communication (degree program)</li> <li>• School of Journalism &amp; Communication</li> </ul>
Michigan Tech Univ.	Humanities	Rhetoric & Technical Communication	Communication (in the Humanities Dept.)
New Mexico St. Univ.	English	Rhetoric & Professional Communication	<ul style="list-style-type: none"> <li>• Dept. of Communication Studies</li> <li>• Dept. of Journalism &amp; Mass Communications</li> </ul>
Penn St. Univ.	English	Rhetoric & Composition	College of Communications
Purdue	English	Theory & Cultural Studies	Dept. of Communication
RPI	Language, Literature, and Communication	Communication & Rhetoric	Science & Technology Studies (Ph.D. program in Humanities & Social Sciences)
Texas Tech Univ.	English	Technical Communication & Rhetoric	<ul style="list-style-type: none"> <li>• Agricultural Education &amp; Communications (degree program)</li> <li>• Dept. of Communication Studies</li> <li>• School of Mass Communications</li> </ul>
Univ. of Central Florida	English	Texts & Technology	Dept. of Communication
Univ. of Minnesota	Rhetoric	Rhetoric & Scientific & Technical Communication	<ul style="list-style-type: none"> <li>• Dept. of Journalism &amp; Mass Communication</li> <li>• Dept. of Speech-Communication</li> <li>• Dept. of Communication Disorders</li> </ul>
Univ. of Washington	College of Engineering (Dept. of Technical Communication)	Technology & Society (area of interdisciplinary concentration)	<ul style="list-style-type: none"> <li>• School of Communications</li> <li>• Dept. of Speech Communication</li> </ul>

Table: Ph.D. Programs Graduating Specialists in Professional/Technical Communication

### *Journal Titles*

The following journals publish a majority of the research in professional/technical communication. These are the journals that students in the program would be expected to be familiar with and to publish in after joining the profession.

- *Business Communication Quarterly*
- *IEEE Transactions on Professional Communication*
- *Journal of Business Communication*
- *Journal of Business and Technical Communication*
- *Journal of Computer Documentation*
- *Journal of Technical Writing and Communication*
- *Technical Communication*
- *Technical Communication Quarterly*
- *Text and Technology*
- *Written Communication*

### *Books and Monographs*

Researchers in this field publish their work in book series such as these.

- Communication, Culture, and Information (Ablex series)
- Contemporary Studies in Communication, Culture, and Technology (Ablex series)
- Contemporary Studies in Technical Communication (Greenwood Publishing)
- Inside Technology (MIT Press series)
- Rhetoric, Science & Technology (University of Wisconsin Press)
- SUNY Series in Studies in Scientific and Technical Communication

Below are selected book/monograph titles published recently in this field that include key terms from the title of the proposed Ph.D. and its 7000-level core seminars. These titles represent major topics in our field of study and the disciplinary discourse our students would be contributing to as professionals. Most of these are titles that the Ph.D. students in our program would read as part of their degree program.

#### *Communication*

*Technical Communication, Deliberative Rhetoric, and Environmental Discourse*, Coppola and Karis, eds. Greenwood Publishing (2000)

*Narrative and Professional Communication*, Perkins and Blyler, eds. Ablex Publishing (1999)

*The Practice of Technical and Scientific Communication*, Lutz and Storms, eds. Ablex Publishing (1998)

*Designing Visual Language: Strategies for Professional Communicators*, Kostelnick and Roberts. Allyn & Bacon (1997)

*Professional Communication: The Social Perspective*, Blyler and Thralls, eds. Sage Publications (1992)

***Culture***

*Online Communication: Linking Technology, Identity, and Culture*, Wood and Smith. Lawrence Erlbaum (2001)

*Writing Workplace Cultures: An Archaeology of Professional Communication*, Henry. Southern Illinois University Press (2000)

*Communication and the Culture of Technology*, Medhurst, ed. Washington State University Press (1990)

***Technology***

*User-Centered Technology: A Rhetorical Theory for Computers and Other Mundane Artifacts*, Johnson. State University of New York Press (1998)

*Why Things Bite Back: Technology and the Revenge of Unintended Consequences*, Tenner. Vintage Books (1997)

*Communicating Technology: Dynamic Processes and Models for Writers*, White. Addison-Wesley Publishing (1996)

*Nonacademic Writing: Social Theory and Technology*, Duin and Hansen. Lawrence Erlbaum (1995)

*Rhetoric, Innovation, Technology: Case Studies of Technical Communication in Technology Transfers*, Stephen Doheny-Farina. MIT Press (1992)



May 26, 2004

MEMORANDUM

To: State Board of Regents  
From: Richard E. Kendell  
Subject: Organizational Changes: Southern Utah University

Southern Utah University requests approval from the State Board of Regents to make the following organizational changes, effective July 1, 2004:

1. Change the configuration and name of the School of Applied Science and Technology to the College of Computing, Engineering, and Technology housing three new departments –  

Engineering and Technology, Mathematics, and Computer Science and Information Systems.
2. Create a Department of Political Science and Criminal Justice within the College of Humanities and Social Science and rename the Social Science Department the Department of History and Sociology.
3. Create a Computer Science and Information Systems Department by consolidating the Computer Science, Information Systems, and Information Systems Applications programs.
4. Combine Agriculture, Nutrition, and Food Science into a new Department of Agriculture and Nutrition Science in the College of Science.
5. Assign the Early Childhood Development program to the College of Education and its Department of Elementary Education.
6. Assign Family and Consumer Sciences Education and associated Apparel Design as well as Textiles and Interior Design classes to Secondary Education Department of the College of Education.

The background, rationale, recommendations, finances, and institutional impact of these proposed changes are described in the attached request from SUU.

Institutional Reviews

This proposal was hand-carried to the Commissioner following a Council of Presidents meeting on May 21, 2004. Normal deadlines for review and discussion by USHE Chief Academic Officers and the Regents' Program Review Committee had passed but the timing of the proposal was important to SUU, given that the next Regents' meeting is scheduled for mid-August. To aid the Commissioner in reviewing the proposal, the plan was sent to USHE Chief Academic Officers for institutional review. Concerns were expressed by the two research universities that the term engineering that appears in the College name and the proposed department name was rather broad and exceeded the role and mission assignment of SUU. They preferred a name that was more descriptive of the engineering program actually approved by the Regents, which is integrated engineering. The feedback was provided to the President and Provost of SUU and they agreed to use the term integrated engineering as outlined herein. Their proposed revision is as follows:

Department of Integrated Engineering and Technology

College of Computing, Integrated Engineering, and Technology

You will note that the University of Utah is forwarding a request for new graduate degrees in Computing which are defined in their proposal. Given the rather broad meaning of the term computing and the emerging disciplines identified by that term, the title of computer science may be appropriate for the SUU program. I have asked them to consider the best term for the content of their program.

Commissioner's Recommendation

I agree with the SUU reorganization plan as proposed, with the proviso that the Department and College names use the term "integrated engineering" as proposed immediately above. I also recommend that SUU provide their rationale for the term Computing as opposed to Computer Science in the title of the new College.

Richard E. Kendell, Commissioner

Attachment

**Request for Organizational Changes  
Southern Utah University**

May 12, 2004

## **SECTION I The Request**

Officials of Southern Utah University request organizational changes to better align programs and address selected program growth. This request:

- 1) Changes the configuration and name of the School of Applied Science and Technology to the College of Computing, Engineering, and Technology, and that the new unit house three departments: Engineering and Technology, Mathematics, and Computer Science and Information Systems;
- 2) Creates from the Social Science Department (separating Political Science) and from the Applied Technology Department (separating Criminal Justice) a Department of Political Science and Criminal Justice within the College of Humanities and Social Science, and renames the Social Science Department, the History and Sociology Department,
- 3) Consolidates the Computer Science, Information Systems, and Information Systems Applications programs into a Computer Science and Information Systems Department within the College of Computing, Engineering, and Technology (the Information Systems Applications program is deleted and elements absorbed into other programs).
- 4) Combines Agriculture, Nutrition, and Food Science courses and fields of study and places them into a new Department of Agriculture and Nutrition Science in the College of Science,
- 5) Assigns the Early Childhood Development program to the College of Education and its Elementary Education Department.
- 6) Assigns the Family and Consumer Sciences Education program along with associated Apparel Design and Textiles and Interior Design classes to the College of Education (Secondary Education Department).

Changes would be effective July 1, 2004.

## **SECTION II Need**

### ***Background***

A recommendation of the SUU prioritization process in 2000 resulted in creation of the School of Applied Science and Technology with two departments 1) Applied Science, housing programs in agriculture, family and consumer science, and information systems applications, and 2) Applied Technology, housing programs in automotive technology, electronics technology and CAD/CAM, criminal justice, technology education, construction management, and design technology. The new school was also to provide liaison with the Southwest UCAT campus and leadership in applied technology education supported with federal Perkins funding.

Concurrently, campus discussions explored ways to organize computer science, information systems and information systems applications to integrate faculty, program synergy, and comply with national coding systems for these programs. The faculty requested combining these programs into one unit.

Following two years of operation of the School of Applied Science and Technology and extended discussion on computing issues, a study was conducted of broad organizational issues of the University. This study included the following:

- Examination of program SCH data
- Discussions with selected deans and department chairs
- Organizational reviews of other, selected institutions
- Alignment of related and traditionally recognized fields of study
- Discussions among SUU executives and faculty senate leaders

Previously a faculty committee examined program classifications and organization structures for CS/IS/ISA and made several recommendations. The faculty input was reviewed again as part of this study.

#### ***General Observations from the Data and Discussions***

- Many programs in the School of Applied Science and Technology are strong and viable.
- Some initial purposes of the School of Applied Science and Technology have not been realized: School mission and goals cover disparate disciplines, ISA is not a recognized academic program in Utah or nationally, and some programs do not now enjoy organizational proximity which would be beneficial.
- The addition of integrated engineering and its relationship with technology offer SUU opportunities for collaboration, as well as ABET accreditation, that were not foreseen in 2000.
- There is value to the institution of combining CS/IS/ISA into one unit. Faculty have encouraged the combining of these programs.
- Many of the faculty in CS/IS/ISA have considerable expertise and experience in the pedagogy of technology and computing that can complement instruction in an integrated program for students.
- In most cases, faculty and programs in CS/IS/ISA, and in Engineering and Technology are operating on an individual basis, rather than as part of a cohesive, integrated approach (although there are some areas of collaboration).
- Organizational structures at other institutions vary considerably regarding CS/IS/ISA, engineering, and other sub-department programs. But there is a discernable trend toward grouping CS and IS together as well as Engineering and Technology in public four-year universities that do not have an Engineering school.

As a result, the following recommendations are offered:

***Recommendation 1:*** *That the administration and Board of Trustees change the configuration and name of the School of Applied Science and Technology to the College of Computing, Engineering, and Technology and that the new unit house three departments: Engineering and Technology, Mathematics, and Computer Science and Information Systems.*

The University should gather programs of commonality into one academic unit. This clarifies programs and organizations for students, follows a national pattern, and establishes a basis for ABET accreditation, since it is the agency accrediting engineering, engineering technology and computer science. Faculty members are looking for the synergy that can come from combining similar disciplines such as computer science and information systems, and engineering and technology.

The College, as re-constituted, can remain as the UCAT liaison to the University, and perhaps provide the necessary foundation for a future expanded relationship between UCAT & SUU. As a consequence of this recommendation, several programs and units are affected, and thus, the remaining recommendations follow:

***Recommendation 2:*** *That from the Social Science Department, separate Political Science, and from the Applied Technology Department separate Criminal Justice to create a Department of Political Science and Criminal Justice within the College of Humanities & Social Sciences.*

The Criminal Justice program, a traditional Social Science discipline, is a growing program at SUU. Its alignment with the Political Science program provides impetus for collaborative teaching and research between two closely related programs.

***Recommendation 3:*** *That CS/IS/ISA and their respective faculty be combined into a Computer Science and Information Systems Department within the School of Computing, Engineering, and Technology.*

Since creation of the ISA (Information Systems Applications) program in 2001, there has been confusion as to what it is and how it relates to the more conventional classifications of computer science and information systems. In 2003, the faculty involved asked that the programs be combined, particularly IS and ISA. Further, as SUU has brought its program labels and codes into compliance with the 2000 Classification of Instructional Programs (CIP) pursuant to direction from the Commissioner's office, it has been clear that ISA and having three related programs in three different departments and three different colleges/schools has been problematic.

***Recommendation 4:*** *That agriculture, and the food science and nutrition elements of the Family and Consumer Science programs be combined into a department of Agriculture and Nutrition Science.*

Because of the food science and nutrition emphasis in Family and Consumer Science, combination of programs would be complementary and similar in structure to other departments nationally. Furthermore, both emphases rely heavily on biology and chemistry courses of study. The new department will be strategically positioned to pursue a B.S. degree in dietetics, a field of study that is within SUU's academic plan.

***Recommendation 5:*** *That Early Childhood Development in Family and Consumer Sciences along with relevant FCS courses be assigned to the College of Education.*

Early Childhood Education and Head Start are part of the College of Education. Early Childhood Development, effective parenting, family relations, and Human Development courses of study will be a natural complement to these programs.

***Recommendation 6:*** *That FCS Education along with associated ADT (Apparel Design and Textiles) and ID (Interior Design) courses/programs be assigned to the College of Education.*

FCS Education is closely aligned with both Early Childhood Development and Secondary Education, and therefore, would appropriately fit into the College of Education.

ADT and ID are both small programs and/or support courses which are an integral part of the FCS Education curriculum. They should remain with FCS Education until the ID program grows sufficiently to hire a full-time faculty member in the discipline. At that time, ID should be moved to the Department of Engineering and Technology in the new College of Computing, Engineering and Technology.

### **SECTION III Institutional Impact**

The Request better collects programs into conventional academic structures while keeping a balance of enrollments and keeping all units viable. Enrollment growth in criminal justice, engineering, social science, biology and information systems is better accommodated, as is potential growth in computer science and technology. No new faculty or physical facilities or equipment will be impacted. Indeed, there will be consolidation, programmatic synergy, and a better alignment of mission and resources.

**SECTION IV**  
**Finances**

The proposal creates two departments, requiring a tenth-month contract for two department chairs and two secretaries. Resources for a third department chair and added division chairs would be reassigned. Financial savings from eliminating duplications, streamlining the curriculum and faculty resources, and increased recruitment and retention opportunities not only exceeds the cost of proposed restructuring, it indeed results in immediate savings that could be assigned to other resource-weak programs. Physical facilities changes would also be desirable to encourage unity and collaboration among faculty in new or combined departments.

**SECTION V**  
**Curriculum and Degree Program Changes**

Upon the approval of SUU Board of Trustees, and the Utah State Board of Regents, the faculty will undertake the challenge of revising, renaming, and aligning courses, degree programs, course prefixes, majors, and minors to recommend them through the university curriculum change processes.



MEMORANDUM

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: Utah Valley State College – Proposal to Offer the Art and Visual Communications Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts – Action Item

Issue

Utah Valley State College requests approval to offer a four-year baccalaureate degree program—a Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts—through the Art and Visual Communications Department. In April 2003, UVSC officials requested an exception to the program moratorium based on cost savings and compelling need. College officials were able to demonstrate that the regular tuition will support the costs of the program. Compelling need is demonstrated by local and statewide market data and student interest surveys. The Letter of Intent for the proposed program, Arts and Visual Communication, was approved by the Program Review Committee (PRC) on February 23, 2004.

Background

The Art and Visual Communications Department at UVSC provides technical and aesthetic training in fine art, design, illustration, photography, and computer graphics. Students receive both hands-on and analytical training needed for employment in the highly diversified fields of visual art, advertisement, graphic design, illustration, and others. Students can also receive training and development of skills in studio arts.

Courses taken may be applied towards a one-year certificate, a two-year Associate in Arts or Associate in Science Degree, or an Associate in Applied Science Degree. The proposed four-year degree offerings include a Bachelor of Arts, a Bachelor of Science, and a Bachelor of Fine Arts Degree.

The proposed program will be supported by appropriately-credentialed faculty. In addition, the associate degree program in art already forms the foundation upon which baccalaureate students can build.

*Policy Issues*

Weber State University (WSU) faculty raised several issues. There was concern that state resources were not adequate to support the proposed program. The new courses (almost 15) would create an additional faculty load that WSU faculty believe would not be cost neutral. UVSC officials point out that the new degree is indeed "relatively cost neutral," and that the budget projections on page 18 showing revenue from new students slightly exceeding expenditures substantiate this projection.

In addition, WSU faculty expressed concern that the BFA would be offered before the faculty and program would have an opportunity to mature. WSU faculty were also concerned that UVSC art faculty never communicated with them to discuss the proposed program. UVSC officials indicate that moving from their current two-year program to the new degree will be somewhat gradual as suggested by the WSU faculty.

*Options Considered*

After Regents have reviewed the proposal from Utah Valley State College to offer a Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts in Art and Visual Communications, they may raise issues, request additional information, deny the request, or approve the request during the June 3-4, 2004 meeting.

*Commissioner's Recommendation*

It is the recommendation of the Commissioner that the Regents review the proposal by Utah Valley State College to offer a Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts in Art and Visual Communications, raise questions, and, if satisfied, approve the request.

Richard E. Kendell, Commissioner

REK/PCS  
Attachment

**ACADEMIC, APPLIED TECHNOLOGY AND STUDENT SUCCESS COMMITTEE**

**ACTION ITEM**

*Proposal to Offer a Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts in Art and Visual Communication*

Utah Valley State College

Prepared for  
Richard E. Kendell  
by  
Phyllis C. Safman

May 26, 2004

## SECTION I: THE REQUEST

Utah Valley State College requests approval to offer a four-year baccalaureate degree program—a Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts— through the Art and Visual Communications Department. The new degrees were approved by the Institutional Board of Trustees in April 2002. The Program Review Committee approved the development of the full proposal on February 23, 2004. The new degree program would be effective Fall 2004, with the full upper-division coursework for B.F.A. options available in 2006.

## SECTION II: PROGRAM DESCRIPTION

### *Complete Program Description*

The Art and Visual Communications Department provides technical and aesthetic training in fine art, design, illustration, photography, and computer graphics. Students receive both hands-on and analytical training needed for employment in the highly diversified fields of visual art, advertisement, graphic design, illustration, and others. They can also receive training and development of skills in studio arts.

Courses taken may be applied towards a one-year certificate, a two-year Associate in Arts or Associate in Science Degree, or an Associate in Applied Science Degree. Four-year degree offerings include a Bachelor of Arts, a Bachelor of Science, and a Bachelor of Fine Arts Degree. An outline of the credit requirements for each of the baccalaureate degree programs follows:

#### **Bachelor of Arts (120 credit hours)**

General Education Requirements	35 credit hours
Art and Visual Communications Lower Division Core	15 credit hours
Art and Visual Communications Upper Division Core	12 credit hours
Art and Visual Communications Upper Division Credit	28 credit hours
Foreign Language	18 credit hours
Open Electives	12 credit hours

#### **Bachelor of Science (120 credit hours)**

General Education Requirements	35 credit hours
Art and Visual Communications Lower Division Core	18 credit hours
Art and Visual Communications Upper Division Core	12 credit hours
Art and Visual Communications Upper Division Credit	28 credit hours
AVC Electives or Foreign Language	9 credit hours
Required Electives	18 credit hours

#### **Bachelor of Fine Arts (120 credit hours)**

General Education Requirements	35 credit hours
Art and Visual Communications Lower Division Core	18 credit hours
Art and Visual Communications Upper Division Core	12 credit hours
AVC Emphasis (includes 28 credits of upper division) <sup>1</sup>	46 credit hours
Required Electives	9 credit hours

---

<sup>1</sup> B.F.A. emphases include Photography, Studio Arts (Painting, Drawing, Sculpture and Ceramics) and Graphic Design/Illustration. Other institutions that offer B.A., B.S., and B.F.A. options have similar emphases.

Students seeking a four-year degree proceed as follows:

1. Select the B.A., B.S., or B.F.A. track
2. Maintain a minimum GPA of 2.5 in AVC courses
3. Submit a portfolio for review by department faculty upon successful completion of 60-62 credit hours required for an associate degree. A successful portfolio review will allow prepared, qualified students to matriculate into the baccalaureate program. The option of receiving both the two-year and the four-year AVC degree is available for qualifying students.

The three degree options in the proposed program will best meet a varied student demand. The B.S. and B.A. do not limit the student to only one area of emphasis. These degrees provide a broad liberal arts background and a valuable base for many careers or further study. B.S. and B.A. degrees offer a more general study of art and provide insight into the extensive amount of visual information conveyed in today's society. In addition, these degrees foster an understanding of other cultures, past and present. To live and work in an increasingly multicultural society, people need an appreciation of the customs, culture, and values of other people. These are the primary concerns in the study of art. Often, B.S. and B.A. graduates do not plan to continue their studies into graduate school; some become professional artists and others pursue commercial work in related vocations. The B.A. degree will be desirable for certain students in Utah Valley because of the additional language requirement. Utah Valley has a large population that is looking for educational experiences that allow them to apply their second language skills towards a degree. At the same time, the B.S. makes an art degree accessible to those students without second language skills.

The B.F.A. offers a more specialized studio-oriented education and is a professional degree requiring above-average accomplishment in art. B.F.A. students will be required to specialize in design/illustration, studio arts, or photography and to mount an exhibition of their work before graduation. The degree is designed for students who wish to pursue professional work or admission to a master's program in the visual arts. Only students demonstrating promise will be accepted into this more demanding option.<sup>2</sup>

### *Purpose of Degree*

Utah Valley State College is offering this program to meet the increasing demand for a four-year art degree in Utah Valley. Because of this demand, the proposed Art and Visual Communications degrees have been UVSC's number one degree priority for the past 24 months.<sup>3</sup>

Many students from the area wish to pursue a baccalaureate degree in the visual arts with a range of degree options. Recent high school graduates and many students currently enrolled in the two-year art program have consistently expressed a desire to obtain four-year degrees in Art and Visual Communications at UVSC. The program proposed has been carefully designed to meet the requirements of similar degrees at other USHE institutions, and to facilitate transferability as well as the mobility of students to enter post-graduate programs of study. In addition, the program continues to offer two-year degrees while integrating four-year degree options that stress sought-after multi-media and technology skills. UVSC will be the only USHE institution to offer both a two-year and four-year program in Art and

---

<sup>2</sup> Offering more than one degree option is not unusual. Other USHE institutions offering four-year art degrees with more than one option include: Southern Utah University – B.A. and B.S.; University of Utah -- B.A. and B.F.A.; Utah State University – B.A., B.S., and B.F.A.; Weber State University – B.A., B.S., and B.F.A. (see Table 8).

<sup>3</sup> Some of the supporting documentation for this proposal was generated for the R401 submitted in 2002. Where necessary, new documentation is included.

Visual Communications, and as such, offers a unique opportunity to provide students with a range of options and to provide businesses with a range of expertise.

UVSC's positive reputation has also been affirmed nationally by US News and World Report, which in their annual "America's Best Colleges" issue ranked the college fourth overall in the West in the comprehensive, four-year college category in 2003 and 2004.<sup>4</sup> Local Utah County businesses and the community at large overwhelmingly favor the creation of a wider array of baccalaureate offerings at UVSC, including Art (see Section III, Need, p. 11). These degrees will benefit current and future students, as well as enhance the cultural environment of the college, community, and state.

To move toward the full range of programs, UVSC must offer a strong undergraduate curriculum including the liberal arts. Programs in the liberal arts encourage exploration, analysis, critique, creative thinking, and celebration of what it means to be human and live in social communities. In a time when many see college as job preparation and a vehicle for economic growth, the liberal arts are one of the best and most practical forms of learning. Liberal arts degrees produce students with skills needed by every employer: effective communication and interpersonal skills, the ability to solve problems, and flexibility in a diverse global society. Indeed, many employers seek graduates who think critically, communicate effectively, and work productively in collaboration with diverse colleagues, clients, or customers. Referring to the competitive, global nature of business, and the value of the liberal arts, former Xerox CEO David T. Kearns remarked:

"In periods of change, narrow specialization condemns us to inflexibility – precisely what we do not need. We need the flexible intellectual tools to be problem solvers, to be able to continue learning over time... [I]t is not simply what you know that counts, but the ability to use what you know. In this way knowledge is power – the ability to use specialized knowledge as you adapt to new requirements."<sup>5</sup>

The arts provide another way of interpreting the human experience and framing it in new ways. The arts both sustain and explain our culture. It is important that core curriculum in the liberal arts includes the visual arts. Four-year degrees in Art and Visual Communications form an indispensable component of a quality undergraduate education. Many students interested in the degree options within Art and Visual Communications are interested in pursuing the computer graphics and commercial graphic design dimensions of the field (see Section III, Student Demand, p. 13). While interest in the fine-arts dimensions of the degree remains strong, more interest continues to be demonstrated for the more career-oriented aspects of the degree (see Table 7, p. 13).

UVSC is the ideal environment in which to educate well-rounded individuals in both practical and humanistic values. The combination of student mandate, community and business demand, sound curriculum and faculty expertise ensures a successful four-year program in Art and Visual Communications.

### ***Admission Requirements***

Utah Valley State College maintains an "open door" policy, admitting all applicants whose qualifications indicate they may benefit from the instructional programs. This "open door" policy applies to students in the

---

<sup>4</sup> See *U.S. News & World Report*, September 1, 2003, p. 112; and *U.S. News & World Report, America's Best Colleges*, 2004, p. 113.

<sup>5</sup> Association of American Colleges and Universities, *Greater Expectations* (Washington DC: AACU, 2002), p. 28.

Art and Visual Communications program for initial admission. After 60-62 credit hours (the required hours for an associate degree), student portfolios will be reviewed by a faculty committee and compared to a pre-determined standard to determine admission eligibility for the final two years of upper-division courses.

***Student Advisement***

In the first year of the program, students will continue to be advised by the full-time Administrative Office Manager/Advisor, who currently advises students concerning A.A., A.S., and A.A.S. degrees. The Department Chair and select faculty will also assist students transferring into or selecting from four-year degree options. By the second year, the AVC department plans to hire a salaried Academic Advisor. One-third of this advisor's responsibilities will be with upper division students; the remaining two-thirds will support existing A.S. and A.A.S. degree students.

***Justification for Number of Credits***

Required credit hours for the new degree will be within the current Regent standards: Bachelor of Arts, 120 credit hours; Bachelor of Science, 120 credit hours; and Bachelor of Fine Arts, 120 credit hours.

***External Review and Accreditation***

External consultants have been involved in the development of the new degree. Perry Stewart, former Art Department Chair of Southern Utah University, offered extensive input in the creation of the new degree. Steve Bule, former Associate Professor of Art History; Richard Hull, Illustration Instructor; and Michael Day, former Art Department Chair at Brigham Young University, support the new program. Perry Stewart and Steve Bule have both accepted teaching positions in the Art and Visual Communications Department at UVSC in anticipation of a four-year degree implementation. Professor Robert Olpin, former Art Department Chair at the University of Utah, was consulted and responded positively to the creation of the new program.

Additional input and favorable response was given by Vern Swanson and Sharon Gray from the Springville Museum of Art; Stephen Hales of Stephen Hales Creative and part-time faculty member in the Design Department at BYU; James Christensen, former BYU Art Professor and nationally recognized illustrator; Bevan Wulfenstein, multimedia designer; and Mrs. James Sorensen, founder of "Art Works for Kids." Drew Sanders, Director of Nu Skin Enterprises Creative and former UVSC student, "highly recommends" the baccalaureate degree options in Art and Visual Communications; Wayne Tew, the Vice President of Operations at the Digital Ranch, expressed his "support for [our] efforts to produce graduates who are qualified to work in the high tech industry." (Letters of support are on file in the Commissioners Office.)

***Projected Enrollment***

*Table 1: Enrollment projections. (\* is for new upper-division courses only.)*

	First Year	Second Year	Third Year	Fourth Year	Fifth Year
Headcount	30	65	75	80	80
Student FTE*	15	31	43	39	48
Student/Teacher Ratio	15.0	15.5	18.7	19.5	20.9

UVSC has a positive track record of not only meeting projected student numbers for newly implemented four-year degrees but in most cases exceeding those projections. In the School of Humanities, Arts, and

Social Sciences (HASS), which includes the Art and Visual Communications Department, Behavioral Science, English, and History have overall exceeded their projected student numbers for their four-year degree programs. For example, in the three years that UVSC has offered a four-year degree in Behavioral Science, the number of declared majors exceeded the R401 projections. Similarly, the four-year degree in Elementary Education, a program which until 2001 was part of the School of HASS, exceeded the R401 projected enrollments. Student demand for the proposed AVC degree should at least meet projections and will provide a solid student base for healthy degree programs.

*Expansion of Existing Program*

The Art and Visual Communications Department enrollment trends for the past five years are:

- 1998/99 School Year                      3003 student enrollments
- 1999/00 School Year                      3507 student enrollments
- 2000/01 School Year                      3825 student enrollments
- 2001/02 School Year                      4436 student enrollments
- 2002/03 School Year                      4956 student enrollments<sup>6</sup>

Enrollments have increased 65% in the past four years, demonstrating a pressing need to expand the current program to include a four-year option. In Fall 2003, the program had 410 majors in two-year degree programs.

*Faculty*

No new faculty hiring will be required during the first five years of program implementation. In anticipation of degree approval and implementation, the department has hired tenure-track faculty over the past several years who are qualified and prepared to teach the courses required for the proposed four-year degrees.

Specifically, the department currently employs thirteen tenure-track or tenured professors<sup>7</sup>:

- Eight hold a terminal degree (Ph.D. or M.F.A.)
- Four hold a Master’s degree in art and/or visual communications
- One long-time faculty member teaches lower-division computer courses

As Table 2 (below) demonstrates, all faculty have extensive academic and/or practical training and experience in art and visual communications. Among them, several have gained significant reputations as nationally recognized scholars, artists, and authors. In addition, five faculty have substantial past experience with teaching and program administration at colleges and universities with four-year programs in art (in Table 2, \* indicates faculty with four-year program experience from previous positions at colleges or universities).

---

<sup>6</sup> For Enrollments, the total number of student in each class is obtained. The totals for all classes are then summed. A student may be counted more than once if they take more than one class.

<sup>7</sup> For comparative reference, Utah State University lists on their Art department website, 15 full-time faculty for both graduate and undergraduate offerings. Weber State University lists 16 full-time faculty on their Art department website, and Southern Utah University currently lists 6 full-time faculty.



*Table 2: Full-time Faculty*

Steven C. Bule Ph.D., Art History, Ohio State Univ.	Catherine Downing M.F.A., Painting, Univ. of South Florida	Perry Stewart* M.F.A., Illustration, USU
Robert B. deWitt M.F.A., Art/Painting, BYU M.F.A., Art History, BYU	Susan M. Parkinson M.A., Fine Arts, USU	Hyunmee Lee* M.A., M.F.A, Painting, Univ. of Sidney
Lawrence P. Holt B.A., French, BYU	Barbra L. Wardle M.A., Art Education, BYU	Jim Godfrey* M.F.A., Graphic Design, USU
Douglas D. Anderson M.S. Industrial Education, BYU Design, Graphic Design	Mark Talbert* M.A., M.F.A., USU, Ceramics, sculpture, 3-D design	Jon Turner M.S. Industrial Education, BYU Computer graphics
Replacement position for retiree will be terminally qualified Photography		

*See Appendix C for further information about the current faculty in the Art and Visual Communications department, including degrees, areas of specialization, and professional accomplishments.*

### ***Adjunct Faculty Preparedness***

The Art and Visual Communications department at UVSC benefits from the fortunate position of being able to draw on a large number of established artists and art professionals who live in Utah Valley and are willing and interested in helping the department with part-time teaching. Numerous adjunct faculty hold terminal degrees in art and/or visual communications, and would also qualify to teach a select number of upper-division courses if the need arises.<sup>8</sup>

Full-time faculty will teach the majority of the upper-division courses. Current full-time and adjunct faculty will continue to cover the lower-division classes. Efficient scheduling of upper- and lower-division courses maintains a relatively stable number of course offerings, including a limited number of upper-division courses, during the first five years of program implementation.

Significant resources are available at Utah Valley State College to new and established faculty for development and support. New faculty receive orientation training and are made aware of college policies and procedures. Monthly seminars and workshops are available through the Faculty Center for Teaching Excellence. Cultural and ethical issues are discussed monthly through the Center for the Study of Ethics and monetary awards encourage attendance. In addition to the many development opportunities offered college-wide, the Art and Visual Communications faculty participate in a department faculty development process. Each faculty member meets with the department chair each year and development goals are established. At the completion of the year, the goals are assessed and faculty progress is discussed and recorded. Each faculty member may attend a conference, workshop, or other developmental experience every year, with travel funds provided by the college.

<sup>8</sup> UVSC will teach 124 sections with 47% will be taught by non-full-time faculty. It seems that UVSC's adjunct/ full-time ratios for this degree program are within an order of magnitude of the other USHE institutions.

### *Staff*

Current staff in the Art and Visual Communications department is able and prepared to complete the general administrative duties associated with a four-year degree program. The table below indicates department staffing.

*Table 3: Current Staff and Staff Responsibilities*

<b>Full-Time</b>	<b>Responsibilities</b>
Staci Owens Administrative Office Manager	General office administration; Assistant to the Department Chair; Advisor for two-year programs
<b>Part-Time</b>	<b>Responsibilities</b>
Work Study Students (One per semester)	General office tasks
Student Assistants (Four to five per semester)	Lab assistance in studio labs and computer labs

During the first year, as Table 3 (Current Staff) indicates, hourly staff support has been included to assist with advising and staffing labs. By the second year, the AVC department plans to hire a 1/3-time salaried academic advisor. This advisor's responsibilities will be to assist upper-division students. Hourly staff funds are also included in the projected budget to assist with labs during years two through five.

### *Library Resources*

#### *Books*

Art resources in the library are in the \*N\* call number area of the Library of Congress classification system and photography in the \*TR\* call number area. The regular collection has 4,234 art titles covering all aspects of art and 536 photography titles. There are 168 art titles in the reference collection including Grove's 34-volume Dictionary of Art, the 10 volume Encyclopedia of Visual Art, and the 16 volume Encyclopedia of World Art. There are 11 photography titles in the reference collection.

#### *Periodicals*

The UVSC Library currently subscribes to 14 art periodicals and 2 photography periodicals. With electronic indexes patrons also have full-text access to an additional 140 art periodicals and 9 photography periodicals. Many more periodical articles are indexed and abstracted in the electronic databases with only abstracts. Students and faculty can acquire almost any article that is unavailable in print or full-text at UVSC through the Utah Article Delivery Service (UTAD). This free service provides UVSC faculty and students with faxed copies of journal articles and is available from the library homepage.

#### *Videos*

The video collection has 62 art titles and 21 photography titles. Several of these titles are multi-volume series. There are a total of 184 art and photography videocassettes and DVDs.

#### *Other Library Resources*

The statewide reciprocal borrowing agreement through the Utah Academic Library Consortium (UALC) allows UVSC students and faculty to check out materials from any Utah academic institution library, as well as from Brigham Young University and Westminster College. If books are not available in-state, or if students cannot physically go to another library, any needed book can be ordered through Interlibrary Loan.

### *Learning Resources*

Significant resources already exist to support the current two-year programs. Three well-equipped computer labs are in operation. The department maintains painting and drawing studios as well as labs for three dimensional projects such as ceramics, jewelry construction, sculpture, and crafts. One classroom has been modified to teach art history, art appreciation, and art education classes.

Due to recent construction and space reallocation, the AVC Department has acquired a significant amount of space to support the proposed degrees, including the BFA. The acquisitions include on-campus gallery and exhibition space that will allow students the opportunity to display their work, and a new painting studio with natural north light and plenty of storage capability. Expanded ceramics and sculpture facilities include a new 2,400 square foot classroom, a glazing and kiln room, and studio workspace for faculty and students. A dedicated design and illustration studio and classroom space has also been added.

In addition to department resources, the college maintains an extensive learning resource center where full-time faculty, staff, and tutors are available as needed.

### *Institutional Readiness*

No new organizational structures will be needed to institute the four-year degree program through the Art and Visual Communications Department. In anticipation of degree approval and implementation, Utah Valley State College has upgraded and expanded the necessary art facilities, including gallery spaces and labs, and hired the appropriate tenure-track faculty.

## **SECTION III: NEED**

### *Program Necessity*

Evidence supports statewide citizen interest in four-year degrees in the liberal arts at UVSC, positive market demand for graduates from a UVSC Art and Visual Communications four-year program, and strong prospective and current student demand for various four-year Arts degrees.

A recent (June 2003) public opinion poll conducted by Foster and Associates indicates that among 500 Utah residents randomly selected from Utah's 29 counties in proportion to population statistics, 89% feel it is somewhat or very important for UVSC to provide more four-year programs, with 65% saying it is somewhat or very important for UVSC to offer Liberal Arts degrees. The general public recognizes the need for UVSC to provide comprehensive undergraduate degree programs, and values the liberal arts as a critical component of undergraduate education in Utah.

UVSC currently maintains a number of popular gallery and exhibit spaces, including the nationally approved Woodbury Gallery in the University Mall, which houses a diversity of exhibits including student shows, state-wide juried events, national exhibits, international, national and local artist's work, and shows from the Smithsonian Gallery. Exhibits of national and international as well as faculty and student artists are mounted on campus in the library and student center; the recently opened Gallery 401 in the Gunther Trades building features student work. These vibrant exhibit spaces, which draw members of the college and Utah community, as well as out-of-state visitors and exhibitors, attest to a demand for cultural vitality

that augments student and market demands. The outcome of a four-year degree program in Art and Visual Communications at Utah Valley State College includes the satisfaction of market demand for trained workers, student demand for degree programs, the state's demand for a well-rounded and well-educated citizenry, and the community's desire for a thriving cultural environment that includes the visual arts.

### *Labor Market Demand*

Burgeoning digital industries in Utah Valley create a high demand for graduates with degrees in the visual arts. The valley has experienced rapid growth in computer and software related businesses. Trained graduates for local businesses and industry are needed in such areas as advertising design, graphic arts, and computer graphics. Local employers that currently hire graduates in Art and Visual Communications with two-year degrees include Candesa Interactive, Nu Skin International, Inc., Novell, Inc., ViewPoint Datalabs, Xactware, Inc., Alexander's Digital Printing, The Daily Herald, Provo Craft, Utah Valley State College, Label Express, and the Digital Ranch. Graduates with a B.A., B.S., or B.F.A. in Art and Visual Communications enhance their employability with these firms as well as with potential employers listed by other services and databases. CareerSearch, a Net-based employer research system, reports on over 32 companies in the Salt Lake and Utah Valley areas which offer graphics and design services. Freelance and self-employment work opportunities are also available. Many organizations such as magazine publishers, advertising agencies, book designers, the music and entertainment industry, greeting card publishers, and computer game designers rely heavily on freelance artists.

Contacts in the economic-development realm report that executives and corporations consistently ask about the valley's arts presence and its commitment to arts education. The arts are a crucial ingredient in building the kind of community that can attract and retain the best and brightest individuals in business and industry. Business leaders also note that the need for skilled artists continues to grow in the county and state. According to Stephan Hales, based on his experience as both Art faculty at Brigham Young University and owner of a large graphic design and advertising firm, "I believe that graduates from a four-year program...at UVSC would have good opportunities to find jobs locally as well as having the option to look [at] other places in the county." Bevan Wulfenstein and Russell Asplund, from Candesa Interactive, assert that the four-year program in Art and Visual Communications will "give students a higher learning edge that will help them get the jobs they love to do...and...give our community an environment of well-trained personnel in the latest skills and technologies." Drew Sanders, the Director of Nu Skin Enterprises Creative, notes that "the 4-year degree in Art and Visual Communications from Utah Valley State College is a boon to Nu Skin Enterprises and other Utah businesses." Wayne Tew, the Vice President of Operations and Senior Art Director at the Digital Ranch, looks forward to meeting the members of the first graduating class, and attests, "it has been difficult to find people with the right mix of artistic talent, design sense, and experience in digital media. Your new program clearly offers that opportunity to your students."<sup>9</sup>

A voluntary survey of Art and Visual Communications graduates from the two-year program indicates an average 65% employment rate among those surveyed. A number of these graduates have also transferred to other institutions in order to continue their art education.

Table 4 shows selected Utah-Statewide Labor Demand and Supply by Occupation 1998-2003, adds data from US Bureau of Labor Statistics tables, and notes various employment opportunities in the visual arts:

---

<sup>9</sup> See Letters of Support, Appendix E.

Table 4: Employment Opportunities in the Visual Arts

Occupation	Median Earnings	Hourly Wage		Total Employed		Ave. Annual Openings
		Entry	Average	1998	2003 (est)	
Commercial Artists*		10.29*	18.57*	4,240*	5,110*	260*
Designers (excluding Interior Design)*	48,780†	6.52*	14.36*	3,680*	4,450*	200*
Photographers*	22,300†	7.17*	14.53*	1,780*	2,000*	80*
Designers‡			17.30*	479,000‡		
Painters, sculptors, craft artists, & printmakers‡			18.43‡	105,000‡		
Photographers‡			18.45‡	52,000‡		
All other Art & Design workers‡	33,190†			112,000†	130,000†	17,000†

\* Utah-Statewide Labor Demand and Supply by Occupation 1998-2003

‡ National Median Weekly Salary Report-Employment and Earnings. Data for the US Department of Labor at <http://stats.bls.gov/proghome.htm>.

† Average annual job openings, U.S. Department of Labor, Bureau of Labor Statistics at <http://data.bls.gov/servlet/oepl.noetted.servlet>, for the years 2000-2010.

Table 4 indicates a rise in the number of job opportunities in the visual arts throughout the state and nation. As one of the fastest growing counties in Utah, Utah County's opportunities for technically trained artists have likewise increased.

### Student Demand

A sustainable student demand for a four-year degree in Art and Visual Communications is supported by various data, from both current and prospective UVSC students.

Art programs in Alpine/Nebo/Provo school districts provide a strong fine arts component, with an average of over 8,500 high school students taking art courses per year. Statewide, of high school students interested in attending UVSC who attended the 2003 High School Tour, over 660 students indicated interest in Art and Visual Communications Degrees. In addition, as the ACT data in Table 5 shows, since 2000 approximately 300 or more students per year indicate that they want to major in Art at UVSC.

Table 5: ACT Survey Results

High School Graduation Year	Students Requesting Art Major At UVSC On ACT
2000	298
2001	388
2002	343
2003	300

Local high school students are well-prepared to enter into a four-year program in Art and Visual Communications, and high school students interested in UVSC indicate a strong and sustainable demand for the degree.

Students currently attending UVSC also desire the four-year degree. In Fall 2000, 501 students enrolled in art classes at UVSC signed a student-generated petition in support of the degree, with the request that it be implemented as soon as possible. In Spring 2002, students enrolled in the Art and Visual Communications courses were surveyed to assess their interest in a four-year degree program. Students surveyed included both majors and non-majors in the current two-year program. Of the 244 participants, 179 (73%) indicated that they would be interested in pursuing a baccalaureate degree in art if it were offered at UVSC.

A survey of current Art students compiled in Fall 2003 indicates continued interest in the four-year Art and Visual Communications degree program, with 185 (76%) of the 241 students surveyed asserting that they would prefer to seek a four-year bachelor's degree in Art and Visual Communications at UVSC rather than at another state school in Utah (see Table 6). Students indicated the convenient location, the quality of the art program and facilities, and the cost of tuition at UVSC attracted them to the potential program. Over half of the interested students indicated they were currently employed in Utah County. Many students indicated that they could not transfer, and would have to either complete a degree of second choice, or not complete a four-year degree at all. Students report that transferring to similar programs would create, in many cases, financial hardship (higher tuition and fees, relocation and/or commute costs). Since many students work, leaving Utah Valley presents difficulties in finding comparable employment. Also, many UVSC students live with their families, and in transferring they would incur housing costs they would not have otherwise. Graduates of the proposed UVSC four-year degree programs would also provide students for graduate programs in Art at the University of Utah, Utah State University, and Southern Utah University.

*Table 6: "If there were a four-year AVC program, would you stay at UVSC to pursue this degree?"*

Year Of Survey	Sample Size (N)	Number and (%) Interested
2000	244	179 (73%)
2003	241	185 (77%)

As a part of the 2000 survey, students could indicate certain areas of interest (students could choose more than one area). Table 7 shows areas of student interest, with a majority of students indicating interest in more career-oriented aspects of the degree program.

*Table 7: Students interested in a four-year AVC degree chose from the following areas*

Computer Graphics (108 out of 179)	60%
Graphic Design and/or Illustration (106 out of 179)	59%
Fine Art – Drawing, Painting, Sculpture, Printmaking (69 out of 179)	39%
Photography (65 out of 179)	36%
Art Education – Teaching elementary or secondary levels (30 out of 179)	17%

In a separate survey in 2003 of students currently studying in the Art and Visual Communications department, 107 students were queried on their degree intentions: 24 (22%) indicated that they wanted to pursue the B.S. degree option, 29 (27%) want to pursue the B.A. degree option, and 47 (44%) want to pursue the B.F.A. There were seven respondents who expressed no interest in any of the four-year degree options. This illustrates that current students are interested the full-range of art degrees.

Overall, students show strong and continued interest in four-year degrees in Art and Visual Communications at UVSC, and students, both from high school and in the current two-year programs, are well-prepared to succeed in these degrees.

### *Similar Programs*

The proposed bachelor degree program will meet all the basic requirements of similar degrees at other USHE institutions.<sup>10</sup> Utah State University, University of Utah, Weber State University, Southern Utah University, and Brigham Young University all offer four-year degrees in art. The new degree at UVSC will be similar to those of the other state institutions in these ways:

1. It makes available foundational education in art, including painting, drawing, sculpture, ceramics, graphic design, and photography
2. It exposes students to qualified and knowledgeable faculty with extensive professional and academic experience in art and visual communication
3. It prepares students for the demanding and heterogeneous job market in a variety of fields
4. It employs standard assessment tools for tracking and evaluating student progress
5. It remains consistent with the standard requirements at other institutions and facilitates transferability as well as mobility of students to enter post-graduate programs of study

The new baccalaureate degree in Art and Visual Communications at UVSC will be unique in the following ways:

1. UVSC's curricular and administrative structure allows for the opportunity to obtain two-year degrees as well as well as four-year degrees at the same institution. The baccalaureate program in Art and Visual Communications thus offers a wide range of undergraduate degree options: students have the option to earn one of three two-year degrees, and to continue at the same institution towards earning a B.A., a B.S., or a B.F.A. degree. This flexibility allows students to work towards a four-year degree that fits their individual needs without losing credits and/or time. Table 8 summarizes and compares the art programs and degrees offered at each of the Utah institutions. Table 8 also indicates UVSC would be the only institution in the state to provide both two-year and four-year degrees.

*Table 8: Art Degrees at Utah Institutions.*

<b>Institution</b>	<b>Degrees Offered</b>
University of Utah	B.A., B.F.A, M.A., M.F.A., Ph.D.
Utah State University	B.A., B.S. , B.F.A. , M.A. , M.F.A.
Weber State University	B.A., B.S., B.F.A
Southern Utah University	B.A., B.S., M.F.A.
Snow College	A.A., A.S.
Dixie State College	Two-year degree in Visual Technology
College of Eastern Utah	A.A., A.S.
Brigham Young University	B.A., B.F.A., M.A., M.F.A.
Westminster College	B.A.
Salt Lake Community College	A.A.S. in Visual Art and Design
Programs at Utah Valley State College	A.A., A.S., A.A.S., B.A., * B.S., * B.F.A.* (*) proposed

<sup>10</sup> The National Center for Educational Statistics, Fall 2002, reports that 60% of all institutions in the U.S. offering four-year degree programs (institutions with student enrollments of 5000+) offer a bachelors degree in Art. Art is the 19<sup>th</sup> most common degree offered by this profile of institutions. As UVSC attempts to offer a more comprehensive set of degrees, it seems reasonable that Art should be among that set.

2. The emphases in illustration and graphic design within the B.F.A. program combine instruction in both basic drawing and painting skills and multimedia skills. As market research shows, illustrators and graphic designers in such fields as computer gaming and the movie industry are more marketable if they have backgrounds in both traditional drawing and multimedia.
3. In the planning of the four-year degree program special attention was given to current demands in society and the workplace, recognizing the influence of technology and computer-enhanced visual communication. Thus, while offering a sound education in the applied arts, the program also includes an emphasis on the technical aspects of art education.
4. The degrees exhibit a continued emphasis, consistent with the mission of UVSC, on professional flexibility and marketability.

### *Collaboration With and Impact on Other USHE Institutions*

The new degree proposed program has been discussed with representatives from several other Utah higher educational institutions. Favorable comments were received from Perry Stewart, former Art Department Chair at SUU; Alan Hashimoto, Graphic Design Coordinator at USU; Robert Olphin, former Art Department Chair at the U of U; and Richard Hull, Department of Visual Arts at BYU. These representatives all expressed the need for a four-year art program in Utah Valley.

The UVSC Art and Visual Communications four-year degree program has been designed to articulate with other art programs in the state of Utah. The AVC Chair has attended articulation meetings with other art departments in the state; existing articulation agreements address lower division coursework between institutions. Courses not specifically articulated may still transfer upon review of student portfolios. The portfolio process, as well as existing articulation agreements, will ensure a smooth transfer process for students seeking to transfer from state two-year programs into the proposed UVSC four-year program. Salt Lake Community College specifically expressed support for this new opportunity for their art students.

### *Benefits*

The four-year program in Art and Visual Communications benefits students, the academic and cultural community, and businesses in the area.

Current and prospective students at Utah Valley State College will benefit since the proposed four-year degree program in Art and Visual Communications meets a high demand from the local population. Students will save considerable time, money, and effort as higher educational goals may be met locally. Many graduates from the new four-year program at UVSC will desire to further their education with graduate-level work, leading the gains for other USHE institutions as UVSC graduates enroll in M.A., M.S., and M.F.A. programs at these institutions. The addition of four-year degrees in Art and Visual Communications enhances the local and state-wide community by augmenting the cultural and artistic environment already provided by Utah Valley State College. The proposed program benefits Utah County and other businesses statewide by providing trained employees with the creative and technical skills necessary to many industries.

### *Consistency with Institutional Mission*

The four-year degree program through the Art and Visual Communications Department is consistent with the UVSC mission to transmit knowledge and skills at the baccalaureate level. A degree program in Art is



considered basic to undergraduate institutions. This program is built upon a strong and successful associate degree program in high demand by students; it contributes to the quality of life for students and the community, as well as the economic development of the county and state.

## SECTION IV: PROGRAM AND STUDENT ASSESSMENT

### *Program Assessment*

#### *Program Goals and Measures:*

The program will expand course offerings to include more in-depth study of computer technology, graphic design, photography, studio art, and illustration. The addition of new faculty members with M.F.A. degrees will allow significant progress in meeting these goals. Two new faculty, one specializing in graphic design and the other in ceramics and sculpture, have been hired. A new faculty member will be hired in Fall 2004 as a replacement for a retiring faculty. This person will teach photography and coordinate that program.

The department will improve contract to adjunct faculty ratio by adding new full-time faculty with terminal degrees. The ratio of full-time to part-time faculty in the AVC Department has recently improved. The FTE ratio of contract to adjunct faculty is about 1 to 1. Full-time, contract faculty will teach the approximately five new upper-division courses per semester offered with the proposed four-year degree program. The planned addition of a contract faculty with photography expertise will continue improvement in this area.

The department will implement seminars and workshops to introduce and inform faculty and students of current trends and practices in the visual arts. Seminars involving faculty, students, and industry specialists will be held at least twice each semester to inform and educate faculty. Local secondary education teachers and AVC students will be invited to attend.

The department, school, and college will continue to improve and increase the physical facilities in the Art and Visual Communications Department. Significant progress has been made towards this goal with the new space allotted to the AVC Department on the third and fourth floors of the Gunther Trades Building. This space includes classrooms, ceramics and sculpture facilities, and exhibition space for student projects. Valuable space including areas for seminars and exhibitions is also available in the University Mall UVSC Woodbury Gallery and recently opened on-campus gallery space.

The Department will develop and implement a method to evaluate student progress. An important part of the new four-year AVC Program includes a capstone course involving comprehensive student projects and portfolio review. Students will be required to pass an exit interview as part of the four-year curriculum.

#### *Expected Standards of Performance*

Students are expected to achieve the following competencies upon graduation:

1. Demonstrate the ability to draw representationally in order to visualize concepts and ideas.
2. Demonstrate a basic understanding of the elements and principles of design. This includes the ability to recognize and critique good design. Design competency is an essential skill both in the creative process as well as the evaluative process in the field of visual arts.

3. Demonstrate the ability to create visual art through the competent manipulation of various computer applications. This valuable competency allows the student to use computer technology to demonstrate artistic solutions to design problems.
4. Demonstrate knowledge of art and design history in order to facilitate the creative process. An understanding of the development of the visual arts is an invaluable tool in the creation of any new aesthetic work.
5. Demonstrate an understanding of theory and competency in a chosen area of the visual arts. The diverse curriculum in the AVC department offers a variety of artistic experiences from which students are encouraged to choose an individual area of interest.

### ***Student Assessment***

Student learning will be consistently assessed through class critiques and exams. Individual student progress will be assessed midway through the program through portfolio evaluation. Portfolios will be evaluated using the AVC Outcomes Assessment Standards and must receive a score of 2.5 or higher in order to achieve competency. Standards that cannot be measured through portfolio evaluation will be assessed by course exams. A minimum GPA of 2.5 is required in order to achieve competency in these areas. Students will be assessed again through an exit interview required for graduation from the four-year program. This interview will include a review of student work compiled in the capstone class as well as a portfolio evaluation.

### ***Continued Quality Improvement***

Student assessment data gathered from portfolio reviews and test scores will be used to strengthen the program. Student outcomes will be reviewed each semester and modifications in course curriculum will be made in order to improve portfolio quality and test scores.

## **SECTION V: FINANCE**

### ***Budget and Funding Sources***

Four-year programs in Art and Visual Communications at UVSC will be relatively cost-neutral for the first five years. All costs associated with the new baccalaureate degrees will be covered by tuition revenue. Preparations for the four-year degrees in the past four years have resulted in some of the costs being anticipated and covered in the planning stages. The sections below address budgetary issues in detail, including staffing, curriculum, facilities, and other resources.

### ***Budget Projections for Each of the First Five Years***

Funding for the Art and Visual Communications baccalaureate degrees will be provided through the tuition revenue process. Budget projections for the first five years of the Art and Visual Communications baccalaureate degrees indicate that the program will be relatively cost-neutral and efficient, actually yielding over \$6,000 of surplus by the fifth year. Since the faculty (both full-time, see Table 1, and adjunct) to support the curriculum is largely in place, tuition revenue can be allocated to funding additional adjunct faculty time, and the new degrees. UVSC relies less on state tax funds as a percentage of total institutional budget than any other USHE institution. As such, UVSC is able to fund new program requests from tuition since student tuition revenue comprises 52% of the institution's total revenue compared to the system

average of 36.1%.<sup>11</sup> That, combined with higher teaching loads than most four-year institutions and relatively low adjunct pay, places UVSC in a less reliant position relative to state funding when covering the cost per student in the programs. Budget projections and allocations for the first five years of the program are specified in Table 9 below.

*Table 9: Budget Projections for the First Five Years*

	04-05	05-06	06-07	07-08	08-09
Salaried Faculty	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Salaried Faculty FTE	0.00	0.00	0.00	0.00	0.00
Salaried Staff		\$11,000	\$11,000	\$11,000	\$11,000
Salaried Staff FTE	0.00	0.33	0.33	0.33	0.33
Adjunct Faculty	\$17,034	\$31,221	\$40,440	\$31,221	\$40,440
Adjunct Faculty FTE	1	2	2.3	2	2.3
Hourly Staff	\$7,000	\$2,000	\$2,000	\$3,000	\$3,000
Benefits	\$2,420	\$9,778	\$10,709	\$9,778	\$10,709
Current	\$3,000	\$6,000	\$7,000	\$8,000	\$9,000
Travel	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Library	\$1,500	\$2,000	\$2,000	\$2,000	\$2,000
Capital			\$15,000	\$15,000	\$17,000
<b>TOTAL</b>	<b>\$30,954</b>	<b>\$61,999</b>	<b>\$88,149</b>	<b>\$79,999</b>	<b>\$93,149</b>
FTE	15	31	43	39	48
Student/Faculty Ratio	15.0	15.5	18.7	19.5	20.9
Cost per FTE	\$2,064	\$2,000	\$2,050	\$2,051	\$1,941
Tuition per FTE	\$2,072	\$2,072	\$2,072	\$2,072	\$2,072
Total Tuition Revenue	\$31,080	\$64,232	\$89,096	\$80,808	\$99,456
DIFFERENCE REVENUE	\$126	\$2,233	\$947	\$809	\$6,307

The following is an outline of the basis of the proposed budget and revenue.

**Faculty**

- No new salaried faculty. Some existing salaried faculty would be shifted from teaching all lower-division courses to teaching many of the new upper-division courses. Salaried faculty loads may then include both upper and lower-division courses.
- Hourly/adjunct faculty would be utilized to staff the lower-division courses shifted from salaried faculty and to teach, if needed, some of the specialized upper-division courses.
- The net result of the above two items is the need for the equivalent of 1 FTE hourly faculty the first year (10 courses) and 2.3 FTE hourly faculty by the fifth year (16 courses, some multiple sections).

**Staff**

- During the first year, hourly staff support has been included to assist with advising as well as labs.

<sup>11</sup> The average reliance on tuition revenue for USHE institutions is 36.1%. The following are comparative data on tuition as a percentage of the total institutional budget: CEU 17.6%, Snow 21.8%, Dixie 30.1%, USU 31.6%, SUU 31.8%, UU 36.2%, SLCC 37%, Weber 37.2%, **UVSC 51.4%** (USHE 2003-04 Budget data). (See Appendix D).

- By the second year, the AVC department plans to hire a salaried Academic Advisor. One-third of this advisor's responsibilities would be with upper division students; the remaining two-thirds would support existing A.S. and A.A.S. degree students. (Thus, only 1/3 of the cost would be associated with the proposed degrees.) Hourly staff funds are also included to assist with labs for years 2 through 5.

### *Operating Funds and Funding Sources*

- Existing capital equipment is sufficient to support the program during Years 1 and 2. Beginning with Year 3, the budget includes capital funds to replace equipment and improve/expand labs.
- Sufficient current expense has been included in the budget to provide the general lab supplies, software, etc., needed to support these degrees. Students would be required to purchase their own materials (such as clay, paints, film, etc.) for their art projects.
- Funds to enhance library acquisitions to support the degrees are also included.

### *Students/Revenue Sources*

- The budget was developed based on the projected demand for the program. The new courses will generate 15 FTE in year 1 and 48 FTE by year 5. Each degree has been designed to offer students select core courses every other semester, additional core courses at least once every two years, and elective courses on a rotating basis according to student demand. The course offerings and numbers of sections per year are designed to move students through their junior and senior years in an efficient manner. Student/faculty ratios will range from 15 to 21.
- Anticipated revenue has been confined to new tuition dollars only.<sup>12</sup> With 15 new FTE at 2003-04 tuition rates, first year revenues would slightly exceed first year costs. During all five years, revenue would exceed costs.
- The impact of 48 new FTE on other campus services would be minimal (particularly with the department providing advising services.)

---

<sup>12</sup> At 2003-2004 tuition rates.

## APPENDIX A: PROGRAM CURRICULUM

### *New Courses to Be Added In the Next Five Years*

Course Number	Title	Credit Hours
AVC 2200	Drawing for Illustration	3
AVC 3010	Classical Art and Architecture History	3
AVC 3020	Renaissance Art History	3
AVC 3030	Baroque Art and Architecture History	3
AVC 3040	20 <sup>th</sup> Century Art and Architecture History	3
AVC 319R	Art and Visual Communications Lectures	1
AVC 3470	Digital Painting	3
AVC 3690	Rendering the Human Head	3
AVC 3710	Photography II	3
AVC 3740	Photoshop for Photographers	3
AVC 3750	Photojournalism	3
AVC 4430	Advanced 3D Computer Modeling and Manipulation	3
AVC 4460	Advanced Web Page Design	3
AVC 466R	Mold Making and Casting	3
AVC 467R	Hand Building Ceramics	3
AVC 489A	Senior Project	3
AVC 489B	Senior Project	3
AVC 490R	Visual Arts Policies and Practices	3
AVC 491R	Independent Study	1-3

### *All Program Courses*

(See Appendix F for all Art and Visual Communications Course Descriptions, including new courses to be added in next five years)

### *Bachelor of Arts Degree*

	<b>General Education</b>	<b>35</b>
ENGL 1010	Introduction to Writing	3
ENGL 2010	Intermediate Writing	3
MATH 1030 or MATH 1040 or MATH 1050	Quantitative Reasoning or Introduction to Statistics or College Algebra	3
PHIL 2050	Ethics and Values	3
HLTH 1100 or PES 1300	Personal Health and Wellness or Fitness for Life	2
ECON 1740 HIST 1700 PLSC 1000 PLSC 1100 HIST 2700 & 2710	US Economic History or American Civilization or American Heritage or American National Government or US Hist. to 1877 & US Hist. from 1877	3
	Humanities Distribution Course	3

	Fine Arts Distribution Course	3
	Social/Behavioral Distribution Course	3
	Biology Distribution Course	3
	Physical Science Distribution Course	3
	Biology or Physical Distribution Course	3
<b>Foreign Language</b>		<b>18</b>
	18 Credit Hours of the Same Language	
<b>AVC Lower Division Core</b>		<b>15</b>
AVC 1110	Design	3
AVC 1120	Graphic Computer Applications	3
AVC 2010 or AVC 2020	History of Art to the Renaissance or History of Art from the Renaissance	3
AVC 1600 or AVC 1630	Drawing I or Introduction to Photography	3
AVC 2590	Portfolio	3
<b>AVC Upper Division Core</b>		<b>12</b>
AVC 3040 or AVC 3220	20th Century Art & Architecture or History of Design and Visual Arts	3
AVC 489A	Senior Project	3
AVC 489B	Senior Project	3
AVC 490R	Visual Arts Policies & Practices	3
<b>Open Electives</b>		<b>12</b>
	12 Credit Hours of Open Electives (AVC courses highly recommended)	
<b>AVC Upper Division Credit</b>		<b>28</b>
	28 Credit Hours of AVC Upper Division	
<b>Total Number of Credits</b>		<b>120</b>

*Bachelor of Science Degree*

<b>General Education</b>		<b>35</b>
ENGL 1010	Introduction to Writing	3
ENGL 2010	Intermediate Writing	3
MATH 1030 or MATH 1040 or MATH 1050	Quantitative Reasoning or Introduction to Statistics or College Algebra	3
PHIL 2050	Ethics and Values	3
HLTH 1100 or PES 1300	Personal Health and Wellness or Fitness for Life	2
ECON 1740 HIST 1700 PLSC 1000 PLSC 1100 HIST 2700 & 2710	US Economic History or American Civilization or American Heritage or American National Government or US Hist. to 1877 & US Hist. from 1877	3
	Humanities Distribution Course	3
	Fine Arts Distribution Course	3

	Social/Behavioral Distribution Course	3
	Biology Distribution Course	3
	Physical Science Distribution Course	3
	Biology or Physical Distribution Course	3
<b>AVC Lower Division Core</b>		<b>18</b>
AVC 1110	Design	3
AVC 1120	Graphic Computer Applications	3
AVC 2010 or AVC 2020	History of Art to the Renaissance or History of Art from the Renaissance	3
AVC 1600	Drawing I	3
AVC 1630	Introduction to Photography	3
AVC 2590	Portfolio	3
<b>AVC Electives</b>		<b>9</b>
	9 Credit hours of AVC Courses	
<b>AVC Upper Division Core</b>		<b>12</b>
AVC 3040 or AVC 3220	20th Century Art & Architecture or History of Design and Visual Arts	3
AVC 489A	Senior Project	3
AVC 489B	Senior Project	3
AVC 490R	Visual Arts Policies & Practices	3
<b>Open Electives</b>		<b>18</b>
	18 Credit Hours of Open Electives (AVC courses highly recommended)	
<b>AVC Upper Division Credit</b>		<b>28</b>
	28 Credit Hours of AVC Upper Division	
<b>Total Number of Credits</b>		<b>120</b>

*Bachelor of Fine Arts Degree with a Graphic Design/Illustration Emphasis*

<b>General Education</b>		<b>35</b>
ENGL 1010	Introduction to Writing	3
ENGL 2010	Intermediate Writing	3
MATH 1030 or MATH 1040 or MATH 1050	Quantitative Reasoning or Introduction to Statistics or College Algebra	3
PHIL 2050	Ethics and Values	3
HLTH 1100 or PES 1300	Personal Health and Wellness or Fitness for Life	2
ECON 1740 HIST 1700 PLSC 1000 PLSC 1100 HIST 2700 & 2710	US Economic History or American Civilization or American Heritage or American National Government or US Hist. to 1877 & US Hist. from 1877	3
	Humanities Distribution Course	3
	Fine Arts Distribution Course	3
	Social/Behavioral Distribution Course	3

	Biology Distribution Course	3
	Physical Science Distribution Course	3
	Biology or Physical Distribution Course	3
<b>AVC Lower Division Core</b>		<b>18</b>
AVC 1110	Design	3
AVC 1120	Graphic Computer Applications	3
AVC 2010 or AVC 2020	History of Art to the Renaissance or History of Art from the Renaissance	3
AVC 1600	Drawing I	3
AVC 1630	Introduction to Photography	3
AVC 2590	Portfolio	3
<b>AVC Electives</b>		<b>9</b>
	9 Credit hours of AVC Courses	
<b>AVC Upper Division Core</b>		<b>12</b>
AVC 3040 or AVC 3220	20th Century Art & Architecture or History of Design and Visual Arts	3
AVC 489A	Senior Project	3
AVC 489B	Senior Project	3
AVC 490R	Visual Arts Policies & Practices	3
<b>Graphic Design/Illustration Emphasis</b>		<b>46</b>
AVC 2020	History of Art from the Renaissance	3
AVC 319R	AVC Lectures	1
AVC 3130	Color Theory	3
AVC 2420	Advanced Computer Assisted Graphics	3
AVC 2450	Image Processing w/Photoshop	3
AVC 3340	3D Computer Graphics	3
AVC 3440	Animation Presentation Graphics	3
AVC 3470	Digital Painting	3
<b>Graphic Design Option</b>		
AVC 1300	Graphics I	3
AVC 1550	Typography	3
AVC 241R	Digital Publishing Platforms	3
AVC 3460	Creating and Publishing Web Pages	3
AVC 4400	Graphics II	3
AVC 4430	Adv. 3D Modeling and Manipulation	3
AVC 4460	Advanced Web Page Design	3
AVC 4490	Digital Layout and Design	3
<b>Illustration Option</b>		
AVC 2200	Drawing for Illustration	3
AVC 1640 or 1650	Painting I or Introduction to Watercolor	3
AVC 1210	Illustrative Techniques	3
AVC 3730	Photo Illustration	3
AVC 3200	Illustration	3
AVC 3690	Rendering the Human Head	3
AVC 361R	Figure Drawing I	3



AVC 4200	Illustration II	3
	<b>Total Number of Credits</b>	<b>120</b>

*Bachelor of Fine Arts Degree with a Studio Arts Emphasis*

<b>General Education</b>		<b>35</b>
ENGL 1010	Introduction to Writing	3
ENGL 2010	Intermediate Writing	3
MATH 1030 or MATH 1040 or MATH 1050	Quantitative Reasoning or Introduction to Statistics or College Algebra	3
PHIL 2050	Ethics and Values	3
HLTH 1100 or PES 1300	Personal Health and Wellness or Fitness for Life	2
ECON 1740 HIST 1700 PLSC 1000 PLSC 1100 HIST 2700 & 2710	US Economic History or American Civilization or American Heritage or American National Government or US Hist. to 1877 & US Hist. from 1877	3
	Humanities Distribution Course	3
	Fine Arts Distribution Course	3
	Social/Behavioral Distribution Course	3
	Biology Distribution Course	3
	Physical Science Distribution Course	3
	Biology or Physical Distribution Course	3
<b>AVC Lower Division Core</b>		<b>18</b>
AVC 1110	Design	3
AVC 1120	Graphic Computer Applications	3
AVC 2010 or AVC 2020	History of Art to the Renaissance or History of Art from the Renaissance	3
AVC 1600	Drawing I	3
AVC 1630	Introduction to Photography	3
AVC 2590	Portfolio	3
<b>AVC Electives</b>		<b>9</b>
	9 Credit hours of AVC Courses	
<b>AVC Upper Division Core</b>		<b>12</b>
AVC 3040 or AVC 3220	20th Century Art & Architecture or History of Design and Visual Arts	3
AVC 489A	Senior Project	3
AVC 489B	Senior Project	3
AVC 490R	Visual Arts Policies & Practices	3
<b>Studio Arts Emphasis</b>		<b>46</b>
AVC 2020	History of Art from the Renaissance	3
AVC 319R	AVC Lectures	1

AVC 3010 or AVC 3020 or AVC 3030	Classical Art History or Renaissance Art History or Baroque Art History	3
AVC 3130	Color Theory	3
AVC 1660 AVC 1670	Introduction to Clay Sculpture or Introduction to Ceramics	3
AVC 3530	3D Design	3
AVC 3540	Creativity	3
AVC 361R	Figure Drawing I	3
AVC 1520 AVC 1680 AVC 1700	Crafts, Methods, and Materials or Fundamentals of Fiber Design Process of Jewelry and Metal Design	3
AVC 1640	Painting I	3
AVC 1650	Introduction to Watercolor	3
AVC 2600	Drawing II	3
	6 Credit Hours of AVC Upper Division	6
<b>Drawing/Painting Option</b>		
AVC 364R or AVC 365R	Painting II or Watercolor II	3
AVC 3690	Rendering the Human Head	3
<b>Sculpture/Ceramics Option</b>		
AVC 3660 or AVC 3670	Clay Sculpture II or Ceramics II	3
AVC 466R or AVC 467R	Mold Making & Casting or Hand Building Ceramics	3
	<b>Total Number of Credits</b>	<b>120</b>

*Bachelor of Fine Arts Degree with a Photography Emphasis*

<b>General Education</b>		<b>35</b>
ENGL 1010	Introduction to Writing	3
ENGL 2010	Intermediate Writing	3
MATH 1030 or MATH 1040 or MATH 1050	Quantitative Reasoning or Introduction to Statistics or College Algebra	3
PHIL 2050	Ethics and Values	3
HLTH 1100 or PES 1300	Personal Health and Wellness or Fitness for Life	2
ECON 1740 HIST 1700 PLSC 1000 PLSC 1100 HIST 2700 & 2710	US Economic History or American Civilization or American Heritage or American National Government or US Hist. to 1877 & US Hist. from 1877	3
	Humanities Distribution Course	3
	Fine Arts Distribution Course	3
	Social/Behavioral Distribution Course	3

	Biology Distribution Course	3
	Physical Science Distribution Course	3
	Biology or Physical Distribution Course	3
<b>AVC Lower Division Core</b>		<b>18</b>
AVC 1110	Design	3
AVC 1120	Graphic Computer Applications	3
AVC 2010 or AVC 2020	History of Art to the Renaissance or History of Art from the Renaissance	3
AVC 1600	Drawing I	3
AVC 1630	Introduction to Photography	3
AVC 2590	Portfolio	3
<b>AVC Electives</b>		<b>9</b>
	9 Credit hours of AVC Courses	
<b>AVC Upper Division Core</b>		<b>12</b>
AVC 3040 or AVC 3220	20th Century Art & Architecture or History of Design and Visual Arts	3
AVC 489A	Senior Project	3
AVC 489B	Senior Project	3
AVC 490R	Visual Arts Policies & Practices	3
<b>Photography Emphasis</b>		<b>46</b>
AVC 2020	History of Art from the Renaissance	3
AVC 319R	AVC Lectures	1
AVC 1300	Graphics I	3
AVC 2620	Advanced Darkroom Techniques	3
AVC 2630	Advanced Camera Techniques	3
AVC 3720	Photo Lighting	3
AVC 3730	Photo Illustration	3
AVC 3710	Photography II	3
AVC 2450	Image Processing with Photoshop	3
AVC 3740	Photoshop for Photographers	3
AVC 3750	Photojournalism	3
	3 Credit hours of AVC Open Elective	
	12 Credit hours of AVC Upper Division	
	<b>Total Number of Credits</b>	<b>120</b>

## APPENDIX B: PROGRAM SCHEDULE

The following are examples of suggested schedules for a student seeking B.A., B.S., or B.F.A. degrees.

### *Bachelor of Arts - Art & Visual Communications*

First Year			
Fall (1st Semester)		Spring (2nd Semester)	
ENGL 1010 Introduction to Writing	3	PLSC 1000 American Heritage	3
BIOL 1010 General Biology	3	PHIL 2050 Ethics & Values	3
AVC 1010 Introduction to Art	3	PHSC 1000 Survey of Physical Science	3
AVC 1110 Design	3	AVC 1630 Introduction to Photography	3
AVC 1120 Graphic Computer Appl.	3	SPAN 1010 Beginning Spanish I	5
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>17</b>

Second Year			
Fall (3rd Semester)		Spring (4th Semester)	
MATH 1030 Quantitative Reasoning	3	ENGL 2010 Intermediate Writing	3
COMM 1010 Intro. to Speech Comm.	3	ASTR 1010 Astronomy	3
HLTH 1100 Personal Health & Wellness	2	COMM 2010 Interpersonal Comm.	3
AVC 2010 History of Art to the Ren.	3	AVC 2590 Portfolio	3
SPAN 1020 Beginning Spanish II	5		
<b>Total Semester Load</b>	<b>16</b>	<b>Total Semester Load</b>	<b>12</b>

### *Portfolio Review - As Degree Completed and/or Continue*

Third Year			
Fall (5th Semester)		Spring (6th Semester)	
AVC 3040 20th Century Art & Architecture	3	AVC 490R Visual Arts Policies/Practices	3
AVC 3130 Color Theory	3	AVC 3540 Creativity	3
AVC 3530 3D Design	3	AVC 3010 Classical Art History	3
SPAN 2010 Intermediate Spanish	5	SPAN 2020 Intermediate Spanish II	3
AVC 2450 Image Proc. w/Photoshop	3	AVC 2420 Adv. Comp. Assisted Graphics	3
<b>Total Semester Load</b>	<b>17</b>	<b>Total Semester Load</b>	<b>15</b>

Fourth Year			
Fall (7th Semester)		Spring (8th Semester)	
AVC 489A Senior Project	3	AVC 489B Senior Project	3
AVC 3340 3D Computer Graphics	3	AVC 4460 Adv. Web Page Design	3
AVC 3460 Creating & Pub. Web Pages	3	AVC 4430 Adv. 3D Comp. Modeling & Manipulation	3
AVC 1650 Introduction to Watercolor	3	AVC 365R Watercolor II	3
AVC 2410 Digital Publishing Platforms	3	AVC 319R AVC Lectures	1
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>13</b>

120 Credit Hours for a Bachelor of Arts degree

*Bachelor of Science - Art & Visual Communications*

First Year			
Fall (1st Semester)		Spring (2nd Semester)	
ENGL 1010 Introduction to Writing	3	PLSC 1000 American Heritage	3
BIOL 1010 General Biology	3	PHIL 2050 Ethics & Values	3
AVC 1600 Drawing I	3	PHSC 1000 Survey of Physical Science	3
AVC 1110 Design	3	AVC 1630 Introduction to Photography	3
AVC 1120 Graphic Computer Appl.	3	AVC 1650 Introduction to Watercolor	3
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>15</b>

Second Year			
Fall (3rd Semester)		Spring (4th Semester)	
MATH 1030 Quantitative Reasoning	3	ENGL 2010 Intermediate Writing	3
COMM 1010 Intro. to Speech Comm.	3	ASTR 1010 Astronomy	3
ASTR 1010 Astronomy	3	HLTH 1100 Personal Health & Wellness	2
AVC 2010 History of Art to the Ren.	3	AVC 2590 Portfolio	3
AVC 2420 Adv. Comp. Assist. Graphics	3	AVC 2450 Image Proc. w/Photoshop	3
		AVC 1550 Typography	3
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>17</b>

*Portfolio Review - As Degree Completed and/or Continue*

Third Year			
Fall (5th Semester)		Spring (6th Semester)	
AVC 3040 20th Century Art & Architecture	3	AVC 490R Visual Arts Policies & Practices	3
AVC 3340 3D Computer Graphics	3	AVC 3130 Color Theory	3
AVC 3460 Creating & Pub. Web Pages	3	AVC 3470 Digital Painting	3
AVC 2410 Digital Pub. Platforms	3	AVC 2600 Drawing II	3
AVC 1300 Graphics I	3	AVC 2630 Adv. Camera Techniques	3
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>15</b>

Fourth Year			
Fall (7th Semester)		Spring (8th Semester)	
AVC 489A Senior Project	3	AVC 489B Senior Project	3
AVC 4460 Adv. Web Page Design	3	AVC 4490 Digital Layout & Design	3
AVC 4430 Adv. 3D Comp. Modeling & Manipulation	3	AVC 3720 Photo Lighting	3
AVC 2620 Adv. Darkroom Techniques	3	AVC 3730 Photo Illustration	3
AVC 2600 Drawing II	3	AVC 319R AVC Lectures	1
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>13</b>

120 Credit Hours for a Bachelor of Science degree

*Bachelor of Fine Arts - Art & Visual Communications, Graphic Design/Illustration Emphasis*

First Year			
Fall (1st Semester)		Spring (2nd Semester)	
ENGL 1010 Introduction to Writing	3	PLSC 1000 American Heritage	3
BIOL 1010 General Biology	3	PHIL 2050 Ethics & Values	3
AVC 1600 Drawing I	3	PHSC 1000 Survey of Physical Science	3
AVC 1110 Design	3	AVC 1630 Introduction to Photography	3
AVC 1120 Graphic Computer Appl.	3	AVC 1650 Introduction to Watercolor or AVC 1640 Painting I	3
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>15</b>

Second Year			
Fall (3rd Semester)		Spring (4th Semester)	
MATH 1030 Quantitative Reasoning	3	ENGL 2010 Intermediate Writing	3
COMM 1010 Intro. to Speech Comm.	3	ASTR 1010 Astronomy	3
ASTR 1010 Astronomy	3	HLTH 1100 Personal Health & Wellness	2
AVC 2010 History of Art to the Ren.	3	AVC 2590 Portfolio	3
AVC 2420 Adv. Comp. Assist. Graphics	3	AVC 2410 Digital Publishing Platforms or AVC 1210 Illustrative Techniques	3
AVC 2450 Image Proc. w/Photoshop	3		
<b>Total Semester Load</b>	<b>18</b>	<b>Total Semester Load</b>	<b>14</b>

*Portfolio Review - As Degree Completed and/or Continue*

Third Year			
Fall (5th Semester)		Spring (6th Semester)	
AVC 2020 History of Art from the Ren.	3	AVC 490R Visual Arts Policies/Practices	3
AVC 1550 Typography or AVC 1640 Painting I or AVC 1650 Watercolor I	3	AVC 3130 Color Theory	3
AVC 1300 Graphics I or AVC 2220 Drawing for Illustration	3	AVC 3460 Creating & Pub. Web Pages or AVC 3730 Photo Illustration	3
AVC 3430 3D Computer Graphics	3	AVC 3440 Animation Presentation Graphics	3
AVC 319R AVC Lectures	1	AVC 2620 Adv. Darkroom Techniques	3
AVC 1700 Proc. of Jewelry & Metal Design	3		
<b>Total Semester Load</b>	<b>16</b>	<b>Total Semester Load</b>	<b>15</b>

Fourth Year			
Fall (7th Semester)		Spring (8th Semester)	
AVC 489A Senior Project	3	AVC 489B Senior Project	3
AVC 3470 Digital Painting	3	AVC 4490 Digital Layout & Design or AVC 4200 Illustration II	3
AVC 4460 Adv. Web Page Design or AVC 361R Figure Drawing I	3	AVC 4430 Adv. 3D Computer Modeling & Manipulation or AVC 3690 Rend. the Human Head	3

Fourth Year			
Fall (7th Semester)		Spring (8th Semester)	
AVC 4400 Graphics II or AVC 3200 Illustration	3	AVC 3040 20th Century Art & Architecture or AVC 3220 Hist. of Design & Visual Arts	3
AVC 2630 Adv. Camera Techniques	3		
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>12</b>

120 Credit Hours for a Bachelor of Fine Arts degree with a Graphic Design/Illustration Emphasis.

*Bachelor of Fine Arts - Art & Visual Communications, Studio Arts Emphasis*

First Year			
Fall (1st Semester)		Spring (2nd Semester)	
ENGL 1010 Introduction to Writing	3	PLSC 1000 American Heritage	3
BIOL 1010 General Biology	3	PHIL 2050 Ethics & Values	3
AVC 1600 Drawing I	3	PHSC 1000 Survey of Physical Science	3
AVC 1110 Design	3	AVC 1630 Introduction to Photography	3
AVC 1120 Graphic Computer Appl.	3	AVC 2600 Drawing II	3
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>15</b>

Second Year			
Fall (3rd Semester)		Spring (4th Semester)	
MATH 1030 Quantitative Reasoning	3	ENGL 2010 Intermediate Writing	3
COMM 1010 Intro. to Speech Comm.	3	ASTR 1010 Astronomy	3
ASTR 1010 Astronomy	3	HLTH 1100 Personal Health & Wellness	2
AVC 2010 History of Art to the Ren.	3	AVC 2590 Portfolio	3
AVC 1650 Introduction to Watercolor	3	AVC 2640 Landscape Painting	3
AVC 1640 Painting I	3		
<b>Total Semester Load</b>	<b>18</b>	<b>Total Semester Load</b>	<b>14</b>

*Portfolio Review - As Degree Completed and/or Continue*

Third Year			
Fall (5th Semester)		Spring (6th Semester)	
AVC 2020 History of Art from the Ren.	3	AVC 490R Visual Arts Policies/Practices	3
AVC 1670 Introduction to Ceramics	3	AVC 3130 Color Theory	3
AVC 3540 Creativity	3	AVC 3530 3D Design	3
AVC 361 R Figure Drawing	3	AVC 364R Painting II	3
AVC 319R AVC Lectures	1	AVC 2420 Adv. Computer Asst. Graphics	3
AVC 2410 Digital Publishing Platforms	3		
<b>Total Semester Load</b>	<b>16</b>	<b>Total Semester Load</b>	<b>15</b>

Fourth Year			
Fall (7th Semester)		Spring (8th Semester)	
AVC 489A Senior Project	3	AVC 489B Senior Project	3
AVC 365R Watercolor II	3	AVC 3690 Rendering the Human Head	3

Fourth Year			
Fall (7th Semester)		Spring (8th Semester)	
AVC 3020 Renaissance Art History	3	AVC 3300 Illustration	3
AVC 1700 Proc. of Jewelry & Metal Design	3	AVC 3040 20th Century Art & Architecture or AVC 3220 Hist. of Design & Visual Arts	3
AVC 2450 Image Processing w/Photoshop	3		
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>12</b>

120 Credit Hours for a Bachelor of Fine Arts degree with a Studio Arts Emphasis.

*Bachelor of Fine Arts - Art & Visual Communications, Photography Emphasis*

First Year			
Fall (1st Semester)		Spring (2nd Semester)	
ENGL 1010 Introduction to Writing	3	PLSC 1000 American Heritage	3
BIOL 1010 General Biology	3	PHIL 2050 Ethics & Values	3
AVC 1630 Introduction to Photography	3	PHSC 1000 Survey of Physical Science	3
AVC 1110 Design	3	AVC 1600 Drawing I	3
AVC 1120 Graphic Computer Appl.	3	AVC 2620 Adv. Darkroom Techniques	3
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>15</b>

Second Year			
Fall (3rd Semester)		Spring (4th Semester)	
MATH 1030 Quantitative Reasoning	3	ENGL 2010 Intermediate Writing	3
COMM 1010 Intro. to Speech Comm.	3	ASTR 1010 Astronomy	3
ASTR 1010 Astronomy	3	HLTH 1100 Personal Health & Wellness	2
AVC 2010 History of Art to the Ren.	3	AVC 2590 Portfolio	3
AVC 2630 Adv. Camera Techniques	3	AVC 1670 Introduction to Ceramics	3
AVC 2450 Image Processing w/Photoshop	3		
<b>Total Semester Load</b>	<b>18</b>	<b>Total Semester Load</b>	<b>14</b>

*Portfolio Review - As Degree Completed and/or Continue*

Third Year			
Fall (5th Semester)		Spring (6th Semester)	
AVC 2020 History of Art from the Ren.	3	AVC 490R Visual Arts Policies/Practices	3
AVC 3710 Photography II	3	AVC 1300 Graphics I	3
AVC 3460 Creating & Pub. Web Pages	3	AVC 3730 Photo Illustration	3
AVC 3720 Photo Lighting	3	AVC 3740 Photoshop for Photographers	3
AVC 319R AVC Lectures	1	AVC 1650 Introduction to Watercolor	3
AVC 2600 Drawing II	3		
<b>Total Semester Load</b>	<b>16</b>	<b>Total Semester Load</b>	<b>15</b>



Fourth Year			
Fall (7th Semester)		Spring (8th Semester)	
AVC 489A Senior Project	3	AVC 489B Senior Project	3
AVC 3220 History of Design & Visual Arts	3	AVC 3750 Photojournalism	3
AVC 2420 Adv. Computer Asst. Graphics	3	AVC 3130 Color Theory	3
AVC 491R Independent Study	3	AVC 4460 Adv. Web Page Design	3
AVC 1640 Painting I	3		
<b>Total Semester Load</b>	<b>15</b>	<b>Total Semester Load</b>	<b>12</b>

120 Credit Hours for a Bachelor of Fine Arts degree with a Photography Emphasis.

**APPENDIX C: CURRENT FULL-TIME FACULTY PREPAREDNESS WITH DEGREE, AREAS OF SPECIALIZATION, AND ACCOMPLISHMENTS**

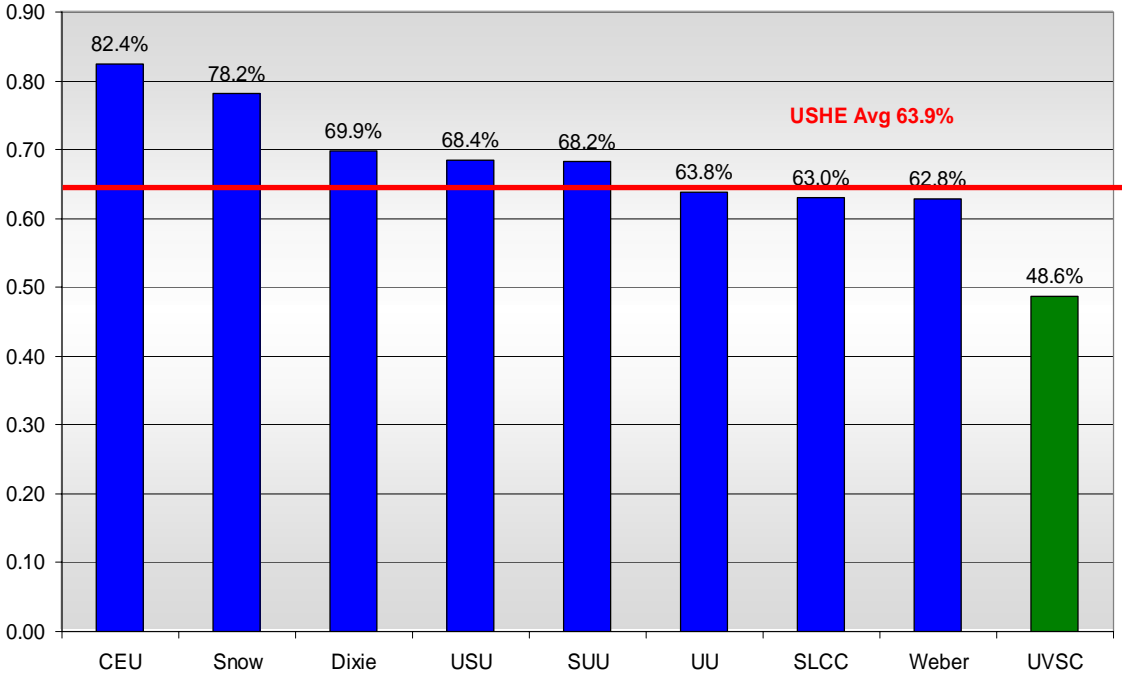
<b>Professors</b>	<b>Area Of Specialization</b>	<b>Accomplishments</b>
Steven C. Bule* Ph.D., Art History, Ohio State University	Art History, Art Appreciation	Scholar of medieval art history; author of authoritative textbook; recipient of prestigious teaching awards at previous university
Robert B. deWitt M.F.A., Art/Painting, BYU M.F.A., Art History, BYU	Figure drawing, art history, computer-aided graphics	Exhibits original 3-D animated computer models on international web sites; Exhibits figure drawings
Lawrence P. Holt B.A., French, BYU	Graphic arts, printing, computerized page layout	16 years industrial experience
Douglas D. Anderson M.S. Industrial Education, BYU	Design, Graphic Design	Extensive administrative experience; 8 years professional experience
Jon Turner M.S. Industrial Education, BYU	Computer graphics	12 years industrial experience
<b>Associate Professors</b>		
Catherine Downing* M.F.A., Painting, University of South Florida	Painting, drawing	Exhibits artwork regularly; recipient of several state and national awards
Susan M. Parkinson M.A., Fine Arts, Utah State University	Screen printing, painting, drawing	Extensive experience as a professional and entrepreneur: owner of studio and screen printing business
Barbra L. Wardle M.A., Art Education, BYU	Three-dimensional design	10 years professional experience
<b>Assistant Professors</b>		
Perry Stewart* M.F.A., Illustration, Utah State University	Illustration	14 years professional illustration experience
Hyunmee Lee* M.A., M.F.A, Painting, University of Sidney	Painting, drawing	Exhibits artwork regularly at prestigious national and international galleries; paintings reside in international locations
Jim Godfrey* M.F.A., Graphic Design, Utah State University	Computer graphics, graphic design	5 years industrial experience; recipient of prestigious graphic design awards
Mark Talbert* M.A., M.F.A., Utah State University	Ceramics, sculpture, 3-D design	Extensive professional experience; directed art program for the city of St. George, UT.; sells and exhibits artwork nationally

\* Faculty with four-year program experience from previous positions at colleges and universities

APPENDIX D

From the Utah System of Higher Education 2003-2204 Data Book

State Tax Funds % of Total Institutional Budget



## APPENDIX E: COURSE DESCRIPTIONS FOR ALL ART AND VISUAL COMMUNICATIONS COURSES

### Includes Upper-Division Courses

AVC 1010: Introduction to Art 3:3:0 Su, F, Sp  
 Develops an appreciation of art. Studies elements and principles of art. Includes identification of major art forms, surveys art history, art criticism, and media. Satisfies a humanities requirement when combined with an art studio class. Community members are welcome.

AVC 1020: Basic Drawing 3:2:2 Su, F, Sp  
 For non-majors. Introduces basic drawing techniques and stresses fundamentals of observation based drawing. Includes practice and skill building. Investigates basic black and white media such as graphite and charcoal. Requires sketchbook, in-class and home work assignments. Community members welcome.

AVC 1110: Design 3:3:0 Su, F, Sp  
 Core course for all AVC majors. Introduces the elements and principles of design. Studies two and three dimensional formats as they relate to a series of different design problems. Uses principles such as line, shape, rhythm, contour, value, and contrast in creative assignments.

AVC 1120: Graphic Computer Applications 3:2:2 Su, F, Sp  
 Core course for all AVC majors. Introduces Desktop Publishing. Emphasizes electronic typesetting, design, and paste-up on a personal computer workstation. Utilizes draw, paint, and specialized word processing software, on Macintosh computers for the design of brochures, newsletters, flyers, packaging, etc. Includes lab. Successful completers should have a general knowledge of the Macintosh platform.

AVC 1210: Illustrative Techniques 3:2:2 F  
 Introduces various techniques used in the commercial art industry. Emphasizes preparation of portfolio pieces. Explores a variety of rendering techniques, such as conte pencil, ink, scratchboard, colored pencil, and water media.

AVC 1280: Airbrush Basics 3:2:2 F, Sp  
 Studies basic airbrush techniques, tools and materials. Develops masking and painting skills for a wide variety of textures and effects. Includes lectures, demonstrations, and labs. Students must provide airbrush (any model) and materials.

AVC 1300: Graphics I 3:2:3 F, Sp  
 For most AVC majors. Introduces the broad-based production techniques of the graphics industry. Teaches layout, paste-up, stat camera operation, image assembly (stripping), proofing, plating, and basic offset presswork. Includes a historical overview of the important figures and processes in the evolution of print. Emphasizes business and personal ethics.

AVC 1310: Screen Printing I 3:2:2 F, Sp  
 Presents the historical development of screen printing and how it is used as a commercial printing process. Includes making of hand-cut and photo-transfer stencils; care of frames and fabric; screen printing inks; and printing on various types of substrates.

- AVC 1320: Presswork 3:2:3 On Sufficient Demand  
Prerequisite: AVC 1300  
Emphasizes advanced methods of imposition, platemaking, and small sheet-fed press operations, including two, three, and four color work. Covers stock selection, color matching, envelope printing, estimating, and production controls.
- AVC 1520: Crafts, Methods, and Materials 3:2:2 On Sufficient Demand  
Prerequisite: AVC 1110  
Emphasizes design skills used in craft media including glass, metal, wood, fibers, and composites. Covers use and safe practices for both hand and power tools. Includes historical and cultural derivation of designs and art works, through critical analysis, aesthetic import and production techniques. Community members welcome.
- AVC 1550: Typography 3:3:0 F, Sp  
Covers principles of type design, type faces, typesetting, specifying type, calligraphy, and publishing processes. Addresses the use of typography in modern advertising and publishing. Includes laboratory. Successful completers should have a basic understanding of typography usage.
- AVC 1600: Drawing I 3:2:2 Su, F, Sp  
For majors and non-majors. Introduces fundamental drawing concepts and media. Emphasizes mastery of basic drawing principles and integration of these principles into a personal drawing style through exposure to a variety of structured drawing experiences. Requires sketchbook, in-class and home work assignments.
- AVC 1630: Introduction to Photography 3:2:3 Su, F, Sp  
Studies basic elements of photography. Includes theory, camera operations, composition, film processing, proofing, enlarging, and methods of display. Student must provide own camera. Community members welcome.
- AVC 1640: Painting I 3:2:2 Su, F, Sp  
Prerequisite: AVC 1600  
For students with no or limited oil painting experience. Presents elementary methods and techniques of painting with oils. Students must provide all materials and equipment except easels. Requires sketchbook, in-class and homework assignments.
- AVC 1650 FF: Introduction to Watercolor 3:2:2 Su, F, Sp  
A beginning/intermediate level course. Studies materials, techniques, and compositional methods of watercolor painting. Teaches the application of six basic techniques for the use of transparent watercolor materials. Includes lecture/demonstration, and studio time for application and evaluation.
- AVC 1660 FF: Introduction to Clay Sculpture 3:2:2 F, Sp  
Introduces methods and techniques of figurative clay sculpture. Students will construct armatures and build clay head and anatomy studies from the model. Includes firing and finishing techniques. Community members welcome.
- AVC 1670 FF: Introduction to Ceramics 3:2:2 Su, F, Sp

Studies clay as an expressive medium. Emphasizes techniques of working with clay, including hand building, wheel throwing, glazing, and firing. Community members welcome.

AVC 1680 FF: Fundamentals of Fiber Design 3:2:2 On Sufficient Demand  
 Introduces basic fiber design and construction. Includes techniques in weaving, carding, spinning, dying, batik, ikat, basketry, and felting. Students provide all materials. Community members welcome.

AVC 1690 FF: Glass Design and Construction 3:2:2 Sp  
 Prerequisite: None, but AVC 1520 and 1600 recommended  
 Introduces materials, methods, and techniques of leaded glass, copper foil, and faceted glass construction. Covers design, cut, fit, and solder of glass projects. Emphasizes glass composition, historical glass and artists, critical analysis and design principles. Community members welcome.

AVC 1700 FF: Processes of Jewelry and Metal Design 3:2:2 Su, F, Sp  
 Prerequisite: None, but AVC 1520 and 1600 recommended  
 Presents traditional methods and techniques of working with fine metals such as silver, gold, pewter, brass, and copper. Includes fabrication, construction, casting, enameling, and lapidary techniques. Community members welcome.

AVC 1710 FF: Fundamentals of Sculpture, Fabrication, & Construction 3:2:2 On Sufficient Demand  
 Studies basic design methods and techniques for fabrication and construction of armatures and sculptural forms of metal. Emphasizes oxyacetylene welding, brazing, metal shearing, and shaping in construction of three dimensional designs. Community members welcome.

AVC 1720 FF: Architectural Rendering 3:3:0 On Sufficient Demand  
 Teaches two point perspective architectural rendering. Develops exterior pictorial views from floor and elevation plans. Uses various artist mediums to add atmospheric perspective and landscape features. Successful completers should also be familiar with the use of renderings in public hearings and design reviews.

AVC 1810: Introduction to Interior Design 3:3:0 F, Sp  
 For individuals wishing to develop interior design skills, be employed in the interior design industry, or develop their own interior design business. Overviews the interior design profession, client profiles and the design process. Covers principles and elements of design, evaluating design, color and lighting, fabric and pattern coordination. Studies American architecture and furniture styles, history and identification, and current design trends.

AVC 1820: Interior Space Design 3:3:0 F, Sp  
 For individuals wishing to develop interior design skills, be employed in the interior design industry, or develop their own interior design business. Covers aesthetic and functional home design and space planning, "presentation" drafting and presentation techniques, "universal design," quality furniture selection, and furniture arrangements. Includes kitchen design, architectural details, background materials, color fabric construction and selection. Includes lecture, guest speakers, videos, in-class labs and field trips. Completers have prepared floor plans, color and selection boards, and make client presentations.

AVC 1830: Residential Interior Design 3:3:0 F, Sp

For individuals wishing to develop interior design skills, be employed in the interior design industry, or develop their own interior design business. Covers conceptualizing, designing, specifying and presenting residential interior client presentations. Includes business practices, building codes, portfolio preparation and advanced interior design concepts. Completers will have knowledge to be competent at mid-level interior design positions.

AVC 2010 FF: History of Art to the Renaissance 3:3:0 F, Sp  
Covers major trends in Western art from the Paleolithic period to the Gothic era, including elements of political, religious, cultural, literary, and philosophical elements as they impacted the development of art.

AVC 2020 FF: History of Art from the Renaissance 3:3:0 F, Sp  
Covers major trends in Western art, from the Renaissance through the Modern era, including elements of political, religious, cultural, literary, and philosophical elements as they impacted the creation of art.

AVC 219R: Art and Visual Communications Seminar 1-3:1-3:0-9 Su, F, Sp  
Elective course for AVC students. Presents seminars and workshops from experts in industry. May range from a single weekend to a full semester. Repeatable for offerings of different content. A maximum of 3 credits may apply toward graduation.

AVC 2200: Drawing for Illustration 3:2:2 On Sufficient Demand  
Prerequisite: AVC 1600  
Provides students with essential drawing skills used in illustration. Introduces techniques, stylization, abstraction sketching, and memory and compositional drawing. Stresses the importance of quality reference materials and files.

AVC 231R: Screen Printing II 3:2:2 F, Sp  
Prerequisite: AVC 1310  
Utilizes individual student contract to produce six multi-color images in a variety of advanced screen printing techniques. Emphasizes screen preparations, direct and indirect photo-emulsion, reduction and hand drawn methods. Incorporates advanced camera techniques and computer applications. Includes multiple color printing on cardstock, fabric, wood, and miscellaneous surfaces. May be repeated once for credit.

AVC 2320: Presswork II 3:2:3 On Sufficient Demand  
Prerequisite: AVC 1320  
Pursues in-depth studies of lithographic equipment and techniques. Studies chemistry used in production processes. Includes hands-on experience and investigative field trips. Successful completers should be able to produce quality lithographs ready for consumer use.

AVC 241R: Digital Publishing Platforms 3:2:2 F, Sp  
Prerequisite: AVC 1120  
Develops advanced skills in the use of Desktop Publishing software. Includes word processing, designing and importing graphics from graphics software. Studies formatting, pagination, runarounds, the use of auto-flow and electronic page layout techniques. Uses state-of-the-art software. Presents industry standards in the production of flyers, newsletters, letterheads, business forms, magazines, etc.

AVC 2420: Advanced Computer Assisted Graphics 3:2:2 F, Sp

Prerequisite: AVC 1120

Develops advanced skills in computer graphics illustration and painting software. Includes advanced creative techniques for drawing, designing, painting, filling, blending, and texturing. Studies application to two-dimensional black and white, grayscale, and process color reproduction. Uses state-of-the-art software.

AVC 2450: Image Processing with Photoshop 3:2:2 F, Sp

Prerequisite: AVC 1120

Covers the basics of generating and manipulating computer images on the Macintosh platform. Teaches beginning to advanced techniques used by professional working with Adobe Photoshop. Includes image capture, scanning, file format conversion, color correction, resolution and printing considerations, digital photo retouching, compositing, image montages and creating stylized artwork from scanned color photos.

AVC 2510: Design II 3:3:0 On Sufficient Demand

Prerequisite: AVC 1110

A continuation of the basic design course with emphasis on preparing the student for advanced challenges in design, such as logo design, magazine layout, and package design.

AVC 2590: Portfolio 3:2:2 F, Sp

Prerequisite: (AVC 1020 or 1600), 1110, 1120, 1130, and 1550

Teaches the selection and preparation of a portfolio and its contents for use in applying to professional art programs and for job interviews. Provides opportunities to evaluate and develop a format for professional presentations. Presents job-seeking skills pertinent to the visual arts industry. Successful completers should have a portfolio which will display the artist's work to its best advantage.

AVC 2600 FF: Drawing II 3:2:2 F, Sp

Prerequisite: AVC 1600

For Art and Visual Communications Majors. Emphasizes continued mastery of drawing principles and further integration of these principles into a personal drawing style. Provides exposure to a variety of structured drawing experiences.

AVC 2620 FF: Photographic Darkroom Techniques 3:2:3 F

Prerequisite: AVC 1630

For students seeking advanced contemporary photographic skills. Covers advanced skills in photographic printing techniques. Studies distortion, toning, reticulation, montage, special screens, brutalization, Polaroid transfers, and liquid emulsion. Emphasizes artistic expression. Community members welcome.

AVC 2630 FF: Photographic Camera Techniques 3:2:3 F

Prerequisite: AVC 1630

For students seeking advanced contemporary camera techniques. Covers skills in camera handling. Studies double exposure, special effects, filters, flash, time exposures, light painting, emulsion transfers, found filtration, Polaroid transfers, etc. Community members welcome.

AVC 2640 FF: Landscape Painting 3:2:2 On Sufficient Demand

For majors and non-majors. Teaches landscape painting and drawing techniques through direct exposure to area sites. Explores interior and exterior landscapes. Studies color, shape, relationships, light, and



space. Emphasizes individual interpretation of subject matter using a variety of media. Community members welcome.

AVC 2700: Drawing for Animation 3:1:6

Prerequisite: AVC 1600

Introduces the drawing of basic shapes and forms used to create solidly-constructed, computer-animated characters. Emphasizes understanding and communicating movement of the human form as shapes and drawing imaginatively.

AVC 281R: Cooperative Work Experience 1-8:0:5-40 On Sufficient Demand

Actual on-the-job training in cooperation with businesses and firms in the local area. Work experience credit is offered in conjunction with a correlated job preparation course (AVC 285R). For job qualified students only, with department Coop coordinator permission.

AVC 285R: Cooperative Correlated Class 1:1:0 F, Sp

For Art and Visual Communications students who wish to earn credit in cooperative work experience.

Emphasizes job seeking skills such as resume writing, cover letters, interviewing techniques and portfolio development. May be repeated once for credit.

AVC 291R: Independent Study 1-3:1-3:2-6 F, Sp

Prerequisite: Second year students only

Provides an opportunity for second year students to do individual research and experimentation within the areas of the AVC Program. Study is limited to advanced work beyond that which can be completed in existing available classes. A proposal must be submitted and approved by the department prior to enrollment. A maximum of three credits may apply to graduation.

AVC 299R: VICA 1:1:0 F, Sp

For Art and Visual Communications majors. Supports and facilitates the goals and objectives of Vocational Industrial Clubs of America (VICA). VICA is a pre-professional student organization that develops social awareness, civic responsibility, vocational and leadership skills through participation in educational, vocational, civic, recreational, and social activities. Students may participate in local, state, and national contests. May be repeated once for credit.

AVC 3010: Classical Art and Architecture History 3:3:0

Prerequisite: AVC 2010 and 2020 or HUM 2010 and 2020

For AVC majors and other students interested in art history. Studies the art and architecture of Ancient Greece, Etruria, and Rome. Explores the influences on classical culture as well as the influences of Greco-Roman culture over the centuries. Includes lectures and class discussion about classical art within its broad cultural framework.

AVC 3020: Renaissance Art History 3:3:0

Prerequisite: AVC 2010 and 2020 or HUM 2010 and 2020

For AVC majors and other students with an interest in art history. Studies art and architecture in Italy between 1250 and 1550 and explores artistic style, patronage, historical influences, and broad cultural influences on art. Includes lectures and class discussion on the major art works and artists in Florence, Rome, and Venice.

AVC 3030: Baroque Art and Architecture History	3:3:0	
Prerequisite: AVC 2010 and 2020 or HUM 2010 and 2020		
For AVC majors and other students with an interest in art history. Studies major art works and artists in Italy, Spain, and France during the 17th Century. Explores the artistic, historical, religious, and broad cultural influences on the art of this period. Includes lectures and class discussion.		
AVC 3040: Twentieth Century Art and Architecture History	3:3:0	
Prerequisite: AVC 2010 and 2020 or HUM 2010 and 2020		
For AVC majors and other students interested in art history and the modern era. Studies leading artists, artworks, and movements. Explores the broad cultural, historical, and philosophical influences on modern and contemporary art and architecture. Includes lectures and class discussions on the art and related issues of contemporary methodologies and art criticism.		
AVC 3130: Color Theory	3:3:0	F, Sp
Prerequisite: AVC 1110		
Covers theories of color, color systems, social and psychological impact of color, and the effects of colors on humankind. Assignments demonstrate the application of color theories.		
AVC 319R: Art and Visual Communications Lectures	1:1:0	F, Sp
Prerequisite: AVC Major Status		
For AVC majors. Explores diverse areas of the visual arts through weekly lectures and demonstrations. Presenters will include professionals in the areas of studio arts, illustration, photography, and graphic design. Students will document course experiences through written and oral reports. Course may be repeated for credit three times.		
AVC 3200: Illustration	3:2:2	F, Sp
Prerequisite: AVC 1110, 1210, and 2200		
Provides experiences in creating mood and visualizing ideas through illustration. Emphasizes creativity and technical ability. Addresses illustrative concepts and problem solving.		
AVC 3220: History of Design and Visual Arts	3:3:0	F
Prerequisite: Upper Division Status in Major		
For AVC majors and other students with interest in the visual arts. Presents a history of graphic design, illustration, and photography apart from the study of traditional art history. Explores the impact of major movements, technologies, and innovations on present-day graphic design. Includes lectures, group projects, and field trips.		
AVC 3400 FF: Fundamentals of Art Education	3:2:2	F, Sp
For elementary and early childhood education majors and other interested students. Introduces concepts and techniques necessary to teach broadly based art education to children. Applies the four disciplines of aesthetics, art criticism, art history, and art production in drawing, painting, sculpture, printmaking, and crafts. Includes classroom and materials management. Community members welcome.		
AVC 3430: 3D Computer Modeling	3:2:2	
Teaches techniques in the use of 3D computer modeling software. Studies model construction, texture mapping, scene construction, animating, and rendering of 3D computer models. Uses the Macintosh platform and state-of-the-art software such as Infini-D, Pixels 3D, Strata 3D, Poser, and Bryce.		

AVC 3440: Computer Animated Presentation Graphics 3:2:2  
 Teaches preparing and editing computer generated animation sequences, video clips, and sound tracks for instructional Multimedia presentations using the Macintosh computer. Uses state-of-the-art software applications such as Macromedia Director and Sound Edit 16.

AVC 3460: Creating and Publishing Web Pages 3:2:2  
 Provides a thorough introduction of the Internet as a major resource and communication tool in today's world. Includes creating and publishing web pages using HTML programming and other web authority tools. Provides instruction on optimizing graphics, animation, and other media to create a fully functioning web site.

AVC 3470: Digital Painting 3:2:2  
 Prerequisite: AVC 1120 and 241R or 2420 or 2450  
 Develops advanced skills in producing pixel-based computer generated artwork for illustrations and other graphic communication applications. The software used for this course is the most recent version of Painter. Some of the topics covered in the course are: the Painter interface; using Painter; surface control; layers; masking; mosaics and tessellations; working with shapes; special effects; color control; animation and web design using Painter.

AVC 3490: Digital Layout and Design 3:2:2  
 Presents advanced techniques for designing and creating page layouts using the computer. Teaches principles of digital page layout with emphasis on application in the world of advertising and publishing. Covers the various steps that are needed to create a page layout from the actual conception of the design to the final print ready output. Emphasizes principles of graphic design, typeface selection, color reproduction, corporate identities, advertisements, brochures, and multi-page layouts.

AVC 3530: Three Dimensional Design 3:2:2  
 Presents a survey of the history and main lines of development and influential factors in three dimensional design. Examines important designers, firms, and decisive turning points in the history of three dimensional design. Assignments are project oriented emphasizing planning, purpose, and function. To this end the proper use of tools and materials will be taught.

AVC 3540: Creativity 3:3:0  
 Studies the creative aspects of business, politics, arts, interpersonal relationships, philosophy, theology, and sciences. Develops an appreciation for creative problem solving. Explores case studies where nontraditional solutions were used to solve problems. Includes lecture, group discussion, guest speakers, and projects.

AVC 361R: Figure Drawing I 3:2:2  
 Presents skills and techniques related to drawing the human figure. Uses life models. May be repeated once for credit.

AVC 364R: Painting II 3:2:2  
 Presents advanced traditional and non-traditional oil painting techniques. Emphasizes the techniques for personal exploration. Encourages development of individual style and approach to the media. Repeatable one time for credit.

- AVC 3650: Watercolor II 3:2:2  
 For students seeking intermediate and advanced techniques of transparent watercolor and/or opaque acrylic watermedia painting. Emphasizes development of technical skills, composition and color mixing. Includes lecture, demonstration, and studio time for application and evaluation.
- AVC 3660: Clay Sculpture II 3:2:2  
 For students seeking more advanced sculpture instruction. Teaches intermediate techniques of clay sculpture, including armature construction, bas relief, figurative sculpture based on human and animal form. Includes mold construction for casting in various media, such as hydrocal, resins, acrylic polymers, cold cast metals, etc. Completers should possess techniques to create a sculpture from clay model to finished piece. Community members welcome.
- AVC 3670: Ceramics II 3:2:2  
 For students seeking intermediate and advanced techniques of wheel throwing, hand-building, and glazing. Emphasizes clay as an artistic medium. Includes decoration of clay shapes with engobes, slip, glaze, overglazes, etc. Students will provide all materials and equipment except wheels. Completers should possess the skills to create a quality finished ceramic piece. Community members welcome.
- AVC 3690: Rendering the Human Head 3:2:2  
 Prerequisite: AVC 1020 or 1600  
 Designed to develop proficiency in rendering the human head in a variety of approaches and techniques. Addresses geometric and planar construction, proportion, lighting, features, and expression.
- AVC 370R: Figure Structure 3:1:6  
 Prerequisite: AVC 261R  
 Studies the human figure in dynamic posing and motion. Emphasizes figure-drawing skills such as extreme foreshortening, perspective, and drawing the human form in motion. May be repeated for a maximum of six credits toward graduation.
- AVC 3710: Photography II 3:2:3  
 Prerequisite: AVC 1630  
 Continuation of Introduction to Photography. Teaches advanced techniques used with the camera and the darkroom. Creativity is emphasized. Teaches camera testing using shutter speed and depth of field as well as testing of darkroom conditions.
- AVC 3720: Photo Lighting 3:2:3  
 Prerequisite: AVC 1630  
 Studies photographic studios and location lighting techniques. Includes single light set ups, multiple lighting, direct lighting, diffused lighting, etc. Discusses types of lights with instruction in color balance and color temperature.
- AVC 3730: Photo Illustration 3:2:3  
 Prerequisite: AVC 1630  
 Emphasizes conceiving, planning, and interpreting of an idea and creating that idea photographically. Studies applied or commercial aspects of photographs as they are produced for advertisement and editorial purposes.

AVC 3740: Photoshop for Photographers Prerequisite: AVC 1120, 1630, and 2450 Teaches advanced techniques using Photoshop as another tool to assist the photographer. Uses techniques of scanning, down loading, photo touch-up, image manipulation, and photo restoration.	3:2:2
AVC 3750: Photojournalism Prerequisite: AVC 1630 Emphasizes the techniques and processes of achieving success in photojournalism. Teaches how to communicate visually and the ethics of privacy and dealing with sensitive materials.	3:3:0
AVC 4200: Illustration II Prerequisite: AVC 2200 and 3200 Provides experiences in creating mood and visualizing ideas through illustration. Emphasizes creativity. Addresses illustrative concepts and problem solving.	3:2:2
AVC 4400: Graphics II Prerequisite: AVC 1120, 1300, 241R, and 2450 Covers both traditional and electronic techniques in generation, evaluation, manipulation, and output of images for reproduction purposes. Offers hands-on experience with traditional equipment such as cameras and light tables as well as digital techniques using Macintosh computer applications. Provides experience working with pre-press professionals to prepare a portfolio representing industry practices.	3:2:2
AVC 4430: Advanced 3D Computer Modeling and Manipulation Prerequisite: AVC 2450 and 3430 Teaches advanced techniques in creating and manipulating 3D computer models, using Lightwave on the Macintosh Computer.	3:2:2
AVC 4460: Advanced Web Page Design Prerequisite: AVC 1110, 3130, and 3460 Teaches advanced techniques in designing web pages, using up-to-date software applications.	3:2:2
AVC 466R: Mold Making and Casting Prerequisite: AVC 1110, 1660, 3530, and 3660 For AVC majors and others interested in mold making. Covers both theory and practice of sculptural mold making and casting of sculptural designs of multiple originals of their own works. This will include using various materials for both cold casting and lost wax casting.	3:2:2
AVC 467R: Hand Building Ceramics Prerequisite: AVC 1670 and 3670 Emphasizes hand building design and techniques in creating both sculptural and vessel projects in water-based clay. Methods of coil, slab, and pinch construction will utilize slump molding, rolled slab, cylinders, and molds in creation of finished clay products. Students will learn various types of firing processes, including bisque, raku, anagama, sagger, high fire, and overglaze, in addition to normal firing methods. This course is designed for students interested in three-dimensional art forms, and for interested members of the community.	3:2:2

AVC 470R: Interpretive Drawing

3:1:6

Prerequisite: AVC 380R

Offers a senior-level drawing experience, emphasizing drawing from imagination. Continues skill development in proper character structure and scene layout. May be repeated for a maximum of 6 credits toward graduation.

AVC 489A: Senior Project

3:2:2

Prerequisite: Senior status in AVC major

For AVC majors with senior status. Combines and integrates concepts, methodologies, and skills developed in previous AVC course work. Through the completion of a comprehensive project. Students will develop their own project/portfolio in consultation with a faculty advisor. Finished projects will demonstrate individual student skills and interests.

AVC 489B: Senior Project

3:2:2

Prerequisite: Senior status in AVC major

For AVC majors with senior status. Combines and integrates concepts, methodologies, and skills developed in previous AVC course work. Through the completion of a comprehensive project. Students will develop their own project/portfolio in consultation with a faculty advisor. Finished projects will demonstrate individual student skills and interests.

AVC 490R: Visual Arts Policies and Practices

3:3:0

Prerequisite: Senior status in AVC major

For AVC majors. Covers standard policies and procedures used in the creation and marketing of visual arts. Includes estimating, pricing, trade customs, ethical standards, contracts, and other legal rights and issues.

May 26, 2004

MEMORANDUM

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: Salt Lake Community College/Utah College of Applied Technology Strategic Alliance

Background

The creation of UCAT has created some challenges for higher education, particularly in communities where both a UCAT and an existing higher education institution exist. Nowhere has this accommodation been more difficult than in the Salt Lake-Tooele Region which is also the home of Salt Lake Community College. Salt Lake Community College is not only a comprehensive community college with a clear mission of providing applied technology education programs, but it has the distinctive feature of a Skills Center which historically has served educationally and economically disadvantaged students by providing them with skill training required for employment. UCAT provides similar services to students with a delivery model that is open entry/open exit and competency measured, with limited emphasis given to credit or degrees. Both institutions want to serve students who desire applied technology programs, hence there have been long standing disagreements about how these students are best served and who should serve them. The history of determining appropriate roles for these two institutions and the many attempts to collaborate on ATE programming is far too long to reiterate here.

The issue can be reduced to a couple of choices. The first choice is to outline a cooperative plan to define and implement complementary roles for the two institutions. In theory this would have UCAT focusing on non-credit, non-degree programs where the purpose is immediate job placement. Typically this is done in an open entry/open exit delivery system that focuses on competencies rather than credits. UCAT is authorized to award an AAT degree but has agreed not to do so in the Salt Lake-Tooele Region unless there is a compelling need. By comparison, SLCC would focus on credit programs that transfer to other institutions and that commonly lead to degrees. This emphasis would diminish SLCC's current program offerings which include non-degree, non-credit programs.

Of particular importance to SLCC is the Skills Center which has a long history at the College and serves educationally and economically disadvantaged students with ATE programs. The Skills Center would remain at SLCC under the proposed agreement; however, to work properly a cooperative agreement will change existing roles and assignments. In effect the ATE "pie" needs to be divided along some lines and this will have

clear changes, especially for SLCC. It is important to emphasize that the role and mission definitions are a good beginning at dividing the work, but no definition or structure will completely solve the issue at hand. We are now at a point where structure must take a back seat to the good faith efforts of the participants. Regardless of whether or not there is a division of roles, the number of new students needing educational programs may well exceed what both institutions can do working together.

A second choice is to merge the programs of Salt Lake –Tooele UCAT into Salt Lake Community College. This would require the elimination of the UCAT campus and a change in legislation. One could argue that the value of choosing this option simplifies the management of these programs and eliminates the potential for unnecessary duplication of programs. It is not clear whether or not there would be Legislative approval for this change. Moreover, there are individuals, businesses and organizations in the region that support the Salt Lake-Tooele UCAT and believe its presence is essential in meeting their training needs.

#### Recommendation

For the last several months a small committee consisting of the SLCC president, the UCAT president, the Commissioner of Higher Education, the SLCC Trustee Chair, the UCAT Trustee Chair, and the Chair of the Board of Regents have been discussing a collaborative effort which is attached. This is an effort to accomplish the goals of the first option outlined above. The agreement bears the approval of the committee but in fairness to SLCC, they continue to have reservations about the collaborative option. Perhaps these concerns can be mitigated by working through the requirements of the plan and developing a true working partnership. The Steering Committee, as identified in the plan, will assist in approving agreements that are workable to all parties.

I believe that we are at an important juncture. It is time either to proceed with a collaborative plan or to merge institutions. I am recommending that the Board of Regents approve the collaborative plan as recommended by the small working committee and direct the presidents and other officers of the respective institutions to accomplish the tasks as outlined. This plan is being presented to SLCC Trustees, UCAT Trustees, and SLTATC Directors. I have been assured of their support.

Accomplishments should be reported at the end of the first year and an evaluation made. Two years may be required to give the collaboration a chance to prove results. Ultimately, future legislative appropriations of this arrangement may be the determining factor for continuation.

Richard E. Kendell, Commissioner

Attachments



**Strategic Alliance  
Between  
the Utah College of Applied Technology and Salt Lake Community College  
to Jointly Provide Applied Technology Education Services  
in the Salt Lake - Tooele Region**

In an effort to cooperatively meet the applied technology education needs of the citizens of the Salt Lake - Tooele Region to the fullest extent possible, to avoid any actual or implied unnecessary duplication of educational services, and to resolve several existing service delivery area concerns, Salt Lake Community College (SLCC) and the Utah College of Applied Technology (UCAT) hereby enter into this Cooperative Agreement on this \_\_\_\_\_ day of \_\_\_\_\_, 2004.

This agreement is designed to enhance the services provided by both institutions, in cooperation with our secondary education partners, for the purposes of serving the education and training needs of students and meeting the interests of the business and industry community-at-large in the Salt Lake – Tooele Region. This agreement is provided to ensure an understanding of the complexities of providing these services and to outline a plan that will coordinate the efforts of all institutions involved. The component parts are as follows:

- 1. Maintain a presence for both Salt Lake Community College and the UCAT Salt Lake – Tooele Campus in the Salt Lake – Tooele Region.**
  - With the creation of this strategic alliance, there is a role for both Salt Lake Community College and the Utah College of Applied Technology in the Salt Lake – Tooele Region.
  - Representatives from Salt Lake Community College, the Utah College of Applied Technology, and the Office of the Commissioner of Higher Education will work together to more clearly define appropriate, complementary roles for each of the two institutions.
  - The focus of this strategic alliance is to develop an approach to the delivery of applied technology education for SLCC and the UCAT Salt Lake – Tooele Campus that avoids unnecessary duplication, and that creates and sustains strong ATE programs that provide a continuum of educational opportunities with a variety of delivery options to the citizens of the region.
  
- 2. Evaluate all existing programs offered by the UCAT SLTATC and the Skills Center to identify unnecessary duplication and support potential partnership opportunities.**
  - Review budgets, cost, current and projected enrollment and business/industry demand.
  - Identify areas of unnecessary duplication and programs that could be the basis for future collaboration.
  - Upon completion of the review, where unnecessary duplication is found, make a determination regarding which program is stronger based upon the best objective data possible. Such data might include best fit with role and mission, enrollment, rate of completion, job placement, cost per student/membership hour, and business/industry support, consistent with the philosophy that whichever deliverer is providing the best program should continue to do so. The actual

determination of criteria will be established by separate agreement and approved by the Executive Review Committee (see #6). Agree upon which program will continue to operate. Construct agreements for these programs which allow both UCAT and Skills Center students to enroll. Skills Center students must meet the criteria of academically and or economically disadvantaged. UCAT students will be those not meeting these criteria. Under this plan, a single program could serve both populations of students or two programs could be justified with different student populations.

- Establish an agreement allowing UCAT and the SLCC Skills Center to contract for shared facilities, faculty and services for these programs, with reimbursement to the appropriate entity per the agreement. Such agreements will be reviewed and approved by the Executive Review Committee (see #6).
  - Agreements concerning facilities shall be consistent with the provisions of H.B. 232.
- 3. Develop a cooperative/partnership approach to future instructional programming in the region.**
- Develop a plan to allow for shared space and services in Tooele, e.g., USU Education Center, DWS facilities, hospitals, etc.
  - Construct a plan for shared space and services at the Unity Center.
  - Explore and pursue grants that provide the opportunity for partnerships and the development of collaborative certificate offerings between SLCC and the SLTATC, e.g. Youthbuild, Utah Electronic College, etc.
- 4. Develop bridge programs that articulate Skills Center and SLTATC certificate offerings with Salt Lake Community College associate degree programs.**
- As required by statute, the SLTATC will focus on non-credit, competency-based ATE programming offered, to the extent possible, in an open-entry/open-exit environment and designed to meet the immediate employment needs of students and employers.
  - For the period of this agreement, SLTATC will not offer the AAT degree in the Salt Lake – Tooele Region unless:
    - there is sufficient demand from students, business and/or industry for a specific AAT degree, and
    - such an effort is discussed and coordinated with Salt Lake Community College, with appropriate articulation with Skills Center certificate programs.
  - As a general operating principle, SLCC will focus on credit ATE programs that result in technical degrees. As required by statute, the SLCC Skills Center will continue to serve academically and economically disadvantaged students by providing non-credit, competency-based, non-degree ATE programming offered, to the extent possible, in an open-entry/open-exit environment and designed to meet the needs of students and employers.

- In all instances, ATE programs will be coordinated between the SLTATC and SLCC and will be consistent with the terms of this Strategic Alliance.
  - Establish formal articulation agreements between Skills Center and SLTATC certificate programs to all appropriate SLCC Associate of Applied Science Programs.
5. **Develop a jointly administered approach to the Custom Fit Program that provides the opportunity for distribution of funds in a manner that is consistent with employer demand.**
- Review reports from both SLTATC and SLCC detailing and verifying the status of current, signed contracts, pending requests from employers for services, and a review of corporate contribution levels.
  - Develop a mechanism to distribute funds in an equitable manner in order to allow both participants to serve employers that have requested service and are waiting for funding to become available.
  - Develop a joint approach to requesting funding from the legislature based on a cooperative Custom Fit effort.
  - Participate in Custom Fit Council meetings to ensure appropriate representation and assist with coordinating Custom Fit efforts statewide.
6. **A Steering Committee, comprised of the President of SLCC, the President of UCAT, the Campus President of the Salt Lake – Tooele Campus, the Commissioner of Higher Education and the respective chairs of the SLCC Trustees, UCAT Trustees, and the Board of Regents will provide direction and oversight for this alliance. Key staff from SLCC and UCAT Salt Lake – Tooele will proceed immediately to accomplish the following tasks:**
- Review and approve new programs, discontinue programs that unnecessarily duplicate each other, propose joint efforts between SLCC and UCAT, etc.
  - Review the status of Custom Fit services and Custom Fit funding in the Region. Make recommendations for redistribution of Custom Fit funds or allocation of supplemental funds.
  - Review and recommend solutions to unresolved issues between SLCC and UCAT.  
(See attachment)

All aforementioned items in this Strategic Alliance agreement between the Salt Lake-Tooele Campus of the Utah College of Applied Technology and Salt Lake Community College have been unanimously approved and recommended for implementation by all parties, adopted on this date, 14 May 2004.

---

David G. Thomas, Chair  
Salt Lake Community College

---

Douglas R. Fannesbeck, Chair  
UCAT Salt Lake-Tooele Campus Board of Directors

---

Judd H. Morgan, President  
Salt Lake Community College

---

Linda Fife, Campus President  
UCAT Salt Lake-Tooele Campus

---

Richard E. Kendell, Commissioner  
Utah System of Higher Education

---

Gregory G. Fitch, President  
Utah College of Applied Technology

---

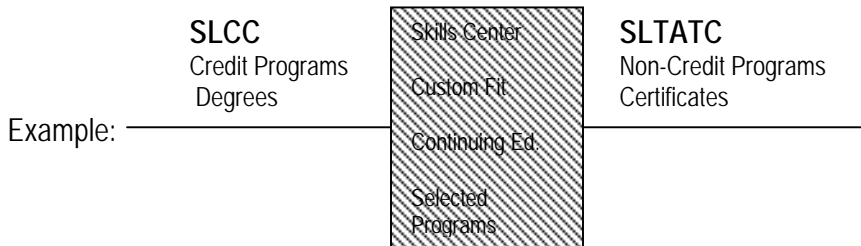
Nolan E. Karras, Chair  
Board of Regents

---

Norman H. Bangerter, Chair  
Utah College of Applied Technology Board of  
Trustees

**SLTATC/SLCC Strategic Alliance**  
Next Steps in Implementation as Outlined in the Agreement

1. Representatives from Salt Lake Community College, the Utah College of Applied Technology, and the Office of the Commissioner of Higher Education will work together to more clearly define appropriate, complementary roles for each of the two institutions. In those instances of potential duplication of role and mission (highlighted by the box below) specific agreements will be made to ensure that programs are complementary to each other.



2. Evaluate all existing programs offered by the UCAT SLTATC and the Skills Center to identify unnecessary duplication and support potential partnership opportunities. The initial report should be prepared by the interim president of SLTATC and the Dean of the Skills Center (SLCC).
  - Review budgets, cost, current and projected enrollment and business/industry demand.
  - Identify areas of unnecessary duplication and programs that could be the basis for future collaboration.
  - Identify objective data elements to be used to determine, when unnecessary program duplication is found, which program is stronger. Examples:
    - Best fit with role and mission,
    - Percentage of enrollment growth, decline, over a specific period of time
    - Rate of completion,
    - Job placement,
    - Cost per student/membership hour,
    - Business/industry support
  - Construct agreements for these programs which allow both UCAT and Skills Center students to enroll. Skills Center students must meet the criteria of academically and or economically disadvantaged. UCAT students will be those not meeting these criteria. Under this plan, a single program could serve both populations of students or two programs could be justified with different student populations.
3. Establish an agreement whereby UCAT and the SLCC Skills Center will contract for shared facilities, faculty and services for these programs, with reimbursement to the appropriate entity per the agreement. Such agreements will be reviewed and approved by the Executive Review Committee (see #6).

4. Develop a cooperative/partnership approach to future instructional programming in the region.
  - Construct a plan to pursue shared space and services in Tooele, e.g., USU Education Center, DWS facilities, hospitals, etc.
  - Construct a plan for shared space and services at the Unity Center.
  - Explore and pursue grants that provide the opportunity for partnerships and the development of collaborative certificate offerings between SLCC and the SLTATC, e.g. Youthbuild, Utah Electronic College, etc.
5. Establish formal articulation agreements between Skills Center and SLTATC certificate programs to all appropriate SLCC Associate of Applied Science Programs.
6. Develop a jointly administered approach to the Custom Fit Program that provides the opportunity for distribution of funds in a manner that is consistent with employer demand.
  - Review reports from both SLTATC and SLCC detailing and verifying the status of current, signed contracts, pending requests from employers for services, and a review of corporate contribution levels.
  - Develop a mechanism to redistribute funds in an equitable manner in order to allow both participants to serve employers that have requested service and are waiting for funding to become available.
  - Develop a joint approach to requesting funding from the legislature based on a cooperative Custom Fit effort.

**MEMORANDUM**

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: **Consent Calendar – Academic, Applied Technology, and Student Success Committee**

The following requests have been submitted by institutions for consideration by the Regents on the Consent Calendar of the Academic, Applied Technology, and Student Success Committee:

A. **Snow College**

1. **“Fast Track” Approval: Culinary Arts**

**Request:** Snow College requests approval under the “Fast Track Approval Process” of Regent policy R401 to offer a 26 credit hour certificate program in Culinary Arts at the Snow College Richfield campus. Program completers will be skilled in culinary arts from short order food preparation to sumptuous banquets. Both classroom theory and hands-on learning experiences are included so that students may acquire the necessary competencies to work in the food service industry. A listing of courses for the Certificate of Proficiency in Culinary Arts follows:

CLA	1301	Culinary Arts I	1:1:0
CLA	1303	Baking and Pastries I	3:1:4
CLA	1305	Hot Food Preparation I	3:1:4
CLA	1306	Short Order Cooking I	3:1:4
CLA	1307	Cold Food Preparation I	3:1:4
CLA	1401	Culinary Arts II	1:1:0
CLA	1403	Baking and Pastries II	3:1:4
CLA	1405	Hot Food Preparation II	3:1:4
CLA	1406	Short Order Cooking II	3:1:4
CLA	1407	Cold Food Preparation II	3:1:4
Total			26 credits

**Need:** The Culinary Arts program has been offered at the Richfield campus for many years under the school's different names and governance structures. The program is now part of Snow

College. However, it has previously been a non-credit program and students were eligible for financial aid. Snow College does not currently provide financial aid for non-credit programs, and a credit option is needed for students who require financial aid. The non-credit option will continue to be available. The Culinary Arts Advisory Committee at the College has recommended creation of this credit certificate program at the Richfield Campus.

Market demand for the program remains strong. Over 90 percent of the completers have found employment in this field in recent years, 80 percent of whom have been employed in the local region. The program will continue to serve both secondary and postsecondary students. The Utah Division of Workforce Services, Vocational Rehabilitation Services, and Utah State Social Services have supported and requested training in this field. The 2004 Utah Career Guide lists food service workers as one of the top 50 occupations currently in demand.

**Institutional Impact/Finances:** No additional resources are required for this program. Faculty, facilities, equipment, and supplies are already in place because the program has been offered as a non-credit program. There will be no increase in costs. This program is consistent with the Snow College Richfield mission of providing short-term ATE programs to both secondary and post-secondary students.

B. Utah Valley State College

1. Emphasis in Environmental Management

**Request:** UVSC requests approval to add an Emphasis in Environmental Management to their current Earth Science Bachelor of Science degree program. The quality of both the Earth Science and the Environmental Technology Management programs will be improved through better integration provided through this Emphasis. Administration of the two programs will be combined, redundant courses will be eliminated, and the total cost of offering degrees in both fields will be decreased. Since many of the career opportunities for Earth scientists are in fields related to environmental management, this emphasis will enhance employment options for students. By completing the 120 credits required for the Environmental Management Emphasis in the Earth Science BS program, students will obtain a solid science, earth science, and math foundation while accomplishing the necessary course work in environmental management. Complete course listings for the existing BS in Earth Science degree and the proposed Environmental Management Emphasis within this degree are available from UVSC or the Commissioner's office.



**Need:** This new emphasis will increase career opportunities for students studying Earth Sciences and/or Environmental Management. Knowledge and skills taught through the Emphasis are in high demand by government regulatory agencies as well as by companies and industries that must comply with environmental regulations. All 40 students currently working toward the Environmental Technology Management AAS degree indicate that they would prefer to complete this baccalaureate degree emphasis over the existing associate degree.

**Institutional Impact:** No new administrative structure will be required for this Emphasis. The existing Earth Science chair will continue as the department chair. The former Environmental Technology Management department chair will have reduced administrative duties and a larger teaching load.

**Finances:** A decrease in the total cost of providing degrees in Earth Science and in Environmental Technology Management will be realized. Cost savings will come from combining administration of the two programs and by eliminating 12 redundant or unnecessary courses. This reduction of courses and an increased teaching load for the former department chair of Environmental Technology Management will more than offset the costs for adding four new courses for the new Emphasis.

C. Utah College of Applied Technology

1. Expansion of Cosmetology Training at the Davis Applied Technology Campus

**Request:** UCAT requests approval to expand the current 900 clock-hour Cosmetology training program at the Davis Campus to a full 2000 hour certificate program that meets state licensing requirements. The limited Cosmetology offering was initially set up as part of a partnership with local business and industry through which students completed the first 900 hours at the DATC and then transferred seamlessly into a private training program.

**Need:** The proposed expansion is consistent with the defined UCAT curriculum in Cosmetology and with state licensing requirements. By completing only 900 hours in the existing program, students seeking licensure would have to transfer to a private cosmetology school or to another UCAT campus. Students in the program have repeatedly requested that the program be expanded to include the full certificate. Since nearly one third of salon workers change jobs each year, since many choose to open their own businesses, and others become "booth renters" at salons, there are constant job openings in this field. About three out of four salon owners report difficulty in finding qualified personnel. Enrollment in the DATC program has continued to be strong.

**Institutional Impact:** The current 900-hour DATC Cosmetology program will have to be expanded by 1100 hours to meet standards of the UCAT approved program and to meet state licensing requirements. Additional hours in *Hair, Skin and Nail Care; Business of Cosmetology I; Job Seeking Skills; Workplace Relations; Computer Literacy;*

and *Math I* will be required.

Current staff are fully prepared to offer the expanded instruction. Regional partners at Weber State University, Davis School District, and Morgan School District are supportive of this expansion.

**Finances:** Increased costs for the Cosmetology training will be absorbed within existing DATC budgets and they will be minimal. The expansion is not designed to serve more students, but to allow existing students to complete the full program leading to state licensure. New instructional costs in Cosmetology will come through the attrition savings of four Medical Anatomy and Physiology faculty positions that are being transferred to the Davis School District at the close of this school year. A portion of the attrition savings will be applied to the Cosmetology program expansion.

#### Commissioner's Recommendation

The Commissioner recommends that the Regents approve the institutional requests on the Consent Calendar of the Academic, Applied Technology, and Student Success Committee, as described above.

Richard E. Kendell, Commissioner

REK:DAC

**MEMORANDUM**

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: **Information Calendar– Academic, Applied Technology, and Student Success Committee**

The following academic and administrative program changes have been submitted for review by the Regents on the Information Calendar of the Academic, Applied Technology, and Student Success Committee. These changes have been previously approved by the respective Boards of Trustees. No action is required by the Regents.

A. University of Utah

1. Undergraduate Minor in Meteorology in the Department of Meteorology.

This proposed minor will offer interested undergraduate students the opportunity to explore the impacts of the atmosphere upon society as well as a way for them to diversify their academic backgrounds in applying basic scientific principles in an interdisciplinary way. Unlike the B.S. degree in Meteorology, the minor is not intended to prepare students for employment as professional meteorologists. The minor would serve students interested in pursuing careers in broadcast meteorology, as well as engineering and science students with an interest in the atmosphere. The minor requires 16 semester credit hours in the Meteorology Department, with prerequisites, and can be offered without any expansion of new courses, no additional faculty, staff, library, or other resources, either as new funding or the reallocation of existing budgets.

2. Name Change: Gerontology Center to the Center on Aging

The current Gerontology Center is housed within the College of Nursing, but serves the entire University as an interdisciplinary unit that focuses on education, service, and research on aging. A name change to the Center on Aging would better reflect the array of programs and content area for students, faculty, and the community. The names of the Masters in Gerontology and a Gerontology Certificate offered by the Center would remain the same. The new name is consistent with a national trend that blends the discipline of gerontology with programs on aging. It also more accurately describes the center, its

mission, and future direction. The proposed name change has unanimous support from the Gerontology Advisory Board and has broad faculty and student support.

B. Utah Valley State College

1. American Studies Minor

A stand-alone interdisciplinary minor in American Studies is proposed at UVSC to begin Fall Semester, 2004. Offered in the School of Humanities, Arts, and Social Sciences, the minor will complement students' focus in their chosen major by adding breadth across disciplines. This program will foster skills in critical thinking, problem solving, collaborative work, gathering and analyzing data, writing, and speaking. It will provide a welcome option for students pursuing a number of degree majors such as English, history, and others. Drawing on the expertise of existing faculty, the institutional impact of this new minor will be minimal, since only one new course will be offered. The minor will require 21 credit hours, 12 hours of core classes and 9 elective credits. No new faculty, facilities, or equipment will be required, and tuition from students in the new course will cover the cost of the new course. This new minor was approved by the UVSC Trustees on April 8, 2004.

Commissioner's Recommendation

It is the Commissioner's recommendation that the Regents review the Information Calendar and raise any issues for clarification. No action is required by the Board.

Richard E. Kendell, Commissioner

REK: DAC

May 26, 2004

**MEMORANDUM**

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: Utah Valley State College – Two-Year Follow-up Report on Baccalaureate Degree Programs in Chemistry, Mathematics and Physics

The Issue

In June of 2001, the Board of Regents approved a UVSC request to offer new baccalaureate degree programs in Chemistry, Mathematics, and Physics. At the time these degrees were approved, the Regents requested yearly progress reports for three years to address issues regarding the preparation and development of faculty, equipment and laboratories, library holdings, financial data, student enrollments, program graduates, and other concerns.

The attached report contains data on the first two years of these three baccalaureate degree offerings. A concluding report will be submitted later this year.

Background and Policy Issues

**Faculty Preparation and Development.** As the report indicates, UVSC has hired new Ph.D. faculty in each department and worked hard to provide appropriate teaching loads and preparation time for faculty to conduct scholarly works and involve students in their research. Doctorally prepared faculty teach all upper division courses in the majors.

**Laboratory Managers.** In response to initial concerns, laboratory managers have been hired in Chemistry and Physics to advise and assist students and faculty in research projects. A research instrumentation physicist helps with instrumentation needs for research projects.

**Equipment and Laboratories.** UVSC has made a firm commitment to provide appropriate laboratory equipment for these degree programs. Available computer labs are sufficient to meet the needs of math students, as well as the students of science. Descriptions of the Chemistry and Physics laboratories and equipment acquired are detailed in the attached report, including Physics equipment for a Semiconductor Technology Laboratory obtained through a UVSC faculty NSF grant.

**Library Holdings.** The number, depth, and quality of library holdings in Chemistry, Mathematics, and Physics have grown rapidly with support from the UVSC Library staff and the Utah Academic Library Consortium (UALC). The Library currently subscribes to 69 journals in Chemistry, 48 journals in Math, and 50 journals in Physics. The attached report further describes access to library resources for students and faculty.

**Student Enrollments and Graduates.** Enrollments are in line with initial estimates, and each of the programs is growing. Departmental estimates for Fall 2003 are that 49 students are pursuing the B.S. in Chemistry, 17 in Mathematics, and 44 in Physics. Program graduates are only beginning to emerge. The third year report submitted later this year will be more informative. Of the first four Mathematics graduates, two have entered graduate programs in math and one is seeking an additional business degree at UVSC.

**Finances.** UVSC has made a firm commitment to ongoing financial support for the baccalaureate degree programs in Chemistry, Math, and Physics, as demonstrated in the tables of the attached report (see pages 15-16).

#### Commissioner's Recommendation

Please review the Two-year Follow-up Report on Baccalaureate Degree Programs in Chemistry, Mathematics, and Physics at Utah Valley State College and expect to receive a Third-Year Report later this Fall. No Board action on this report is currently required or recommended.

Richard E. Kendell, Commissioner

REK:DAC  
Attachment

**MEMORANDUM**

May 26, 2004

TO: The Board of Regents

FROM: Richard E. Kendell

SUBJECT: Update on Utah Legislature H.B. 320, “Transferability of Credit among Higher Education Institutions,” and Transition Plan - Report

Issue

During the 2004 Legislative Session, H.B.320, Transferability of Credit among Higher Education Institutions was proposed by Representative Bradley Johnson to improve transfer and articulation for Utah System of Higher Education (USHE) students. The bill passed and was signed into law by Governor Olene Walker.

Background

Since 1974, the Board of Regents has had policies to define and manage General Education across the system. Of greatest importance was the facilitation of transfer for students who began their college work at a two-year institution and transferred to a four-year institution to complete their baccalaureate degrees. Thus, Regents’ policies covered transfer of General Education credit and the articulation of General Education and pre-major courses. One of the policies, *R467, Lower Division Major Requirements*, establishes “major committees” in each of the General Education disciplines for the purpose of achieving the greatest possible congruence between the major emphases at community colleges and the lower division major requirements at the universities. Major Committees, comprised of system-wide faculty, are expected to meet once a year to coordinate and articulate course content. This year the Majors Meetings focused on identifying common course numbers and prefixes as directed in H.B. 320.

In 2004, the Utah Legislature directed the USHE to facilitate transfer by creating common course numbers for General Education and pre-major courses. Faculty were to determine which lower-division General Education and pre-major courses that were similar in content, rigor, and standards could be identified by a common course number and prefix. Many courses taught at the various institutions already articulate among the institutions, but did not have a common course number.

### Process

To comply with the mandates from H.B. 320, the Commissioner's staff convened over 250 faculty from 25 academic disciplines for the annual Majors Meetings during the month of April 2004. Academic advisors and transfer articulation specialists were included in each group. Working together, faculty identified sets of courses that were similar in content, rigor, and standards and arrived at common course numbers that each institution agreed to accept. In addition, some committees identified issues that they would revisit during subsequent annual Majors Meetings.

### Majors Meetings Results

The work of the Major Committees meetings resulted in an increase in commonly numbered courses of almost 12 times the original number from approximately 35 to over 400 (see Appendix A). Cooperation was evident in the discussions and a willingness to compromise was demonstrated by the faculty. However, there are many challenges that remain.

The implementation of the new common course numbers and prefixes at each institution will be a challenge of major proportions. The timing of the transition will match the schedule for the Banner transition at most institutions. With no fiscal note attached to H.B. 320, adjusting course numbers and prefixes during this same time will add additional pressure to existing scarce resources.

An update identifying the progress that has been made to date has been provided to the Legislature (see Appendix B).

### Implementation

To provide an orderly process for implementation, a detailed plan has been developed to assist institutions in the process (see Appendix C). This plan has been reviewed by the Council of Presidents, Chief Academic Officers, and Chief Information Officers from each institution. Though a bit overwhelming in its scope and magnitude, it is agreed that the new common course numbers and prefixes will be in place ready for Fall, 2005.

### Next Steps

The Commissioner's staff will schedule meetings this fall for the academic disciplines that were not able to meet in April. Included in this group are Business, Engineering, Computer Science, and Special Education. Elementary Education will continue their



deliberations, and Early Childhood will be convened along with Family and Consumer Studies, Nutrition, and Theater to address courses regarding the young child.

It is understood that changes will continue to be made, vetted among faculty, and shared with the Regents. Strengths of higher education in America are its diversity and its ability to stay abreast of new research and create new knowledge. Thus, course content and numbers will need to be updated as changes warrant.

Faculty and staff fully believe they have seriously addressed H.B. 320 and have done everything possible to comply with the legislative mandates. All General Education and pre-major courses that are similar in content, rigor, and standards were identified and given common course numbers. Most academic areas that use the same departmental designation arrived at common course prefixes.

The faculty, academic advisors, and articulation specialists should be commended on their exceptional efforts to meet the demands of H.B.320.

Commissioner's Recommendation

It is the recommendation of the Commissioner that the Regents review the report on H.B.320, "Transferability of Credit among Higher Education Institutions," and make comments and suggestions.

Richard E. Kendell, Commissioner

REK/PCS/GW  
Attachments

## Appendix A

### Anthropology

Faculty agreed to the common course prefix ANTH and the following common course numbers:

<b>ANTH</b>	1000	Introduction to Anthropology
	1010	Cultural Anthropology
	1020	Biological Anthropology
	1030	World Pre-History
	1040	Linguistics
	1050	Evolutional Ecology
	1060	Applied Anthropology
	2010	Peoples and Culture *
	2011	People of the Southwest *
	2020	Biological Anthropology Advanced (ex.: Human Evolution)
	2030	Archeology
	2040	Linguistics Advanced
	2050	Evolutional Ecology Advanced

\* There can be additional classes under each number set. For example, subsets for ANTH 2010 will be ANTH 201\_(1-4 and 6-9 without a \*5). Departments could have 2012, 2013, 2014, etc. These subset classes may deal with various peoples and cultures.

### Biology

Faculty agreed to the common course prefix BIOL and the following common course numbers:

<b>BIOL</b>	1010	General/Introduction to Biology
	1610	Biology I (for majors) *
	1615	Biology Lab *
	1620	Biology II (for majors) *
	1625	Biology II Lab *
	2030	Genetics (for majors) **
	2035	Genetics Lab **
	2060	General Microbiology
	2065	General Microbiology Lab
	2220	Ecology ***
	2225	Ecology Lab ***
	2320	Human Anatomy
	2325	Human Anatomy Lab
	2420	Human Physiology ****
	2425	Human Physiology Lab
	3060	Genetics (for majors) **
3065	Genetics Lab **	

\* Biology I and II is a one-year sequence for majors. Each institution typically teaches this course as a two-semester sequence with lab. The exception is SLCC which has a six course series.

\*\* Genetics will be taught at both the 2000 and 3000 level across the system and, even though they are numbered differently, will be considered equivalent.

\*\*\* Ecology is taught at both the 2000 and 3000 level across the system.

\*\*\*\* Human Anatomy is a prerequisite.

### Art

Faculty agreed to the common course prefix of ART (Art) and ARTH (Art History) and the following common course numbers:

<b>ART</b>	1010	Introduction to Visual Arts
	1020	Basic Drawing (non majors)
	1050	Photography (non majors)
	1110	Drawing I
	1120	2D Design
	1130	3D Design
	2110	Drawing II
<b>ARTH</b>	2710	Art History Survey I
	2720	Art History Survey II

## Appendix A

### Chemistry

Faculty agreed to the common course prefix CHEM and the following common course numbers:

CHEM	1010	Introductory Chemistry
	1015	Introductory Chemistry Lab
	1110	Elementary Chemistry
	1115	Elementary Chemistry Lab
	1120	Elementary Organic Bio-Chemistry
	1125	Elementary Organic Bio-Chemistry Lab
	1210	Principles of Chemistry I
	1215	Principles of Chemistry I Lab
	1220	Principles of Chemistry II
	1225	Principles of Chemistry II Lab
	2310	Organic Chemistry I
	2315	Organic Chemistry I Lab
	2320	Organic Chemistry II
	2325	Organic Chemistry II Lab
	3000	Quantitative Analysis
3005	Quantitative Analysis Lab	

### Criminal Justice

Faculty agreed to the common course prefix CJ and the following common course numbers:

CJ	1010	Introduction to Criminal Justice
	1300	Introduction to Corrections
	1330	Criminal Law
	1340	Criminal Investigation
	1350	Introduction to Forensic Science
	2020	Criminal Justice Supervision
	2110	Security
	2330	Juvenile Justice
	2340	Survey of Criminal Procedure
	2350	Laws of Evidence
	2360	Juvenile Law and Procedures

### Dance

Faculty agreed to the common course prefix DANC and the following common course numbers:

DANC	1100	Ballet I
	1170	Social Dance
	1200	Modern Dance I
	1500	Jazz Dance I
	1520	Folk/Cultural Dance
	1580	Tap I

### Economics

Faculty agreed to the common course prefix ECON and the following common course numbers:

ECON	1010	Economics as a Social Science
	1740	U S Economic History
	2010	Principles of Microeconomics
	2020	Principles of Macroeconomics
	2100	Labor Economics
	2250	Environmental Economics
	2400	International Economics/Finance

### Communications

Faculty agreed to the common course prefix COMM and the following common course numbers:

COMM	1010	Introduction to Communications
	1020	Public Speaking
	1050	Human Communications
	1130	Media Writing
	1270	Analysis of Argumentation
	1500	Introduction to Mass Media
	1560	Broadcast Production (Audio)
	1610	News Writing
	2010	Mass Communication and Society
	2110	Interpersonal Communication
	2120	Small Group
	2150	Intercultural Communication
	2200	Broadcast Production (T.V.)
	2270	Argumentation and Debate
	2300	Introduction to Public Relations
	2560	Advanced Radio

## Appendix A

### Elementary Education

The faculty did not agree on a common course prefix, but agreed on the following common course number:

	1010	Introduction to Education
	*	Children's Literature
	*	Introduction to Special Education/Exceptionalities
	*	Human Development (Child/Adolescent)
	*	Ethnic Studies
	*	Math for Elementary Education

\* It was recommended these courses be lower-division with common numbers.

### English

Faculty agreed to the common course prefix ENGL and the following common course numbers:

ENGL	1010	Introduction to Writing
	2010	Intermediate Writing
	2030	Discourse Studies
	2130	Science Fiction
	2200	Literature (non majors)
	2210	Introduction to Folklore
	2220	Introduction to Fiction
	2230	Introduction to Mythology
	2240	Introduction to Poetry
	2290	Introduction to Drama
	2330	Children's Literature
	2600	Introduction to Critical Literature/Theory

### Family and Human Development

It is not possible to identify a common course prefix because these courses are taught in different academic departments. Faculty agreed on the following common course numbers:

	1400	Marriage
	1500	Human Development Across the Lifespan
	2400	Family Relations
	2500	Child Development/Birth to Eight
	2570	Child Development/Six to Twelve
	2600	Introduction to Early Childhood Education
	2610	Guidance
	2610L	Lab
	2620	Creative Play
	2640	Working with Families/Parents

### Geography

Faculty agreed to the common course prefix GEOG and the following common course numbers:

GEOG	1000	Physical Geography
	1005	Physical Geography Lab
	1300	World Regional Geography
	1400	Human Geography
	1800	Two year GIS introductory courses

## Appendix A

### Geology

Faculty agreed to the common course prefix GEO and the following common course numbers:

GEO	1010	Introduction Survey, Essentials
	1015	Introduction Survey Lab, Essentials
	1020	Life of the Past Fossil, Life History
	1025	Life of the Past Fossil Lab
	1030	Earthquakes and Volcanoes, Natural Disasters
	1035	Earthquakes and Volcanoes Natural Disasters Lab
	1040	Dinosaurs
	1045	Dinosaurs Lab
	1050	Geology of National Parks
	1055	National Parks Lab
	1060	Environmental Geology
	1065	Environmental Lab
	1070	Unstable Ground
	1075	Unstable Ground Lab
	1080	Oceanography
	1085	Oceanography Lab
	1090	Earth Systems
	1095	Earth Systems Lab
	1110	Physical Geography (science majors only)
	1115	Physical Geography Lab (science majors only)
1220	Historical Geology (science majors only)	
1225	Historical Geology Lab (science majors only)	

### History

Faculty agreed to the common course prefix HIST and the following common course numbers:

HIST	1100	Western Civilization I
	1110	Western Civilization II
	1500	World History to 1500
	1510	World History from 1500 to the Present
	1700	American Civilization
	2700	United States to 1877
	2710	United States 1877 to Present

### Mathematics

Faculty agreed to the common course prefix MATH and the following common course numbers:

MATH	1040	Statistics *
	1100	Applied Calculus **
	1630	Discrete Math prerequisite ***
	2010	Math for Elementary Education I
	2020	Math for Elementary Education II
	2040	Applied Statistics ****
	2270	Articulate with Linear Algebra
	2280	Articulate with Differential Equations

\* The UU also offers a MATH 1070 statistics course. Because this 1070 curriculum is similar to MATH 1040 curriculum, the UU will accept MATH 1040 from other institutions for either their 1040 or 1070.

\*\* Not housed in Math department.

\*\*\* Schools that have Discrete Math with a 1050 prerequisite will change the number to 1630.

\*\*\*\* Math 1050 is a prerequisite.

### Music

Faculty agreed to the common course prefix MUSC and the following common course numbers:

MUSC	1010	Introduction to Music
	1030	Introduction to Jazz *
	1100	Fundamentals of Music
	1110	Music Theory I
	1120	Music Theory II
	1130	Sight Sing/Ear Training I
	1140	Sight Sing/Ear Training II
	1150	Class Piano I
	1160	Class Piano II
	2110	Music Theory III
	2120	Music Theory IV
	2130	Sight Sing/Ear Training III
	2140	Sight Sing/Ear Training IV
	2150	Class Piano III
	2160	Class Piano IV
	2350	Fundamentals of Conducting *

\* MUSC 1030 *Introduction to Jazz* is only offered at UU, WSU and Snow. MUSC 2350 *Fundamentals of Conducting* is only offered at Snow, DSC, CEU and SLCC.

## Appendix A

### Nutrition

NUTR or NFS will be used based on program content; faculty agreed to the following common course numbers:

NUTR or NFS	1020	Introductory Course
	2020	Lifecycle

### Philosophy

Faculty agreed to the common course prefix PHIL and the following common course numbers:

PHIL	1000	Introduction to Philosophy
	1120	Social Ethics *
	1250	Reason and Rational Decision Making *
	2000	Philosophy of Literature **
	2200	Logic *
	2600	Religion

\* PHIL 1120 *Social Ethics* is offered at WSU, DSC and SLCC. PHIL 1250 *Reason and Rational Decision Making* is offered at the UU, USU, WSU, SUU and UVSC. PHIL 2200 *Logic* is offered at USU and WSU.

\*\* PHIL 2000 *Philosophy of Literature* is offered by SLCC, UVSC and the UU. UVSC and the UU use the 2010 course number, but the courses are not the same. Thus, the UU will change its number to 2000.

### Physical Education/Exercise and Sports Science

The faculty did not address common prefixes. The most common prefix used begins with PE. The second two characters will be assigned by the institution (PE\_\_). Faculty agreed on common course numbers for the following 181 activity courses:

Fitness Strengthening		
PE__	1000	Cardio Fitness
	1010	Aerobics I
	1011	Aerobics II
	1012	Aerobics III
	1015	Cycling/Spinning I
	1016	Cycling/Spinning II
	1020	Step Aerobics I
	1021	Step Aerobics II
	1022	Step Aerobics III
	1025	Interval Training
	1030	Kick Boxing I
	1031	Kick Boxing II
	1040	Walking I

(Fitness Strengthening Continued)		
PE__	1041	Walking II
	1043	Jog I
	1044	Jog II
	1046	Jog/Walk I
	1047	Jog/Walk II
	1050	Power Tone
	1052	Boot Camp
	1055	Pilates I
	1056	Pilates II
	1057	Yoga I
	1058	Yoga II
	1060	Nia
	1062	Flexibility for Fitness
	1063	Conditioning I
	1064	Conditioning II
	1065	Marathon
	1067	Triathlon
	1070	Cross Training I
	1071	Cross Training II
	1072	Cross Training III
	1073	Circuit Training I
	1074	Circuit Training II
	1075	Circuit Training III
	1080	Strength Training I
	1081	Strength Training II
	1082	Strength Training III
	1085	Weight Training I
	1086	Weight Training II
	1087	Weight Training III
	1088	Fitness Center I
	1089	Fitness Center II
1090	Fitness Center III	
1091	Fitness Center IV	
1092	Fitness Center V	
1093	Fitness Center VI	
1094	Fitness Center VII	
1095	Fitness Center VIII	
1096	Fitness for Life (1 crhr)	
1097	Fitness for Life (2 crhr)	
1098	Fitness for Life (3 crhr)	

## Appendix A

Individual/Dual Sports		
PE__	1100	Tennis I
	1101	Tennis II
	1102	Tennis III
	1105	Badminton I
	1106	Badminton II
	1107	Badminton III
	1110	Racquetball I
	1111	Racquetball II
	1112	Racquetball III
	1115	Squash I
	1116	Squash II
	1117	Squash III
	1120	Handball I
	1121	Handball II
	1122	Handball III
	1125	Pickleball I
	1126	Pickleball II
	1127	Pickleball III
	1130	Golf I
	1131	Golf II
	1132	Golf III
	1133	Golf IV
	1135	Archery I
	1136	Archery II
	1137	Archery III
	1140	Marksman I
	1141	Marksman II
	1142	Marksman III
	1145	Bowling I
	1146	Bowling II
	1147	Bowling III
	1150	Billiards I
	1151	Billiards II
	1152	Billiards III
1155	Fencing	
1160	Wrestling	
1170	Gymnastics	

Team Sports		
PE__	1200	Basketball I
	1201	Basketball II
	1202	Basketball III
	1205	Handball I
	1206	Handball II
	1207	Handball III
	1210	Volleyball
	1215	Walleyball
	1220	Baseball
	1225	Softball
	1230	Soccer
	1235	Football
	1240	Rugby
	1245	Ultimate Frisbee
	1250	Lacrosse
	1255	Field Hockey
1260	Ice Hockey	
1265	Water Polo	

Aquatics		
PE__	1300	Swimming
	1310	Water Fitness
	1315	Water Aerobics
	1320	Aqua Tone
	1325	Aqua Size
	1330	Power Swim
	1335	Diving
	1340	Lifeguard
	1345	Water Safety Instructor
	1350	Scuba

## Appendix A

Combatives		
PE__	1400	Self Defense
	1405	Women's Self Defense
	1407	Rape Aggression Defense
	1410	Tai Chi
	1415	Martial Arts
	1420	Judo
	1425	Jiu Jitsu
	1430	Karate
	1435	Kempo Karate
	1440	Aikido
	1445	Tae Kwon-do
	1450	Kung Fu
1455	Boxing	

Adventure		
PE__	1500	Canoeing
	1505	Kayaking
	1510	Fishing
	1512	Fly Tying
	1513	Fly Casting
	1515	Sailing
	1517	Board Sailing
	1518	Windsurfing
	1520	Hiking
	1523	Orienteering
	1525	Mountaineering
	1527	Rock Climbing
	1530	Primitive Survival Skills
	1532	Outdoor Survival
	1535	Backpacking
	1538	Yurt Camping
	1540	Outdoor Related Activities
	1542	Wilderness First Responder
	1543	First Aid
	1545	Outdoor Cooking
	1547	Spelunking
	1550	Mountain Biking
	1555	Road Biking
	1557	Cycling

(Adventure Continued)		
PE__	1560	Horseback Riding
	1565	In-Line Skating
	1570	National Outdoor Leadership
	1575	Rodeo

Winter Sports		
PE__	1600	Winter Exploration
	1605	Skiing
	1610	Skiing/Snowboarding
	1615	Snowboarding
	1620	Ski Instructor
	1625	Cross Country Skiing
	1630	Cross Country Skiing Classic
	1635	Telemark Skiing
	1640	Back Country Skiing
	1645	Ski Touring
	1650	Skate Skiing
	1655	Snow Shoeing
	1660	Ice Climbing
	1670	Ice Skating
	1675	Speed Skating
	1680	Curling

Dance		
PE__	1700	Dance
	1705	Line Dance
	1710	Western Swing
	1715	Country Western Dance
	1720	Social Dance
	1725	Social Latin Dance
	1730	Folk Dance
	1735	Latin American Dance
	1740	Ballroom Dance
	1745	Swing
	1750	Clogging
	1755	Tap
1760	Dance Promo	



## Appendix A

### Physics

Faculty agreed to the common course prefix PHYS and the following common course numbers:

PHYS	1010	Elementary Physics *
	1040	Elementary Astronomy
	1050	The Solar System
	1060	Stars and Galaxies
	1070	Cultural Astronomy
	1080	Life in the Universe
	1500	Preparatory Physics
	2010	College Physics I
	2015	College Physics I Lab
	2020	College Physics II
	2025	College Physics II Lab
	2210	Physics for Scientists and Engineers I
	2215	Physics for Scientists and Engineers I Lab
	2220	Physics for Scientists and Engineers II
	2225	Physics for Scientists and Engineering II Lab
	2710	Introductory Modern Physics **
3740	Modern Physics	

\* Either PHYS 1010 or 1020 will be accepted as General Education credit.

\*\* Transfer students will be evaluated.

### Political Science

Faculty agreed to the common course prefix POLS and the following common course numbers:

POLS	1020	Political Ideologies
	1100	American/US National Government
	2100	Introduction to International Relations
	2200	Introduction to Comparative Politics
	2300	Political Thought/Ideology

### Psychology

Faculty agreed to the common course prefix PSY and the following common course numbers:

PSY	1010	Introduction to Psychology
	1100	Human Development across the Life Span
	1210	Personal Development and Growth
	1400	Introduction to Experimental Analysis
	2200	Ethnicity/Multicultural Psychology
	2300	Introduction to Abnormal Psychology
	2370	Introduction to Psychology of Gender
	2500	Introduction to Social Psychology
	2710	Introduction to Brain and Behavior

### Social Work

SW is emerging as a common course prefix and faculty agreed to the following common course numbers:

	1010	Introduction to Social Welfare
	2100	Human Behavior in the Social Environment
	2400	Social Work with Diverse Populations

### Sociology

Faculty agreed to the common course prefix SOC and the following common course numbers:

SOC	1010	Introduction to Sociology
	1020	Social Problems
	1200	Sociology of the Family *
	2370	Gender Roles
	2400	Soc. Intermountain West
	2500	Social Psychology *
	2600	Marriage and Family *
	2630	Race and Ethnic Relations
	2680	Sociology of Aging

\* SOC 1200 *Sociology of the Family* is offered at UVSC and DSC. SOC 2500 *Social Psychology* is offered at SLCC and DSC. SOC 2600 *Marriage and Family* is offered at SUU and SLCC.

## Appendix A

---

### Theatre

Faculty agreed to the common course prefix THEA and the following common course numbers:

THEA	1013	Survey of Theater/Introduction to Theatre
	1023	Introduction to Film
	1033	Acting I
	1113	Voice and Diction
	1223	Make-up
	1513	Stage Craft
	1713	Script Analysis
	2033	Acting II
	2203	Costume Construction
	2443	Acting for Musical Theater
	2513	Introduction to Design
	*	Theater History and Literature

\* Major requirement: four-year schools only.

## Appendix A: Major Committee Participants

---

### Major Committee Participants

The USHE Major Committees are made up of faculty from each of the institutions offering courses in the particular discipline. The following faculty, assisted by advisors and the commissioner's staff, participated in the common course numbers process.

### Anthropology Faculty

Chair – James F. O'Connell – UU  
Richley Crapo – USU  
Rosemary Conover – WSU  
Donald Hinton – DSC  
Pam Miller – CEU  
David Knowlton – UVSC  
John Fritz – SLCC  
Advisor – John Wiemer – SLCC  
Commissioner's Staff – Teddi Safman

### Art Faculty

Chair – Mark Biddle – WSU  
Elizabeth Peterson – UU  
Nevon Brusckhe – UU  
Sara Northerner – USU  
Eric Brown – SUU  
Adam Larsen – Snow  
Dennis Martinez – DSC  
Cliff Bergera – CEU  
Doug Anderson – UVSC  
Rick Graham – SLCC  
Advisor – Katrina Green – SLCC  
Commissioner's Staff – Deanna Winn

### Biology Faculty

Chair – Kate Grandison – SUU  
Dennis Bramble – UU  
Dave Gard – UU  
Greg Podgorski – USU  
Dennis Welker – USU  
Shelby Caldwell – CEU  
Karen L. Bauer – DSC  
Allan Stevens – Snow  
Robert R. Robbins – UVSC  
Bill Tanner – SLCC  
Tim Beagley – SLCC  
Advisor – Mat Barreiro – Snow  
Advisor – Rachel Lewis – USU  
Advisor – Crystalyn Nilson – SLCC  
Commissioner's Office – Deanna Winn

### Chemistry Faculty

Chair – Vernon Parker – USU  
Tom Richmond – UU  
Todd Johnson – WSU  
Dan Black – Snow  
Donald Hinton – DSC  
George Uhlig – CEU  
Bruce Wilson – UVSC  
Advisor – John Allred – WSU  
Advisor – Deron Hutchinson – SLCC  
Commissioner's Staff – Teddi Safman

### Communications Faculty

Chair – Randal S. Chase – SLCC  
Craig Denton – UU  
Liz Leckie – UU  
John Seiter – USU  
Les Roka – USU  
Randy Scott – WSU  
Jon Smith – SUU  
Mark Soderborg – Snow  
Debra Hanson – DSC  
Troy Hunt – CEU  
Roger Gunn – UVSC  
Carolyn Clark – SLCC  
Advisor – John Wiemer – SLCC  
Advisor – John Allred – WSU  
Commissioner's Staff – Teddi Safman

### Criminal Justice Faculty

Chair – Paul Harnett – Snow  
Heather Melton – UU  
Kay Gillespie – WSU  
Lamar Jordan – SUU  
Donald Hinton – DSC  
Steven Burge – CEU  
Brent Bullock – UVSC  
Advisor – Debra Bryant – DSC  
Advisor – Katrina Green – SLCC  
Advisor – Mitch Jenkins – Snow  
Commissioner's Staff – Gary Wixom

### Dance Faculty

Chair – Donna White – UU  
Joanne Lawrence – WSU  
Shauna Mendini – SUU  
Donald Hinton – DSC  
Carolyn Gwyther – CEU  
Kim Strunk – UVSC  
Deborah Robertson – SLCC  
Advisor – John Wiemer – SLCC  
Commissioner's Staff – Teddi Safman

## Appendix A: Major Committee Participants

---

### Economics Faculty

Chair – Cliff Nowell – WSU  
Carrie Mayne – UU  
Richard Fowles – UU  
Steve Reynolds – UU  
Keith Criddle – USU  
Patti Sanchez – WSU  
Rhead Bowman – SUU  
Kerry Hansen – Snow  
Ali Hekmat – CEU  
Dennis Farnsworth – UVSC  
K. T. Magnusson – SLCC  
Advisor – Marcia Lavalle – UU  
Advisor – Wendy Mills – UVSC  
Advisor – Sharon Aiken-Wisniewski – UU  
Commissioner's Staff – Gary Wixom

### Elementary Education Faculty

Chair – Diana Pounder – UU  
Sheri Noble – USU  
Kristin Radovich – WSU  
Mike Cena – WSU  
Judith Mitchell – WSU  
Rosalind Charlesworth – WSU  
Gerald Bowler – SUU  
Gary Parnell – Snow  
Nancy Hauck – DSC  
Phil Brown – CEU  
Linda Benson – UVSC  
Dale Smith – SLCC  
Barbara Allred – SLCC  
Advisor – Aimee Fox – UU  
Advisor – Mat Barreiro – Snow  
Advisor – Kauli Kaio – SLCC  
Advisor – Sue Besser – SLCC  
Advisor – Margaret Bellon – UVSC  
Commissioner's Staff – Deanna Winn

### English Faculty

Chair – Gary Dohrer – WSU  
Stuart Culver – UU  
Kathryn Fitzgerald – USU  
Julie Simon – SUU  
Erick Faatz – Snow  
Larry Severeid – CEU  
Jen Wahlquist – UVSC  
Rick McDonald – UVSC  
Louise Bown – SLCC  
Stephen Ruffus – SLCC  
Allison Fernley – SLCC  
Advisor – Sue Besser – SLCC  
Advisor – Dawn Chase – UVSC  
Advisor – Terre Burton – DSC  
Commissioner's Staff – Deanna Winn

### Family and Human Development Faculty

Chair – Cheryl Wright – UU  
Paul Black – UU  
Susan Erickson – USU  
Marilyn Kruse – USU  
Joyce Buck – WSU  
Darcy Gregg – WSU  
Mitch Jenkins – Snow  
Kim Cragun – Snow  
Tim Eicher – DSC  
Phil Brown – CEU  
Genan Anderson – UVSC  
Dale Smith – SLCC  
Advisor – Cindy Clark – SLCC  
Advisor – Shawn Christensen – SUU  
Commissioner's Staff – Don Carpenter

### Geography Faculty

Chair – Paul Larson – SUU  
Spike Hampson – UU  
Steve Reynolds – UU  
Cliff B. Craig – USU  
Mark Brunson – USU  
Hal Elliott – WSU  
Cless Young – Snow  
Jon Moore – UVSC  
Dorleen Jensen – SLCC  
Advisor – John Allred – WSU  
Advisor – Crystalyn Nilson – SLCC  
Advisor – Debra Bryant – DSC  
Commissioner's Staff – Deanna Winn

### Geology Faculty

Chair – Robert Eves – SUU  
Barbara Nash – UU  
Peter Kolesar – USU  
Richard Ford – WSU  
Renee Mauche Faatz – Snow  
Peter Van Valkenburg – DSC  
Michelle Fleck – CEU  
Daniel Horns – UVSC  
Frank Komatar – SLCC  
Advisor – Crystalyn Nilson – SLCC  
Advisor – Deron Hutchingson – SLCC  
Commissioner's Staff – Don Carpenter

## Appendix A: Major Committee Participants

---

### History Faculty

Chair – Norm Jones – USU  
Eric Hinderaker – UU  
Chris Conte – USU  
Kathryn MacKay – WSU  
Earl Mulderink – SUU  
V. Michael Seibt – Snow  
Chip McLeod – DSC  
Shelly Lemons – CEU  
Oscar Jesperon – UVSC  
Ginger Davidson – SLCC  
Advisor – Rachel Lewis – USU  
Advisor – Cindy Clark – SLCC  
Advisor – Sharon Aiken-Wisniewski – UU  
Advisor – Liz Leckie – UU  
Commissioner's Staff – Don Carpenter

### Mathematics Faculty

Chair – Donna Dillingham-Evans – DSC  
Alexandra Hacon – UU  
Nat Smale – UU  
Chris Coray – USU  
Kent Kidman – WSU  
Richard Tebbs – SUU  
Kari Arnoldsen – Snow  
Henry A. Zwick – CEU  
Christine Merrin – UVSC  
Joe Gallegos – SLCC  
Advisor – Katrina Green – SLCC

### Music Faculty

Chair – Bruce Saperston – USU  
David Power – UU  
Michael Palumbo – WSU  
Bart Shankin – SUU  
Vance Larsen – Snow  
Ron Garner – DSC  
Greg Benson – CEU  
Wayne Erickson – UVSC  
Helen Stringham – SLCC  
Advisor – John Wiemer – SLCC  
Commissioner's Staff – Teddi Safman

### Nutrition Faculty

Chair – Joan Thompson – WSU  
Jean Zancanella – UU  
Marianne Rich – USU  
Janet Anderson – USU  
Artis Grady – SUU  
Sue Dalley – Snow  
Demaree Johnson – DSC  
Vance Hillman – UVSC  
Gustavo Ibarra – SLCC  
Advisor – Katrina Green – SLCC  
Advisor – John Allred – WSU  
Commissioner's Staff – Gary Wixom

### Philosophy Faculty

Chair – Richard Greene – WSU  
Leslie Francis – UU  
Liz Leckie – UU  
William Wilcox – USU  
Kirk Fitzpatrick – SUU  
Carole Schuyler – DSC  
Michael Kowalski – Snow  
Brian Birch – UVSC  
David Keller – UVSC  
Tim McWhirter – SLCC  
Advisor – Sue Besser – SLCC  
Advisor – Sharon Aiken-Wisniewski – UU  
Commissioner's Office – Don Carpenter

### Physical Education/Exercise and Sports Science Faculty

Chair – Patricia Eisenman – UU  
Suzie Stones – USU  
Sherrie Jensen – WSU  
Craig Morrison – SUU  
Elliot Anderson – Snow  
Christian Hildebrandt – DSC  
Shaunna McGhie – UVSC  
Jamie Vener – UVSC  
Soni Adams – SLCC  
Advisor – John Wiemer – SLCC  
Advisor – Mat Barreiro – Snow  
Advisor – Deron Hutchinson – SLCC  
Commissioner's Staff – Teddi Safman

### Physics Faculty

Chair – Larry Smith – Snow  
Richard Price – UU  
Lynn Higgs – UU  
David Peak – USU  
Brad Carroll – WSU  
Steve Sullivan – DSC  
David Kardellis – CEU  
Phil Matheson – UVSC  
Trina VanAusdal – SLCC  
Advisor – John Wiemer – SLCC  
Advisor – Debra Bryant – DSC  
Advisor – Sharon Aiken-Wisniewski – UU

## Appendix A: Major Committee Participants

---

### Political Science Faculty

Chair – Slava Lubomudrov – UU  
Ron Hrebenar – UU  
Sherlyn Marks – UU  
Peter Galderisi – USU  
Nancy Haanstad – WSU  
Michael Stathis – SUU  
Paul Harnett – Snow  
Doug Alder – DSC  
Alex Stecker – UVSC  
Sherilee Sowards – SLCC  
Advisor – Wendy Mills – UVSC  
Advisor – Katrina Green – SLCC  
Commissioners Staff – Gary Wixom

### Psychology Faculty

Chair – David Dodd – UU  
Kimberlee Derushia – UU  
Steve Reynolds – UU  
Julie Arbuckle – WSU  
Kathleen Pope – DSC  
Mike King – CEU  
David Yells – UVSC  
Lora Harpster – SLCC  
Advisor – Cindy Clark – SLCC  
Advisor – Matt Barreiro – Snow  
Advisor – Sharon Aiken-Wisniewski – UU  
Commissioner's Staff – Gary Wixom

### Social Work Faculty

Chair – Enrique Velasquez – SLCC  
Rosemarie Hunter – UU  
Terry Peak – USU  
Mark Bigler – WSU  
Joe Peterson – DSC  
Advisor – Cindy Clark – SLCC  
Commissioner's Staff – Deanna Winn

### Sociology Faculty

Chair – Ron Hammond – UVSC  
Dennis Willigan – UU  
Steve Reynolds – UU  
Rick Krannick – USU  
Rob Reynolds – WSU  
Kenny Laundra – SUU  
Matt Smith-Lahrman – DSC  
Spencer Blake – SLCC  
Advisor – Mat Barreiro – Snow  
Advisor – Cindy Clark – SLCC  
Advisor – Debra Bryant – DSC  
Commissioner's Staff – Gary Wixom

### Theatre Faculty

Chair – Jim Christian – WSU  
David Sidwell – USU  
Terry Lewis – SUU  
Brent Hanson – DSC  
James Arrington – UVSC  
Richard Clifford – SLCC  
Advisor – Marcia LaValle – SLCC  
Advisor – Margaret Bellon – UVSC  
Commissioner's Staff – Teddi Safman

Appendix C

Utah System of Higher Education Procedural Response to HB 320			
Steps for implementation of HB320—Transferability of Credits Among Higher Education Institutions—Common Course Numbers and Prefixes			
Step	Action	Proposed Action Date	Proposed Completed by
1	Major meetings held where faculty in each discipline will agree upon a common alpha prefix and identify pre-major courses that have common course content, rigor, and standards. A common course number and prefix, where appropriate, will be assigned to these pre-major courses.*	March 2004	April 16, 2004
2	A completed draft list of all agreements from the majors meetings will be circulated back to participating faculty for final agreement.	March—April 2004	April 25, 2004
3	The list of all agreements from the majors meetings will be reviewed by CAOs.	May 2004	May 11, 2004
4	The process for implementation will be reviewed by COP.	May 2004	May 14, 2004
5	The completed list of all common course numbers and prefixes (CCNP) will be submitted to the Board of Regents for their approval as an agenda item.	June 2004	
6	The completed and approved list of all common course numbers and prefixes (CCNP) will be distributed by the CAOs to the appropriate approval body for institutional approval. A simplified process will be used as no substantive changes to course content have been made.	August—December 2004	
7	The approved CCNP will then go through institutional change procedures for records, catalogues, advising sheets, registration materials, etc. The changes should be in place by Fall 2005. For catalogues printed every two years, the changes will still be in place in electronic catalogues, registration materials, etc.	August 2004—June 2005	

\*Not all Major Committees have completed their work. Meetings will take place in the near future involving faculty from additional disciplines.

MEMORANDUM

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: USHE – 2004-2005 Final Capital Improvement Allocations

Issue

On May 5, 2004, the State Building Board approved the allocation of \$44 million in capital improvement funding to benefit state educational institutions and agencies with facility improvement needs. This agenda item details State Building Board action by reporting the amounts earmarked for the USHE institutions.

Background

Each year following the Legislative Session, the State Building Board is responsible for allocating all capital improvement funding appropriated by the Legislature during the session. Capital Improvements, also called Alterations, Repairs, and Improvements (AR&I) are infrastructure or remodeling projects, costing under \$1.5 million, which do not add new space. This action by the Building Board is the culmination of a year-round process that involves staff from the Division of Facilities Construction and Management (DFCM), USHE institutions, the Office of the Commissioner of Higher Education, and all state agencies.

For 2004-2005, higher education institutions will receive \$24.6 million for new projects. (USHE had identified high priority needs of \$37.9 million, but anticipated receiving approximately \$24 million based on the 0.9 percent of current value funding model used by the Legislature.) This amount represents 61 percent of the total allocated for agency and institution needs. An additional \$4 million has been set aside for statewide funding issues. Appreciation is expressed to the Utah State Legislature, the State Building Board, and DFCM for recognizing USHE facility improvement needs and providing funding for the most urgent of these needs.

Attachment 1 shows the percentage of funding allocated to each sector of state government. Attachment 2 shows a five-year history of capital improvement funding allocations. Attachment 3 arrays each individual project that was approved for 2004-2005 (FY2005). Attachment 4 is a status report of current year projects.



State Board of Regents  
May 26, 2004  
Page 2

Recommendation

No action is requested. This is an information item only.

Richard E. Kendell, Commissioner

REK/MHS  
Attachments

MEMORANDUM

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: USHE – Amendments to Policy R511, *Tuition Disclosures and Consultation*

Issue

Regents are asked to adopt amendments to Policy R511, *Tuition Disclosures and Consultation*, to implement the provisions of House Bill 248, *Disclosure of Higher Education Costs*, by Representative Ron Bigelow from the 2004 General Session.

Background

With the objective of promoting better understanding of the financial relationship between tuition and total instructional costs, HB 248 requires each institution to plainly disclose at the time of registration for a full-time undergraduate resident student the full cost of instruction, the amount collected from tuition and fees, and the difference that comes from state tax dollars and other sources. For over a dozen years, end-of-year cost and net tuition data have been reported in the USHE Data Book. However, to make this disclosure simple and more meaningful for students and parents, institutions have agreed, with concurrence from the bill's sponsor, to disclose the current semester's estimated full cost of instruction and the listed tuition and fees amount. To provide guidelines and consistency on this disclosure, amendments to the Board's current policy on tuition disclosures, R511, are shown in Attachment 1.

Calculations for the 2004-05 disclosure are contained in Attachment 2. To maintain the straightforwardness of the disclosure, a number of assumptions are embedded in these calculations. For instance, Regents will quickly notice that the percentage supported by tuition is generally greater than the "one-third" number typically quoted for USHE. This disparity results because tuition amounts for the disclosure are the listed "sticker price" of tuition and fees, prior to any discounting that occurs through statutory waivers or other tuition and fee deductions. In other words, the "one-third" refers to a net tuition number instead of the tuition and fees sticker price.

Other assumptions in the calculations are related to (1) estimating expenditures, tuition revenues, and the number of students for the upcoming budget year; (2) including general student fees, as required by the bill, even though the expenditures associated with designated student fee revenues technically fall

State Board of Regents  
May 26, 2004  
Page 2

outside the definition of full costs of instruction; and (3) determining the time period for which these information should be disclosed. Regarding the time period issue, the nine two- and four-year institutions have their costs disclosed based on a semester amounts, whereas UCAT information is based on weekly amounts. The two separate disclosure periods match the period for which tuition rates are published at the institutions.

Particular methods of disclosure are not specified in the bill. The proposed changes to R511 list a number of potential disclosure methods from which an institution may choose, including (1) the course catalog, (2) the course schedule, (3) tuition invoices, (4) tuition receipts, (5) the cashier's office window, or (6) other Internet and printed materials that list tuition-related information.

For Regent information and comparison purposes, the proportion of full instructional costs covered by net tuition revenues at the institutions is shown in Attachment 3 for the past five years. For the nine two-year and four-year institutions, the percentages differ from the amounts listed on the disclosure because of the inclusion of waivers, non-resident students, and graduate students at some institutions. Overall, these inclusions generally cause the proportion covered by net tuition to decrease. For UCAT, including the significant front-load charged to part-time students with the average tuition causes the proportion covered by net tuition to increase.

#### Policy Implications

Existing Regent policy on tuition disclosures focuses on truth in tuition hearing and consultation processes with students. Because that policy was adopted prior to the legislature's adoption of Senate Bill 210, *Higher Education Tuition Disclosure* (2001 General Session), technical inconsistencies and direct references between Regent policy and current statute are also included in the proposed amendments to R511 which implement HB 248.

#### Commissioner's Recommendation

The Commissioner recommends that Regents approve the proposed amendments to R511, *Tuition Disclosures and Consultation*, which provide guidelines for implementing HB 248 as well as technical corrections to the existing policy on truth-in-tuition hearings and consultation.

Richard E. Kendell, Commissioner

REK/MHS/BLM  
Attachments

*Draft Amendments****R511, Tuition Disclosures and Consultation***

(Proposed deletions and insertions)

**R511-1. Purpose**

To establish procedures (1) for institutions to consult with students prior to recommending tuition increases to the Board, ~~and to establish procedures (2) for the Board to consult with students prior to adopting projected tuition increases as part of the budget process and, (3) for the Board to consult with students prior to approving increases of the tuition to be charged to the students at the institutions,~~ and (4) for institutions to disclose to students the full cost of instruction and the amount of that cost covered by tuition.

**R511-2. References**

2.1. Utah Code [§53B-7-101](#) (Combined Requests for Appropriations - ~~Board Fixes Tuition, Fees, and Charges~~ Board review of operating budgets -- Submission of budgets -- Recommendations -- Hearing request -- Appropriation formulas -- Allocations -- Dedicated credits -- Financial affairs.)

2.2. Utah Code [§53B-7-101.5](#) (Proposed tuition increases -- Notice -- Hearings.)

2.3. Utah Code [§53B-7-105](#) (Higher education cost disclosure.)

2.4. Policy and Procedures [R510](#), *Tuition and Fees*

2.5. Policy and Procedures [R513](#), *Tuition Waivers and Reductions*

2.6. Policy and Procedures [R824](#), *Tuition Remission Benefits*

**R511-3. Definitions**

**3.1. Full Cost of Instruction** – As derived from a calculation that allocates functional overhead expenditure categories to instruction, excluding the amount spent directly on research and public service or the overhead allocable to research and public service. Overhead categories defined by the National Association of College and University Business Officials include student services, institutional support, physical plant operation and maintenance, and academic support. Full cost of instruction is reported in the USHE Data Book for the most recently completed year.

**3.2. Tuition** – Board-approved amounts for a full-time undergraduate student ([R510](#)).

**3.3. General Student Fees** – Board approved amounts which are assessed to students directly, required to be paid with tuition, and are generally dedicated to specific purposes, such as building

revenue bonds, extracurricular student activities, additional student services such as health clinics or computer labs, or athletics (R510). Fees for specific courses are not included.

**R511-34. Policy Disclosures for Tuition Increases – “Truth in Tuition”**

**34.1. Institutional Consultation with Students** - Prior to recommending a tuition increase to the Board of Regents, the President or his or her designee shall hold a public meeting to provide an explanation of the reasons for the proposed increase, an explanation of how the revenue generated by the increase will be used, consistent with the format prescribed by Utah Code §53B-7-101.5.(4), and an opportunity for public comment from students. After consultation with student leaders, public notice of the time, place and purpose of the public meeting shall be provided through an advertisement in the student newspaper or by other forms of written notification at least ~~one week~~ two times within the ten day period prior to the meeting date, consistent with the standards prescribed in Utah Code §53B-7-101.5.(2) and (3).

**34.2. State Board of Regents Consultation with Students** - The State Board of Regents, prior to adopting projected tuition increases as part of the budget process or prior to approving any increase in tuition, shall hold a public hearing as part of a regularly scheduled meeting of the Board. In the hearing the Board shall provide an explanation of the reasons for the proposed increase, an explanation of how the revenue generated by the increase will be used, and an opportunity for public comment from students. The Board shall provide written notice of the hearing to the members of the Utah Council of Student-body Presidents at least one week prior to the date of the hearing.

**34.3. Frequency of Consultations** - The Board considers any projected tuition increase each Fall as part of the Board's request to the Governor and the Legislature for appropriations for the next fiscal year. This process is subject to consultations with students as provided herein. After the appropriations process is completed by the Legislature, the Board levies the tuition increases for the next fiscal year as they were projected in the Fall, or levies adjusted tuition increases, if necessary. Before the institution requests, or the Board levies a tuition increase different from what was projected in the Fall, the institution and/or Board must consult with students as provided herein.

**R511-5. Disclosure of Tuition and Higher Education Costs**

**5.1. Disclosure of Tuition Relative to Full Cost of Instruction** – Consistent with Utah Code §53B-7-105, each institution shall disclose to its undergraduate resident students at the time of registration, in dollar figures for a full-time equivalent student (a) the full cost of instruction, (b) the amount collected from student tuition and fees, and (c) the difference between the amounts for the full cost of instruction and the student tuition and fees, noting that the difference between the cost and tuition was paid by state tax funds and other monies.

**5.2. Amounts Based on One Semester for the Current Year** – Except for the Utah College of Applied Technology (see 5.2.1), amounts for full-time equivalent student tuition and general student fees and estimated full costs of instruction should be based on 15 credit hours for one semester for the current academic year. Tuition and fee amounts which support the full cost of

instruction, prior to any reductions for statutory tuition waivers (R513) or employee tuition remissions (R824), shall be used.

**5.2.1. Utah College of Applied Technology Disclosure Based on Weekly Amounts** – For the Utah College of Applied Technology, tuition and fees and estimated full costs of instruction should be based on a weekly full-time student who enrolls for 30 membership hours per week.

**5.3. Content of Cost Disclosure** – Amounts for the full cost of instruction shall be estimated by the Office of the Commissioner of Higher Education in consultation with the institutions, relying on existing USHE cost study reporting practices. The content of the disclosure shall be in a statement with essentially the same content as the following:

Full-time undergraduate resident students at [Institution Name] paying a [semester/weekly] tuition and fee amount of [tuition dollar amount] (before any financial aid, scholarships, or waivers) contribute an estimated [percentage] percent to the full cost of instruction per full-time student of [full cost dollar amount]. The remaining support of [difference dollar amount] for the full cost of instruction is provided by state tax funds and other institutional revenue sources.

**5.4. Method of Cost Disclosure** – Institutions may choose to disclose this information through a variety of methods, so long as the information is disclosed plainly and is readily available for students and other constituencies. These methods may include disclosure through (1) the course catalog, (2) the course schedule, (3) tuition invoices, (4) tuition receipts, (5) the cashier's office window, or (6) other Internet and printed materials that list tuition schedules, tuition payment procedures and timelines, or other registration and tuition -related information.

---

(Approved February 16, 2001, *proposed amendments June 3-4, 2004.*)

MEMORANDUM

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: University of Utah – Approving Resolution (Medical Research Facility Renovation Project)  
Research Facilities Revenue Bonds Series 2004A

Issue

University of Utah officials request that the Regents approve the attached bonds resolution authorizing the issuance of up to \$10,000,000 for the purpose of renovating and equipping a building located in Research Park and owned by the University's Research Foundation.

Background

As described in the attached letter from Vice President Arnold Combe, the University of Utah proposes to issue revenue bonds to renovate and equip an existing building in Research Park. The refurbished building will be used by the School of Medicine and other departments within Health Sciences.

In order to finance this renovation and equipment purchase, University officials request that the Regents use special bonding authority granted to the Regents by the Legislature. Most Regent revenue bonds are issued under the authority of UCA 53-B-21, which requires formal Legislative approval prior to issuance. The University requests that the Regents use separate, limited bonding authority granted to them in UCA 11-17-17. This authority allows the Regents to issue up to \$10 million per year on behalf of the University for purposes related to its educational mission. The Attorney General has appointed Ballard Spahr as bond counsel. Wells Fargo will serve as Financial Advisor, and underwriters are George K. Baum & Co. and Zions First National Bank.

A draft Approving Resolution is attached. Also on file, and available for review, are the Bond Purchase Agreement, the Second Supplemental Indenture of Trust, and the Preliminary Official Statement. Parameters established by the resolution are as follows: a principal amount not to exceed \$10,000,000, a maximum term not to exceed 16 years, interest rates not to exceed 5.75 percent, and discount from par not to exceed 2 percent.

State Board of Regents  
May 26, 2004  
Page 2

The bonds will be issued as part of the University's Indirect Cost Recovery Bond System\*, although rent and lease revenues from Health Sciences will be sufficient to pay all operating costs and to amortize the debt over fifteen years. The bonds will be subordinated to the research revenue bonds issued by the University 2000. Representatives of the University, Bond Counsel, and Financial Advisor will be available to answer questions.

Recommendation

It is the recommendation of the Commissioner that the Regents approve the attached Approving Resolution (Medical Research Facility Renovation Project) Research Facilities Revenue Bonds Series 2004A for the University of Utah.

Richard E. Kendell, Commissioner

REK/MHS  
Attachments

\* Note: Indirect cost recovery is also known as Facilities and Administrative Rate Recoveries, and as Reimbursed Overhead.



MEMORANDUM

May 27, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: Snow College - Campus Master Plan

Issue

Snow College is requesting approval for the current campus master plan. President Michael Benson will be available at the Board meeting to review the plan as currently approved by the Board of Trustees.

Recommendation

It is the recommendation of the Commissioner that the Regents approve the current Snow College campus master plan

Richard E. Kendell, Commissioner

REK/MHS/JV  
Attachments

MEMORANDUM

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: College of Eastern Utah - Campus Master Plan

Issue

College of Eastern Utah officials are requesting approval of the existing campus master plan. The College is currently working with DFCM and a contract architect to develop a new five-year plan. The new plan is not ready for approval. College officials will describe the planning process and will provide a progress report at the June 3 meeting.

Recommendation

It is the recommendation of the Commissioner that the Regents approve the existing CEU campus master plan.

Richard E. Kendell, Commissioner

REK/MS/JV  
Attachment

MEMORANDUM

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: Utah Valley State College/ Division of Facilities and Construction Management – Approval of Energy Performance Contract and Capital Equipment Lease-Purchase with Chevron Energy Solutions (ESCO)

Issue

Utah Valley State College, in cooperation with the State Division of Facilities and Construction Management (DFCM) and the State Energy Office, proposes to enter into an Energy Performance Contract and Capital Equipment Lease-Purchase to obtain long-term energy efficiencies.

Discussion

As indicated in the attached letter from Vice President Val Peterson, officials of Utah Valley State College were recently approached by staff from DFCM and the State Energy Office with a proposal for the College to participate in a state energy efficiency program. DFCM is authorized by statute to select an energy efficiency vendor (hereafter referred to as an ESCO) and to pursue financing options for energy projects in the state. When UVSC expressed a willingness to participate, specialists from DFCM and the State Energy Office directed the ESCO to begin a formal assessment of potential energy savings for UVSC's Orem Campus.

The proposed UVSC contract is patterned after two previous projects coordinated by DFCM and the State Energy Office. The first project was the East Campus Central Plant at the University of Utah beginning in 1999. That year the Board of Regents authorized the University to enter into a \$10 million lease-purchase and energy performance contract with Viron and its parent company York International. As part of that contract, York International guaranteed the proposed level of energy savings. Equipment lease-purchase financing was arranged through York International and Lehman Bros. Phases I and II involved retrofit of existing buildings. Phases III, IV, and V have involved a new chilled water plant and a high temperature hot water plant. University officials report that energy savings have met or exceeded expectations. (Attachment 2)

State Board of Regents  
May 26, 2004  
Page 2

The second ESCO model was initiated in 2003 with the Department of Corrections (Attachment 3). Partnering with Johnson Controls and Pacificorp, the Draper Facility put into place energy efficiencies which included the use of renewable resources such as geothermal and wind power. The equipment lease-purchase was financed through Citibank.

Representatives from UVSC, DFCM, and the Energy Office will be present at the June 3 meeting to describe the proposed UVSC project. The most significant elements of the project are a new energy management control system, an independent campus electrical substation, and a new cooling tower. DFCM and UVSC will soon issue an RFP to select a financing partner. The equipment lease-purchase will be paid off through annual payments over a period of up to nineteen years, with the amount of annual savings guaranteed by the ESCO.

The proposed performance contract has been reviewed and approved by officials from UVSC as well as Kent Beers (DFCM), Mike Glenn (State Energy Office), and Alan Bachman (Assistant Attorney General). Both DFCM and UVSC will sign the performance contract. UVSC will sign the financing contract, upon the recommendation of DFCM and after review by the assistant attorney general working with DFCM. Institutions are authorized to enter into agreements for the lease-purchase of equipment according to Regent policy R587, *Lease-Purchase Financing*.

#### Recommendation

It is the recommendation of the Commissioner that the Regents review the attached materials, pose questions to the representatives from UVSC, DFCM, and the State Energy Office, and, if satisfied with the proposed energy project, approve the Energy Performance Contract and Capital Lease-Purchase with Chevron Energy Solutions (ESCO).

REK/MHS

Richard E. Kendell, Commissioner

Attachments

MEMORANDUM

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: Utah Valley State College – Authorizing Resolution for Revenue Refunding Bonds, Series 2004

Issue

Utah Valley State College officials request approval of an authorizing resolution enabling the refinancing of two prior revenue bond issues of the College: (1) Student Center Building Fee and Unified System Revenue Cross-Over Refunding Bonds, Series 1995A, and Student Center Building Fee and Unified System Revenue Bonds, Series 2000.

Discussion

The College has determined that it would be useful at this time to execute a “structural refunding” of these bonds. This refunding represents no new debt but does restructure and consolidate existing debt. Generally, the Regents must first obtain legislative authorization to exercise their statutory authority to issue revenue bonds on behalf of USHE institutions. However, prior authorization is not needed for refunding revenue bonds. The aggregate principal amount of the restructured debt is \$16,000,000.

Regents are asked to approve bond “parameters” that express their intent to issue bonds so long as the final structuring of the bond issues falls within those parameters. As is provided in statute, final pricing, structuring, and execution of the bonds (within the authorized parameters) is performed by the Chair or Vice-chair of the Board, or by the Chair of the Board’s Finance, Facilities and Accountability Committee.

Parameters established for the Student Center Building Fee and Unified System Revenue Refunding Bonds, Series 2004, are as follows: a principal amount not to exceed \$16,000,000; interest rates not to exceed 7.5 percent; discount from par not to exceed 2 percent; and final maturity not to exceed 20.5 years.

Bond counsel appointed by the Attorney General for this bond issuance in Ballard Spahr Andrews & Ingersoll, LLP, represented by Blake Wade. Underwriter is Zions First National Bank, represented by Carl Empey.

State Board of Regents  
May 26, 2004  
Page 2

As is the case with other revenue bonds, these new Series 2004 bonds will be linked to a specific revenue source, and will not constitute a general obligation of the Board, the College, or the State of Utah. College officials are confident that the student fee structure currently in place will provide a consistent revenue source for bond repayment.

Recommendation

It is the recommendation of the Commissioner that the Board of Regents adopt the attached authorizing resolution for Utah Valley State College, with the understanding that final pricing, structuring, and execution of the bonds will be performed by the Chair or Vice-Chair of the Board, or the Chair of the Board's Finance, Facilities, and Accountability Committee.

Richard E. Kendell, Commissioner

REK/MHS  
Attachment

**MEMORANDUM**

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

SUBJECT: Utah Valley State College – Approval of Bond Authorizing Resolution, Purchase Contract, and Sublease with Utah County for Funding of the Baseball Stadium (Series 2004)

Issue

Utah Valley State College officials request approval of a bond authorizing resolution, a purchase contract, and a sublease with Utah County. This sublease will enable the County to secure the sale of bonds by its Municipal Building Authority to refund a previous municipal bond with UVSC and to fund construction of a new baseball stadium at UVSC. This matter was discussed at the April 16 Regents' meeting at which time additional information was requested.

Discussion

Utah Valley State College has had plans for several years to construct a Division I-quality baseball stadium on its Orem Campus. UVSC sought private donations during 2002 and 2003 in order to make this project a reality. When, in late 2003, it became apparent that the donations were pledged to occur over the space of several years, officials of Utah County informally offered to advance to the College the cash necessary to facilitate timely construction of the stadium. As County officials finalized the details of this cash advance during the first few months of 2004, they were advised that the most appropriate financing approach would be in the form of a municipal bond, which would raise money for a loan to the College. Accordingly, Utah County's Municipal Building Authority will issue a bond for \$3.8 million and will loan this amount to UVSC for construction of the Parkway Crossing Baseball Stadium. UVSC will make annual payments to the County to pay off the bond. The majority of the \$3.8 million cost has been pledged from private donors to be paid over the next eight to ten years, including a substantial amount from lead donor Parkway Crossing.

It was not the intention of UVSC to in any way circumvent regular legislative channels for bond approval. Rather, because the Stadium will be primarily privately funded, the College merely sought a type of "bridge" financing in collaboration with a long time local partner. UVSC previously entered into a similar arrangement with Utah County in order to purchase the former Utah County Journal newspaper building which is located adjacent to UVSC's Orem campus. This previous Revenue Bond, Series 1999, allowed the College to purchase what is now called the Education Building, which houses the School of Education, the Development Office, the Bookstore warehouse, and the College's general warehouse.

State Board of Regents  
May 26, 2004  
Page 2

Utah County's Municipal Building Authority will use the opportunity of the new bonds to refund the 1999 project. The new bond will be the Lease Revenue and Refunding Bonds, Series 2004, (Utah Valley State College Project), to: (1) finance the costs of acquisition of the 2004 project, (2) refund all of the Authority's outstanding Lease Revenue Bonds, Series 1999, (3) fund a deposit to a debt service reserve fund, and (4) pay costs associated with issuance of the Bonds.

Because the Municipal Building Authority has been advised that "pledged revenues" are insufficient to guarantee the most favorable bond rating, although the County is the issuer of bonds the UVSC fee revenue system will be used as security for the bonds. The Regents are therefore asked to approve the bond "parameters" that express the intent to issue bonds so long as the final structuring of the bond issues falls within those parameters.

In order to secure its bond financing, Utah County will enter into a ground lease with UVSC to construct the Stadium (the 2004 Project) then will in turn sublease the new facility to UVSC to operate. This sublease arrangement will be in place until the bonds are paid. The bonds are secured by UVSC student fees, although the majority of the repayment will be through pledged donations, including a lead "naming rights" commitment of \$1.7 million from Parkway Crossing. Funds have also been pledged by Orem City and Utah County, and in-kind donations have been received from several local businesses.

Parameters for the Lease Revenue and Refunding Bonds, Series 2004, (Utah Valley State College Project), are as follows: a principal amount not to exceed \$8,000,000; interest rates not to exceed 7.5 percent; discount from par not to exceed 2 percent; and final maturity not to exceed 20.5 years. Bond counsel appointed by the Attorney General for this bond issuance is Ballard Spahr Andrews & Ingersoll, LLP, represented by Blake Wade. Underwriter is Zions First National Bank, represented by Carl Empey.

Since the April Board meeting, the Commissioner has received additional supporting materials, including a one-page summary from UVSC, a summary letter from Bond Counsel, and letters from Utah County and Orem City, which are attached.

After discussion of this matter at the April Board meeting, the Commissioner and Pres. Sederburg received several follow-up assignments. The following four statements are a report on those assignments:

1. We have confirmed prior legislative authorization, via intent language, permitting construction of a baseball stadium as long as it is accomplished without appropriated funds.
2. We have discussed the proposed stadium, the municipal bond, and sublease with a staff member representing the Legislative Fiscal Analyst, who agrees that the current proposal is consistent with legislative intent.



State Board of Regents  
May 26, 2004  
Page 3

3. We have held discussions with representatives of legislative leadership, who are pleased with the level of private donations which have been pledged, and are comfortable with the proposed plan for a financing partnership with local government.
4. We have reviewed this matter with the contracted financial advisor, representing Zions Bank, who affirms that the plan for bond refunding is a reasonable financial decision which will likely save a small amount of money (\$41,000) over the life of the bonds. We have reviewed the list of pledged donations and are confident that donations will be sufficient to make bond payments.

Recommendation

It is the recommendation of the Commissioner that the Board of Regents adopt the sublease and authorizing resolution for Utah Valley State College, with the understanding that final pricing, structuring, and execution of the bonds will be performed by the Chair or Vice-Chair of the Board, or the Chair of the Board's Finance, Facilities, and Accountability Committee.

REK/MHS  
Attachment

Richard E. Kendell, Commissioner

MEMORANDUM

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: UCAT – Approval of 2004-05 Tuition Rate

Issue

During the March meeting, Regents finalized 2004-05 tuition increases for 9 of the 10 USHE institutions. At this time, Regents are being asked to approve the new Utah College of Applied Technology tuition model and finalize the 2004-05 UCAT tuition increase.

Background

Last year at this time, Regents were asked to review and approve the proposed UCAT tuition model and proposed tuition rates for 2003-04. Under the new model, campuses have found difficulty balancing enrollment patterns and revenue streams. The problems arise because historically UCAT campuses exercised considerable latitude in developing tuition schedules while under public education. Some campuses charged a front-load to students enrolled in a lesser number of hours, while other campuses charged a constant, linear rate per hour regardless of the enrollment level. Persuasive arguments exist for both the front-loaded and linear model. While charging a front-load to students can encourage them to complete programs more quickly, maintaining a constant rate per hour is conducive to UCAT's open-entry/open-exit instruction delivery systems.

The uniform tuition schedule implemented for 2003-04 to fulfill legislative intent language included a front-load to maintain revenue levels, but this front load has had a detrimental impact on student enrollment at campuses previously on a constant rate-per-hour model. To resolve this, UCAT Finance Officers, UCAT Administration and the Commissioner's Office have worked to develop a more amenable tuition model that would not only address the revenue concerns expressed by each of the campuses, but also allow for flexibility to meet the unique needs of each campus regarding their respective student populations.

During the April UCAT Board of Trustees meeting, the Trustees discussed a new model and identified a target tuition increase of the full-time student rate from \$1.00 per hour to \$1.15 per hour or 15 percent using a two-schedule tuition model. The two schedules are referred to as a "Step Schedule" and a "Linear Schedule." These two models intersect, having a uniform rate per hour at three designated points and at the full-time student level.

The figures in Attachment 1 illustrate the historical and proposed UCAT tuition schedules. Figure 1

State Board of Regents  
May 26, 2004  
Page 2

shows the various schedules developed by the campuses under the State Board of Education and used in 2002-03. Figure 2 illustrates the step and linear schedules proposed for 2004-05 compared to the 2003-04 model. The table in Attachment 2 illustrates that while the increase for full-time students is 15 percent, a number of students will experience a tuition decrease.

Since the April UCAT Board of Trustees meeting, UCAT campuses have held truth-in-tuition hearings regarding which tuition schedule to use and on the proposed 15 percent increase. The results of these truth-in-tuition hearings will be presented at the June 2, 2004 UCAT Board of Trustees meeting for their information and approval. The details of the Board of Trustees approval being forwarded for consideration will be hand carried to the June 3-4, 2004 Regent's meeting.

#### Commissioner's Recommendation

The tuition plan has had a great deal of discussion and generally there is agreement regarding the two-schedule model. Certainly it is simpler than the previous institutional plans. Assuming positive recommendations from the UCAT Trustees, the Commissioner recommends the proposed tuition model and tuition increase for UCAT.

Richard E. Kendell, Commissioner

REK/MHS/KLH  
Attachment

MEMORANDUM  
May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: Action: Consent Calendar, Finance, Facilities, and Accountability Committee

It is the recommendation of the Commissioner that the Regents approve the following items on the Finance Facilities, and Accountability Committee Consent Calendar:

- A. USHE - 2003-2004 Final Work Program Revisions (Attachment 1).** Attached is a summary of the final 2003-2004 Work Programs. "Work Program" is a term applied to revenue and expenditure allotment schedules submitted to the State Division of Finance. Work programs serve as a basis for the disbursement of state appropriated funds to institutions.
- B. USHE - 2004-2005 Initial Work Program (Attachment 2).** Utah statute requires that the Board of Regents approve all work program revisions. Attached is a summary of revisions for the 2004-2005 budget.
- C. USHE – 2004-2005 Presidents' Salaries (Attachment 3).** - To be hand carried to the meeting.
- D. UofU - Sale of Donated Property (Attachment 4).** Policy R710 requires Board of Regents approval for the sale of property. As stated in the attached letter from Vice President Arnold Combe, the University requests approval for the sale of two donated properties. Proceeds from the sale will be used as directed by the donors.
- E. UofU and USU – Capital Facilities Delegation Reports (Attachment 5).** In accordance with the capital facilities delegation policy adopted by the Regents and by the State Building Board, the attached reports are submitted to the Board for review. Officials from the institutions will be available to answer any questions that the Regents may have.
- F. OCHE – Third Quarter Budget/Investment Report (Attachment 6)** - To be hand carried to the meeting.

Richard E. Kendell, Commissioner

CHF/MHS/jv  
Attachments

# Utah System of Higher Education 2003-2004 Work Programs

June 26, 2003

## Initial Schedule (Ties to 2003 General Session Appropriations)

Expenditures	Revenues							
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds	
<b>University of Utah</b>								
Education and General	\$276,890,400	\$79,908,500	\$95,000,000	\$0	\$93,195,300	\$0	\$0	\$8,786,600
School of Medicine	30,688,400	19,953,200			10,735,200			
Regional Dental Education Prog.	687,500	555,400			132,100			
Poison Control	1,348,100				1,348,100			
Pub. Svc. - Seismograph Stations	394,600	394,600						
Pub. Svc. - Museum Nat. History	606,500	606,500						
Pub. Svc. - State Arboretum	109,900	109,900						
KUED	2,357,700	2,357,700						
University Hospital	4,318,000	4,318,000						
Miners Hospital	170,200	19,200						151,000
Educationally Disadvantaged	732,100	697,600						34,500
<b>Total U of U</b>	<b>318,303,400</b>	<b>108,920,600</b>	<b>95,000,000</b>	<b>0</b>	<b>105,410,700</b>	<b>0</b>	<b>0</b>	<b>8,972,100</b>
<b>Utah State University</b>								
Education and General	140,221,300	95,323,200			44,797,500			100,600
Uintah Basin Continuing Ed. Ctr.	5,336,700	2,722,700			2,614,000			
Southeastern Utah Cont. Ed. Ctr.	1,128,500	625,400			461,000			42,100
Brigham City Continuing Ed Ctr.	1,537,800	373,300			1,164,500			
Tooele/Wasatch Cont. Ed. Ctr.	3,856,800	1,031,200			2,825,600			
Agricultural Experiment Station	13,905,600	11,461,800			630,000		1,813,800	
Water Research Laboratory	2,249,800	1,497,200				752,600		
Cooperative Extension	13,306,800	11,068,300			150,000		2,088,500	
Educationally Disadvantaged	228,000	228,000						
<b>Total USU</b>	<b>181,771,300</b>	<b>124,331,100</b>	<b>0</b>	<b>0</b>	<b>52,642,600</b>	<b>752,600</b>	<b>3,902,300</b>	<b>142,700</b>
<b>Weber State University</b>								
Education and General	88,758,400	54,785,900			33,945,000			27,500
Educationally Disadvantaged	323,200	323,200						
<b>Total WSU</b>	<b>89,081,600</b>	<b>55,109,100</b>	<b>0</b>	<b>0</b>	<b>33,945,000</b>	<b>0</b>	<b>0</b>	<b>27,500</b>
<b>Southern Utah University</b>								
Education and General	39,237,800	25,725,100			13,512,700			
Utah Shakespearean Festival	12,500	12,500						
Rural Development	98,100	98,100						
Educationally Disadvantaged	90,900	90,900						
<b>Total SUU</b>	<b>39,439,300</b>	<b>25,926,600</b>	<b>0</b>	<b>0</b>	<b>13,512,700</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Snow College</b>								
Education and General	20,139,300	15,800,200			4,339,100			
Applied Technology Education	1,659,000	1,154,000			330,000		175,000	
Educationally Disadvantaged	32,000	32,000						
<b>Total Snow College</b>	<b>21,830,300</b>	<b>16,986,200</b>	<b>0</b>	<b>0</b>	<b>4,669,100</b>	<b>0</b>	<b>175,000</b>	<b>0</b>
<b>Dixie State College</b>								
Education and General	23,134,800	16,145,700			6,989,100			
Zion Park Amphitheatre	88,400	56,300			32,100			
Educationally Disadvantaged	30,600	30,600						
<b>Total Dixie College</b>	<b>23,253,800</b>	<b>16,232,600</b>	<b>0</b>	<b>0</b>	<b>7,021,200</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>College of Eastern Utah</b>								
Education and General	12,356,900	10,185,000			2,171,900			
San Juan Center	2,278,700	1,716,700			562,000			
Prehistoric Museum	180,800	179,800			1,000			
CEU Star Schools - Price	134,900	134,900						
CEU Star Schools - San Juan	134,900	134,900						
Educationally Disadvantaged	116,900	116,900						
<b>Total CEU</b>	<b>15,203,100</b>	<b>12,468,200</b>	<b>0</b>	<b>0</b>	<b>2,734,900</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Utah Valley State College</b>								
Education and General	83,923,500	40,217,200			43,706,300			
Educationally Disadvantaged	131,400	131,400						
<b>Total UVSC</b>	<b>84,054,900</b>	<b>40,348,600</b>	<b>0</b>	<b>0</b>	<b>43,706,300</b>	<b>0</b>	<b>0</b>	<b>0</b>

Utah System of Higher Education 2003-2004 Work Programs

June 26, 2003

Initial Schedule (Ties to 2003 General Session Appropriations)

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds

(continued)

**Salt Lake Community College**

Education and General	\$77,907,500	\$49,180,400	\$0	\$0	\$28,727,100	\$0	\$0	\$0
Skills Center	4,777,500	3,883,900			893,600			
Educationally Disadvantaged	178,400	178,400						
<b>Total SLCC</b>	<b>82,863,400</b>	<b>53,242,700</b>	<b>0</b>	<b>0</b>	<b>29,620,700</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SBR and Statewide Programs**

Administration - SBR	2,954,900	2,864,100			90,800			
Administration - Prison Recidivism	385,700	385,700						
Engineering Initiative	500,000	500,000						
WICHE	1,020,900	1,020,900						
Student Financial Aid	3,315,200	3,315,200						
Student Financial Aid - UCOPE	1,983,800	1,983,800						
Student Financial Aid - New Century	73,200	73,200						
Student Fin. Aid - Minority Scholarships	47,100	47,100						
Student Fin. Aid - Tuition Assistance	47,100	47,100						
T.H. Bell Teacher Incentive Loans	794,700	619,700			175,000			
University Centers	255,500	255,500						
Electronic Coursework/UEC	513,800	513,800						
Higher Education Technology Initiative	2,445,600	2,445,600						
Federal Programs	301,400						301,400	
Academic Library Council	2,883,500	2,883,500						
<b>Total SBR</b>	<b>17,522,400</b>	<b>16,955,200</b>	<b>0</b>	<b>0</b>	<b>265,800</b>	<b>0</b>	<b>301,400</b>	<b>0</b>

<b>9 INSTITUTION &amp; SBR TOTAL</b>	<b>\$873,323,500</b>	<b>\$470,520,900</b>	<b>\$95,000,000</b>	<b>\$0</b>	<b>\$293,529,000</b>	<b>\$752,600</b>	<b>\$4,378,700</b>	<b>\$9,142,300</b>
--------------------------------------	----------------------	----------------------	---------------------	------------	----------------------	------------------	--------------------	--------------------

**Utah College of Applied Technology**

Bridgerland	\$8,254,500	\$7,236,000	\$0	\$0	\$1,018,500	\$0	\$0	\$0
Davis	8,347,500	7,183,900			965,800			197,800
Dixie	811,800	811,800						0
Mountainland	2,356,000	2,230,400			125,600			0
Ogden Weber	9,335,800	8,007,200			1,241,000			87,600
Salt Lake/Tooele	2,111,400	1,956,200			123,300			31,900
Southeast	972,000	818,900			153,100			0
Southwest	1,784,100	1,306,700			300,400			177,000
Uintah Basin	4,130,200	3,810,200			320,000			0
UCAT Custom Fit	3,108,100	3,108,100						0
UCAT Equipment	837,400	837,400						0
UCAT Administration	368,100	368,100						0
<b>UCAT TOTAL</b>	<b>\$42,416,900</b>	<b>\$37,674,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,247,700</b>	<b>\$0</b>	<b>\$0</b>	<b>\$494,300</b>

**Utah Education Network**

USU Satellite	\$1,454,000	\$1,454,000	\$0	\$0	\$0	\$0	\$0	\$0
UtahLINK	18,883,500	13,464,600			1,037,000		4,195,000	186,900
<b>UEN TOTAL</b>	<b>\$20,337,500</b>	<b>\$14,918,600</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,037,000</b>	<b>\$0</b>	<b>\$4,195,000</b>	<b>\$186,900</b>

<b>GRAND TOTAL - USHE (w/ UCAT) &amp; UEN</b>	<b>\$936,077,900</b>	<b>\$523,114,400</b>	<b>\$95,000,000</b>	<b>\$0</b>	<b>\$298,813,700</b>	<b>\$752,600</b>	<b>\$8,573,700</b>	<b>\$9,823,500</b>
---	----------------------	----------------------	---------------------	------------	----------------------	------------------	--------------------	--------------------

# Utah System of Higher Education 2003-2004 Work Programs

June 26, 2003

## June 2003 Revisions

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds

### University of Utah

Education and General	(\$2,775,300)				(\$2,775,300)			
School of Medicine	(1,963,200)				(1,963,200)			
Regional Dental Education Prog.	(19,900)				(19,900)			
Poison Control	0							
Pub. Svc. - Seismograph Stations	0							
Pub. Svc. - Museum Nat. History	0							
Pub. Svc. - State Arboretum	0							
KUED	0							
University Hospital	0							
Miners Hospital	0							
Educationally Disadvantaged	0							
<b>Total U of U</b>	<b>(4,758,400)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(4,758,400)</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Utah State University

Education and General	(962,300)	(60,700)			(901,600)			
Uintah Basin Continuing Ed. Ctr.	(61,900)				(61,900)			
Southeastern Utah Cont. Ed. Ctr.	(23,400)				(23,400)			
Brigham City Continuing Ed Ctr.	28,300	60,700			(32,400)			
Tooele/Wasatch Cont. Ed. Ctr.	(95,900)				(95,900)			
Agricultural Experiment Station	0							
Water Research Laboratory	0							
Cooperative Extension	0							
Educationally Disadvantaged	0							
<b>Total USU</b>	<b>(1,115,200)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1,115,200)</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Weber State University

Education and General	(1,426,700)				(1,426,700)			
Educationally Disadvantaged	0							
<b>Total WSU</b>	<b>(1,426,700)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1,426,700)</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Southern Utah University

Education and General	(1,532,400)				(1,532,400)			
Utah Shakespearean Festival	0							
Rural Development	0							
Educationally Disadvantaged	0							
<b>Total SUU</b>	<b>(1,532,400)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1,532,400)</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Snow College

Education and General	61,600				61,600			
Applied Technology Education	(505,000)				(330,000)		(175,000)	
Educationally Disadvantaged	0							
<b>Total Snow College</b>	<b>(443,400)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(268,400)</b>	<b>0</b>	<b>(175,000)</b>	<b>0</b>

### Dixie State College

Education and General	(22,300)				(22,300)			
Zion Park Amphitheatre	0							
Educationally Disadvantaged	0							
<b>Total Dixie College</b>	<b>(22,300)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(22,300)</b>	<b>0</b>	<b>0</b>	<b>0</b>

### College of Eastern Utah

Education and General	(33,400)				(33,400)			
San Juan Center	(900)				(900)			
Prehistoric Museum	0							
CEU Star Schools - Price	0							
CEU Star Schools - San Juan	0							
Educationally Disadvantaged	0							
<b>Total CEU</b>	<b>(34,300)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(34,300)</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Utah Valley State College

Education and General	(1,223,500)				(1,223,500)			
Educationally Disadvantaged	0							
<b>Total UVSC</b>	<b>(1,223,500)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1,223,500)</b>	<b>0</b>	<b>0</b>	<b>0</b>

Utah System of Higher Education 2003-2004 Work Programs

June 26, 2003

June 2003 Revisions

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds

(continued)

**Salt Lake Community College**

Education and General	\$131,700				\$131,700			
Skills Center	(61,800)				(61,800)			
Educationally Disadvantaged	0							
<b>Total SLCC</b>	<b>69,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>69,900</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SBR and Statewide Programs**

Administration - SBR	0							
Administration - Prison Recidivism	0							
Engineering Initiative	0							
WICHE	0							
Student Financial Aid	0							
Student Financial Aid - UCOPE	0							
Student Financial Aid - New Century	0							
Student Fin. Aid - Minority Scholarships	0							
Student Fin. Aid - Tuition Assistance	0							
T.H. Bell Teacher Incentive Loans	0							
University Centers	0							
Electronic Coursework/UEC	0							
Higher Education Technology Initiative	0							
Federal Programs	0							
Academic Library Council	0							
<b>Total SBR</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>9 INSTITUTION &amp; SBR TOTAL</b>	<b>(\$10,486,300)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$10,311,300)</b>	<b>\$0</b>	<b>(\$175,000)</b>	<b>\$0</b>
--------------------------------------	-----------------------	------------	------------	------------	-----------------------	------------	--------------------	------------

**Utah College of Applied Technology**

Bridgerland	\$0							
Davis	0							
Dixie	0							
Mountainland	0							
Ogden Weber	0							
Salt Lake/Tooele	0							
Southeast	0							
Southwest	0							
Uintah Basin	0							
UCAT Custom Fit	0							
UCAT Equipment	0							
UCAT Administration	0							
<b>UCAT TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Utah Education Network**

CEU Distance Learning	\$0							
UtahLINK	0							
<b>UEN TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<b>GRAND TOTAL - USHE (w/ UCAT) &amp; UEN</b>	<b>(\$10,486,300)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$10,311,300)</b>	<b>\$0</b>	<b>(\$175,000)</b>	<b>\$0</b>
---	-----------------------	------------	------------	------------	-----------------------	------------	--------------------	------------



Utah System of Higher Education 2003-2004 Work Programs

June 26, 2003

Revised Schedule -- June 2003

Expenditures	Revenues							
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds	
<b>University of Utah</b>								
Education and General	\$274,115,100	\$79,908,500	\$95,000,000	\$0	\$90,420,000	\$0	\$0	\$8,786,600
School of Medicine	28,725,200	19,953,200	0	0	8,772,000	0	0	0
Regional Dental Education Prog.	667,600	555,400	0	0	112,200	0	0	0
Poison Control	1,348,100	0	0	0	1,348,100	0	0	0
Pub. Svc. - Seismograph Stations	394,600	394,600	0	0	0	0	0	0
Pub. Svc. - Museum Nat. History	606,500	606,500	0	0	0	0	0	0
Pub. Svc. - State Arboretum	109,900	109,900	0	0	0	0	0	0
KUED	2,357,700	2,357,700	0	0	0	0	0	0
University Hospital	4,318,000	4,318,000	0	0	0	0	0	0
Miners Hospital	170,200	19,200	0	0	0	0	0	151,000
Educationally Disadvantaged	732,100	697,600	0	0	0	0	0	34,500
<b>Total U of U</b>	<b>313,545,000</b>	<b>108,920,600</b>	<b>95,000,000</b>	<b>0</b>	<b>100,652,300</b>	<b>0</b>	<b>0</b>	<b>8,972,100</b>
<b>Utah State University</b>								
Education and General	139,259,000	95,262,500	0	0	43,895,900	0	0	100,600
Uintah Basin Continuing Ed. Ctr.	5,274,800	2,722,700	0	0	2,552,100	0	0	0
Southeastern Utah Cont. Ed. Ctr.	1,105,100	625,400	0	0	437,600	0	0	42,100
Brigham City Continuing Ed Ctr.	1,566,100	434,000	0	0	1,132,100	0	0	0
Tooele/Wasatch Cont. Ed. Ctr.	3,760,900	1,031,200	0	0	2,729,700	0	0	0
Agricultural Experiment Station	13,905,600	11,461,800	0	0	630,000	0	1,813,800	0
Water Research Laboratory	2,249,800	1,497,200	0	0	0	752,600	0	0
Cooperative Extension	13,306,800	11,068,300	0	0	150,000	0	2,088,500	0
Educationally Disadvantaged	228,000	228,000	0	0	0	0	0	0
<b>Total USU</b>	<b>180,656,100</b>	<b>124,331,100</b>	<b>0</b>	<b>0</b>	<b>51,527,400</b>	<b>752,600</b>	<b>3,902,300</b>	<b>142,700</b>
<b>Weber State University</b>								
Education and General	87,331,700	54,785,900	0	0	32,518,300	0	0	27,500
Educationally Disadvantaged	323,200	323,200	0	0	0	0	0	0
<b>Total WSU</b>	<b>87,654,900</b>	<b>55,109,100</b>	<b>0</b>	<b>0</b>	<b>32,518,300</b>	<b>0</b>	<b>0</b>	<b>27,500</b>
<b>Southern Utah University</b>								
Education and General	37,705,400	25,725,100	0	0	11,980,300	0	0	0
Utah Shakespearean Festival	12,500	12,500	0	0	0	0	0	0
Rural Development	98,100	98,100	0	0	0	0	0	0
Educationally Disadvantaged	90,900	90,900	0	0	0	0	0	0
<b>Total SUU</b>	<b>37,906,900</b>	<b>25,926,600</b>	<b>0</b>	<b>0</b>	<b>11,980,300</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Snow College</b>								
Education and General	20,200,900	15,800,200	0	0	4,400,700	0	0	0
Applied Technology Education	1,154,000	1,154,000	0	0	0	0	0	0
Educationally Disadvantaged	32,000	32,000	0	0	0	0	0	0
<b>Total Snow College</b>	<b>21,386,900</b>	<b>16,986,200</b>	<b>0</b>	<b>0</b>	<b>4,400,700</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Dixie State College</b>								
Education and General	23,112,500	16,145,700	0	0	6,966,800	0	0	0
Zion Park Amphitheatre	88,400	56,300	0	0	32,100	0	0	0
Educationally Disadvantaged	30,600	30,600	0	0	0	0	0	0
<b>Total Dixie College</b>	<b>23,231,500</b>	<b>16,232,600</b>	<b>0</b>	<b>0</b>	<b>6,998,900</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>College of Eastern Utah</b>								
Education and General	12,323,500	10,185,000	0	0	2,138,500	0	0	0
San Juan Center	2,277,800	1,716,700	0	0	561,100	0	0	0
Prehistoric Museum	180,800	179,800	0	0	1,000	0	0	0
CEU Star Schools - Price	134,900	134,900	0	0	0	0	0	0
CEU Star Schools - San Juan	134,900	134,900	0	0	0	0	0	0
Educationally Disadvantaged	116,900	116,900	0	0	0	0	0	0
<b>Total CEU</b>	<b>15,168,800</b>	<b>12,468,200</b>	<b>0</b>	<b>0</b>	<b>2,700,600</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Utah Valley State College</b>								
Education and General	82,700,000	40,217,200	0	0	42,482,800	0	0	0
Educationally Disadvantaged	131,400	131,400	0	0	0	0	0	0
<b>Total UVSC</b>	<b>82,831,400</b>	<b>40,348,600</b>	<b>0</b>	<b>0</b>	<b>42,482,800</b>	<b>0</b>	<b>0</b>	<b>0</b>

Utah System of Higher Education 2003-2004 Work Programs

June 26, 2003

Revised Schedule -- June 2003

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds

(continued)

**Salt Lake Community College**

Education and General	\$78,039,200	\$49,180,400	\$0	\$0	\$28,858,800	\$0	\$0	\$0
Skills Center	4,715,700	3,883,900	0	0	831,800	0	0	0
Educationally Disadvantaged	178,400	178,400	0	0	0	0	0	0
<b>Total SLCC</b>	<b>82,933,300</b>	<b>53,242,700</b>	<b>0</b>	<b>0</b>	<b>29,690,600</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SBR and Statewide Programs**

Administration - SBR	2,954,900	2,864,100	0	0	90,800	0	0	0
Administration - Prison Recidivism	385,700	385,700	0	0	0	0	0	0
Engineering Initiative	500,000	500,000	0	0	0	0	0	0
WICHE	1,020,900	1,020,900	0	0	0	0	0	0
Student Financial Aid	3,315,200	3,315,200	0	0	0	0	0	0
Student Financial Aid - UCOPE	1,983,800	1,983,800	0	0	0	0	0	0
Student Financial Aid - New Century	73,200	73,200	0	0	0	0	0	0
Student Fin. Aid - Minority Scholarships	47,100	47,100	0	0	0	0	0	0
Student Fin. Aid - Tuition Assistance	47,100	47,100	0	0	0	0	0	0
T.H. Bell Teacher Incentive Loans	794,700	619,700	0	0	175,000	0	0	0
University Centers	255,500	255,500	0	0	0	0	0	0
Electronic Coursework/UEC	513,800	513,800	0	0	0	0	0	0
Higher Education Technology Initiative	2,445,600	2,445,600	0	0	0	0	0	0
Federal Programs	301,400	0	0	0	0	0	301,400	0
Academic Library Council	2,883,500	2,883,500	0	0	0	0	0	0
<b>Total SBR</b>	<b>17,522,400</b>	<b>16,955,200</b>	<b>0</b>	<b>0</b>	<b>265,800</b>	<b>0</b>	<b>301,400</b>	<b>0</b>

<b>9 INSTITUTION &amp; SBR TOTAL</b>	<b>\$862,837,200</b>	<b>\$470,520,900</b>	<b>\$95,000,000</b>	<b>\$0</b>	<b>\$283,217,700</b>	<b>\$752,600</b>	<b>\$4,203,700</b>	<b>\$9,142,300</b>
--------------------------------------	----------------------	----------------------	---------------------	------------	----------------------	------------------	--------------------	--------------------

**Utah College of Applied Technology**

Bridgerland	\$8,254,500	\$7,236,000	\$0	\$0	\$1,018,500	\$0	\$0	\$0
Davis	8,347,500	7,183,900	0	0	965,800	0	0	197,800
Dixie	811,800	811,800	0	0	0	0	0	0
Mountainland	2,356,000	2,230,400	0	0	125,600	0	0	0
Ogden Weber	9,335,800	8,007,200	0	0	1,241,000	0	0	87,600
Salt Lake/Tooele	2,111,400	1,956,200	0	0	123,300	0	0	31,900
Southeast	972,000	818,900	0	0	153,100	0	0	0
Southwest	1,784,100	1,306,700	0	0	300,400	0	0	177,000
Uintah Basin	4,130,200	3,810,200	0	0	320,000	0	0	0
UCAT Custom Fit	3,108,100	3,108,100	0	0	0	0	0	0
UCAT Equipment	837,400	837,400	0	0	0	0	0	0
UCAT Administration	368,100	368,100	0	0	0	0	0	0
<b>UCAT TOTAL</b>	<b>\$42,416,900</b>	<b>\$37,674,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,247,700</b>	<b>\$0</b>	<b>\$0</b>	<b>\$494,300</b>

**Utah Education Network**

CEU Distance Learning	\$1,454,000	\$1,454,000	\$0	\$0	\$0	\$0	\$0	\$0
UtahLINK	18,883,500	13,464,600	0	0	1,037,000	0	4,195,000	186,900
<b>UEN TOTAL</b>	<b>\$20,337,500</b>	<b>\$14,918,600</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,037,000</b>	<b>\$0</b>	<b>\$4,195,000</b>	<b>\$186,900</b>

<b>GRAND TOTAL - USHE (w/ UCAT) &amp; UEN</b>	<b>\$925,591,600</b>	<b>\$523,114,400</b>	<b>\$95,000,000</b>	<b>\$0</b>	<b>\$288,502,400</b>	<b>\$752,600</b>	<b>\$8,398,700</b>	<b>\$9,823,500</b>
---	----------------------	----------------------	---------------------	------------	----------------------	------------------	--------------------	--------------------

## Utah System of Higher Education 2004-05 Work Programs

April 15, 2004

## Initial Schedule (Ties to 2004 General Session Appropriations)

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/Trust Funds/Other Funds
<b>University of Utah</b>							
Education and General	\$293,591,200	\$71,757,600	\$108,865,500	\$0	\$104,181,500	\$0	\$8,786,600
School of Medicine	31,482,100	20,563,900	0	0	10,918,200	0	0
Regional Dental Education Prog.	679,500	558,600	0	0	120,900	0	0
Poison Control	1,374,400	0	0	0	1,374,400	0	0
Pub. Svc. - Seismograph Stations	403,200	403,200	0	0	0	0	0
Pub. Svc. - Museum Nat. History	822,500	822,500	0	0	0	0	0
Pub. Svc. - State Arboretum	112,600	112,600	0	0	0	0	0
KUED	2,416,600	2,416,600	0	0	0	0	0
University Hospital	4,423,400	4,423,400	0	0	0	0	0
Miners Hospital	478,100	22,300	0	0	0	0	455,800
Educationally Disadvantaged	743,400	708,900	0	0	0	0	34,500
Total U of U	336,527,000	101,789,600	108,865,500	0	116,595,000	0	9,276,900
<b>Utah State University</b>							
Education and General	143,894,300	97,729,700	0	0	46,064,000	0	100,600
Uintah Basin Continuing Ed. Ctr.	6,103,500	2,890,200	0	0	3,213,300	0	0
Southeastern Utah Cont. Ed. Ctr.	1,168,400	639,600	0	0	500,700	0	28,100
Brigham City Continuing Ed Ctr.	1,837,900	455,600	0	0	1,382,300	0	0
Tooele/Wasatch Cont. Ed. Ctr.	3,995,800	1,091,300	0	0	2,904,500	0	0
Agricultural Experiment Station	14,348,600	11,904,800	0	0	630,000	1,813,800	0
Water Research Laboratory	2,329,800	1,530,200	0	0	0	799,600	0
Cooperative Extension	13,599,000	11,360,500	0	0	150,000	2,088,500	0
Educationally Disadvantaged	231,800	231,800	0	0	0	0	0
Total USU	187,509,100	127,833,700	0	0	54,844,800	3,902,300	128,700
<b>Weber State University</b>							
Education and General	94,691,600	56,463,100	0	0	38,228,500	0	0
Educationally Disadvantaged	331,700	331,700	0	0	0	0	0
Total WSU	95,023,300	56,794,800	0	0	38,228,500	0	0
<b>Southern Utah University</b>							
Education and General	38,821,000	26,587,300	0	0	12,233,700	0	0
Utah Shakespearean Festival	12,500	12,500	0	0	0	0	0
Rural Development	98,100	98,100	0	0	0	0	0
Educationally Disadvantaged	92,900	92,900	0	0	0	0	0
Total SUU	39,024,500	26,790,800	0	0	12,233,700	0	0
<b>Snow College</b>							
Education and General	20,570,500	16,053,200	0	0	4,517,300	0	0
Applied Technology Education	1,296,600	1,296,600	0	0	0	0	0
Educationally Disadvantaged	32,000	32,000	0	0	0	0	0
Total Snow College	21,899,100	17,381,800	0	0	4,517,300	0	0
<b>Dixie State College</b>							
Education and General	24,208,600	16,670,200	0	0	7,538,400	0	0
Zion Park Amphitheatre	89,500	57,000	0	0	32,500	0	0
Educationally Disadvantaged	30,600	30,600	0	0	0	0	0
Total Dixie College	24,328,700	16,757,800	0	0	7,570,900	0	0
<b>College of Eastern Utah</b>							
Education and General	12,347,600	10,345,900	0	0	2,001,700	0	0
San Juan Center	2,604,600	1,834,900	0	0	769,700	0	0
Prehistoric Museum	186,400	185,400	0	0	1,000	0	0
CEU Star Schools - Price	138,200	138,200	0	0	0	0	0
CEU Star Schools - San Juan	138,100	138,100	0	0	0	0	0
Educationally Disadvantaged	117,400	117,400	0	0	0	0	0
Total CEU	15,532,300	12,759,900	0	0	2,772,400	0	0
<b>Utah Valley State College</b>							
Education and General	91,587,500	41,817,200	0	0	49,770,300	0	0
Educationally Disadvantaged	134,700	134,700	0	0	0	0	0
Total UVSC	91,722,200	41,951,900	0	0	49,770,300	0	0

## Utah System of Higher Education 2004-05 Work Programs

April 15, 2004

## Initial Schedule (Ties to 2004 General Session Appropriations)

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/Trust Funds/Other Funds

(continued)

**Salt Lake Community College**

Education and General	\$84,615,400	\$50,702,500	\$0	\$0	\$33,912,900	\$0	\$0	\$0
Skills Center	4,862,500	3,984,200	0	0	878,300	0	0	0
Educationally Disadvantaged	178,400	178,400	0	0	0	0	0	0
<b>Total SLCC</b>	<b>89,656,300</b>	<b>54,865,100</b>	<b>0</b>	<b>0</b>	<b>34,791,200</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SBR and Statewide Programs**

Administration - SBR	2,991,500	2,900,700	0	0	90,800	0	0	0
Administration - Prison Recidivism	385,700	385,700	0	0	0	0	0	0
Engineering Initiative	1,003,100	1,003,100	0	0	0	0	0	0
Nursing Initiative	675,000	675,000	0	0	0	0	0	0
WICHE	1,020,900	1,020,900	0	0	0	0	0	0
Student Financial Aid	3,580,200	3,580,200	0	0	0	0	0	0
Student Financial Aid - UCOPE	2,811,800	2,811,800	0	0	0	0	0	0
Student Financial Aid - New Century	480,200	480,200	0	0	0	0	0	0
Student Fin. Aid - Minority Scholarships	47,100	47,100	0	0	0	0	0	0
Student Fin. Aid - Tuition Assistance	47,100	47,100	0	0	0	0	0	0
Student Fin. Aid - Engineering Loan Repaym	50,000	50,000	0	0	0	0	0	0
T.H. Bell Teacher Incentive Loans	796,600	621,600	0	0	175,000	0	0	0
University Centers	257,600	257,600	0	0	0	0	0	0
Campus Compact	100,000	100,000	0	0	0	0	0	0
Electronic Coursework/UEC	520,300	520,300	0	0	0	0	0	0
Higher Education Technology Initiative	2,445,600	2,445,600	0	0	0	0	0	0
Federal Programs	301,600	0	0	0	0	0	301,600	0
Academic Library Council	2,883,500	2,883,500	0	0	0	0	0	0
<b>Total SBR</b>	<b>20,397,800</b>	<b>19,830,400</b>	<b>0</b>	<b>0</b>	<b>265,800</b>	<b>0</b>	<b>301,600</b>	<b>0</b>

<b>9 INSTITUTION &amp; SBR TOTAL</b>	<b>\$921,620,300</b>	<b>\$476,755,800</b>	<b>\$108,865,500</b>	<b>\$0</b>	<b>\$321,589,900</b>	<b>\$799,600</b>	<b>\$4,203,900</b>	<b>\$9,405,600</b>
--------------------------------------	----------------------	----------------------	----------------------	------------	----------------------	------------------	--------------------	--------------------

**Utah College of Applied Technology**

Bridgerland	\$8,719,500	\$7,551,000	\$0	\$0	\$1,168,500	\$0	\$0	\$0
Davis	8,940,300	7,608,400	0	0	1,331,900	0	0	0
Dixie	943,700	861,800	0	0	81,900	0	0	0
Mountainland	3,000,700	2,875,100	0	0	125,600	0	0	0
Ogden Weber	9,813,900	8,452,900	0	0	1,361,000	0	0	0
Salt Lake/Tooele	2,171,600	2,016,600	0	0	155,000	0	0	0
Southeast	1,036,000	882,900	0	0	153,100	0	0	0
Southwest	1,582,800	1,416,300	0	0	166,500	0	0	0
Uintah Basin	4,327,300	3,987,300	0	0	340,000	0	0	0
UCAT Custom Fit	3,108,100	3,108,100	0	0	0	0	0	0
UCAT Equipment	837,400	837,400	0	0	0	0	0	0
UCAT Administration	374,100	374,100	0	0	0	0	0	0
<b>UCAT TOTAL</b>	<b>\$44,855,400</b>	<b>\$39,971,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,883,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Utah Education Network**

USU Satellite	\$1,454,000	\$1,454,000	\$0	\$0	\$0	\$0	\$0	\$0
UtahLINK	19,757,600	14,544,000	0	0	508,000	0	4,705,600	0
<b>UEN TOTAL</b>	<b>\$21,211,600</b>	<b>\$15,998,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$508,000</b>	<b>\$0</b>	<b>\$4,705,600</b>	<b>\$0</b>

<b>GRAND TOTAL - USHE (w/ UCAT) &amp; UEN</b>	<b>\$987,687,300</b>	<b>\$532,725,700</b>	<b>\$108,865,500</b>	<b>\$0</b>	<b>\$326,981,400</b>	<b>\$799,600</b>	<b>\$8,909,500</b>	<b>\$9,405,600</b>
---	----------------------	----------------------	----------------------	------------	----------------------	------------------	--------------------	--------------------

## Utah System of Higher Education 2004-05 Work Programs

April 15, 2004

## March 2004 Revisions

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds
<b>University of Utah</b>							
Education and General	(\$7,181,500)			(\$7,181,500)			
School of Medicine	(1,515,100)			(1,515,100)			
Regional Dental Education Prog.	32,000			32,000			
Poison Control	0						
Pub. Svc. - Seismograph Stations	0						
Pub. Svc. - Museum Nat. History	0						
Pub. Svc. - State Arboretum	0						
KUED	0						
University Hospital	0						
Miners Hospital	0						
Educationally Disadvantaged	0						
Total U of U	(8,664,600)	0	0	(8,664,600)	0	0	0
<b>Utah State University</b>							
Education and General	688,700			688,700			
Uintah Basin Continuing Ed. Ctr.	(95,900)			(95,900)			
Southeastern Utah Cont. Ed. Ctr.	24,300			24,300			
Brigham City Continuing Ed Ctr.	127,100			127,100			
Tooele/Wasatch Cont. Ed. Ctr.	(3,400)			(3,400)			
Agricultural Experiment Station	0						
Water Research Laboratory	0						
Cooperative Extension	0						
Educationally Disadvantaged	0						
Total USU	740,800	0	0	740,800	0	0	0
<b>Weber State University</b>							
Education and General	(1,095,800)			(1,095,800)			
Educationally Disadvantaged	0						
Total WSU	(1,095,800)	0	0	(1,095,800)	0	0	0
<b>Southern Utah University</b>							
Education and General	925,200			925,200			
Utah Shakespearean Festival	0						
Rural Development	0						
Educationally Disadvantaged	0						
Total SUU	925,200	0	0	925,200	0	0	0
<b>Snow College</b>							
Education and General	(4,900)			(4,900)			
Applied Technology Education	(3,800)			(3,800)			
Educationally Disadvantaged	0						
Total Snow College	(8,700)	0	0	(8,700)	0	0	0
<b>Dixie State College</b>							
Education and General	105,700			105,700			
Zion Park Amphitheatre	0						
Educationally Disadvantaged	0						
Total Dixie College	105,700	0	0	105,700	0	0	0
<b>College of Eastern Utah</b>							
Education and General	102,800			102,800			
San Juan Center	(70,100)			(70,100)			
Prehistoric Museum	0						
CEU Star Schools - Price	0						
CEU Star Schools - San Juan	0						
Educationally Disadvantaged	0						
Total CEU	32,700	0	0	32,700	0	0	0
<b>Utah Valley State College</b>							
Education and General	(1,768,000)			(1,768,000)			
Educationally Disadvantaged	0						
Total UVSC	(1,768,000)	0	0	(1,768,000)	0	0	0

## Utah System of Higher Education 2004-05 Work Programs

April 15, 2004

## March 2004 Revisions

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/ Trust Funds/ Other Funds

(continued)

**Salt Lake Community College**

Education and General	(\$1,101,500)				(\$1,101,500)			
Skills Center	(46,500)				(46,500)			
Educationally Disadvantaged	0							
<b>Total SLCC</b>	<b>(1,148,000)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1,148,000)</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SBR and Statewide Programs**

Administration - SBR	0							
Administration - Prison Recidivism	0							
Engineering Initiative	0							
Nursing Initiative	0							
WICHE	0							
Student Financial Aid	0							
Student Financial Aid - UCOPE	0							
Student Financial Aid - New Century	0							
Student Fin. Aid - Minority Scholarships	0							
Student Fin. Aid - Tuition Assistance	0							
Student Fin. Aid - Engineering Loan Repaym	0							
T.H. Bell Teacher Incentive Loans	0							
University Centers	0							
Campus Compact	0							
Electronic Coursework/UEC	0							
Higher Education Technology Initiative	0							
Federal Programs	0							
Academic Library Council	0							
<b>Total SBR</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>9 INSTITUTION &amp; SBR TOTAL</b>	<b>(\$10,880,700)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$10,880,700)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
--------------------------------------	-----------------------	------------	------------	------------	-----------------------	------------	------------	------------

**Utah College of Applied Technology**

Bridgerland	\$0							
Davis	0							
Dixie	0							
Mountainland	0							
Ogden Weber	0							
Salt Lake/Tooele	0							
Southeast	0							
Southwest	0							
Uintah Basin	0							
UCAT Custom Fit	0							
UCAT Equipment	0							
UCAT Administration	0							
<b>UCAT TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Utah Education Network**

CEU Distance Learning	\$0							
UtahLINK	0							
<b>UEN TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<b>GRAND TOTAL - USHE (w/ UCAT) &amp; UEN</b>	<b>(\$10,880,700)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$10,880,700)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
---	-----------------------	------------	------------	------------	-----------------------	------------	------------	------------

## Utah System of Higher Education 2004-05 Work Programs

April 15, 2004

## Revised Schedule -- April 2004

Expenditures	Revenues							
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/Trust Funds/Other Funds	
<b>University of Utah</b>								
Education and General	\$286,409,700	\$71,757,600	\$108,865,500	\$0	\$97,000,000	\$0	\$0	\$8,786,600
School of Medicine	29,967,000	20,563,900	0	0	9,403,100	0	0	0
Regional Dental Education Prog.	711,500	558,600	0	0	152,900	0	0	0
Poison Control	1,374,400	0	0	0	1,374,400	0	0	0
Pub. Svc. - Seismograph Stations	403,200	403,200	0	0	0	0	0	0
Pub. Svc. - Museum Nat. History	822,500	822,500	0	0	0	0	0	0
Pub. Svc. - State Arboretum	112,600	112,600	0	0	0	0	0	0
KUED	2,416,600	2,416,600	0	0	0	0	0	0
University Hospital	4,423,400	4,423,400	0	0	0	0	0	0
Miners Hospital	478,100	22,300	0	0	0	0	0	455,800
Educationally Disadvantaged	743,400	708,900	0	0	0	0	0	34,500
Total U of U	327,862,400	101,789,600	108,865,500	0	107,930,400	0	0	9,276,900
<b>Utah State University</b>								
Education and General	144,583,000	97,729,700	0	0	46,752,700	0	0	100,600
Uintah Basin Continuing Ed. Ctr.	6,007,600	2,890,200	0	0	3,117,400	0	0	0
Southeastern Utah Cont. Ed. Ctr.	1,192,700	639,600	0	0	525,000	0	0	28,100
Brigham City Continuing Ed Ctr.	1,965,000	455,600	0	0	1,509,400	0	0	0
Tooele/Wasatch Cont. Ed. Ctr.	3,992,400	1,091,300	0	0	2,901,100	0	0	0
Agricultural Experiment Station	14,348,600	11,904,800	0	0	630,000	0	1,813,800	0
Water Research Laboratory	2,329,800	1,530,200	0	0	0	799,600	0	0
Cooperative Extension	13,599,000	11,360,500	0	0	150,000	0	2,088,500	0
Educationally Disadvantaged	231,800	231,800	0	0	0	0	0	0
Total USU	188,249,900	127,833,700	0	0	55,585,600	799,600	3,902,300	128,700
<b>Weber State University</b>								
Education and General	93,595,800	56,463,100	0	0	37,132,700	0	0	0
Educationally Disadvantaged	331,700	331,700	0	0	0	0	0	0
Total WSU	93,927,500	56,794,800	0	0	37,132,700	0	0	0
<b>Southern Utah University</b>								
Education and General	39,746,200	26,587,300	0	0	13,158,900	0	0	0
Utah Shakespearean Festival	12,500	12,500	0	0	0	0	0	0
Rural Development	98,100	98,100	0	0	0	0	0	0
Educationally Disadvantaged	92,900	92,900	0	0	0	0	0	0
Total SUU	39,949,700	26,790,800	0	0	13,158,900	0	0	0
<b>Snow College</b>								
Education and General	20,565,600	16,053,200	0	0	4,512,400	0	0	0
Applied Technology Education	1,292,800	1,296,600	0	0	(3,800)	0	0	0
Educationally Disadvantaged	32,000	32,000	0	0	0	0	0	0
Total Snow College	21,890,400	17,381,800	0	0	4,508,600	0	0	0
<b>Dixie State College</b>								
Education and General	24,314,300	16,670,200	0	0	7,644,100	0	0	0
Zion Park Amphitheatre	89,500	57,000	0	0	32,500	0	0	0
Educationally Disadvantaged	30,600	30,600	0	0	0	0	0	0
Total Dixie College	24,434,400	16,757,800	0	0	7,676,600	0	0	0
<b>College of Eastern Utah</b>								
Education and General	12,450,400	10,345,900	0	0	2,104,500	0	0	0
San Juan Center	2,534,500	1,834,900	0	0	699,600	0	0	0
Prehistoric Museum	186,400	185,400	0	0	1,000	0	0	0
CEU Star Schools - Price	138,200	138,200	0	0	0	0	0	0
CEU Star Schools - San Juan	138,100	138,100	0	0	0	0	0	0
Educationally Disadvantaged	117,400	117,400	0	0	0	0	0	0
Total CEU	15,565,000	12,759,900	0	0	2,805,100	0	0	0
<b>Utah Valley State College</b>								
Education and General	89,819,500	41,817,200	0	0	48,002,300	0	0	0
Educationally Disadvantaged	134,700	134,700	0	0	0	0	0	0
Total UVSC	89,954,200	41,951,900	0	0	48,002,300	0	0	0

## Utah System of Higher Education 2004-05 Work Programs

April 15, 2004

## Revised Schedule -- April 2004

Expenditures	Revenues						
	General Fund	Income Tax	Uniform School Fund	Dedicated Credits	Mineral Lease	Federal Funds	Cigarette Tax/Trust Funds/Other Funds

(continued)

**Salt Lake Community College**

Education and General	\$83,513,900	\$50,702,500	\$0	\$0	\$32,811,400	\$0	\$0	\$0
Skills Center	4,816,000	3,984,200	0	0	831,800	0	0	0
Educationally Disadvantaged	178,400	178,400	0	0	0	0	0	0
<b>Total SLCC</b>	<b>88,508,300</b>	<b>54,865,100</b>	<b>0</b>	<b>0</b>	<b>33,643,200</b>	<b>0</b>	<b>0</b>	<b>0</b>

**SBR and Statewide Programs**

Administration - SBR	2,991,500	2,900,700	0	0	90,800	0	0	0
Administration - Prison Recidivism	385,700	385,700	0	0	0	0	0	0
Engineering Initiative	1,003,100	1,003,100	0	0	0	0	0	0
Nursing Initiative	675,000	675,000	0	0	0	0	0	0
WICHE	1,020,900	1,020,900	0	0	0	0	0	0
Student Financial Aid	3,580,200	3,580,200	0	0	0	0	0	0
Student Financial Aid - UCOPE	2,811,800	2,811,800	0	0	0	0	0	0
Student Financial Aid - New Century	480,200	480,200	0	0	0	0	0	0
Student Fin. Aid - Minority Scholarships	47,100	47,100	0	0	0	0	0	0
Student Fin. Aid - Tuition Assistance	47,100	47,100	0	0	0	0	0	0
Student Fin. Aid - Engineering Loan Repaym	50,000	50,000	0	0	0	0	0	0
T.H. Bell Teacher Incentive Loans	796,600	621,600	0	0	175,000	0	0	0
University Centers	257,600	257,600	0	0	0	0	0	0
Campus Compact	100,000	100,000	0	0	0	0	0	0
Electronic Coursework/UEC	520,300	520,300	0	0	0	0	0	0
Higher Education Technology Initiative	2,445,600	2,445,600	0	0	0	0	0	0
Federal Programs	301,600	0	0	0	0	0	301,600	0
Academic Library Council	2,883,500	2,883,500	0	0	0	0	0	0
<b>Total SBR</b>	<b>20,397,800</b>	<b>19,830,400</b>	<b>0</b>	<b>0</b>	<b>265,800</b>	<b>0</b>	<b>301,600</b>	<b>0</b>

<b>9 INSTITUTION &amp; SBR TOTAL</b>	<b>\$910,739,600</b>	<b>\$476,755,800</b>	<b>\$108,865,500</b>	<b>\$0</b>	<b>\$310,709,200</b>	<b>\$799,600</b>	<b>\$4,203,900</b>	<b>\$9,405,600</b>
--------------------------------------	----------------------	----------------------	----------------------	------------	----------------------	------------------	--------------------	--------------------

**Utah College of Applied Technology**

Bridgerland	\$8,719,500	\$7,551,000	\$0	\$0	\$1,168,500	\$0	\$0	\$0
Davis	8,940,300	7,608,400	0	0	1,331,900	0	0	0
Dixie	943,700	861,800	0	0	81,900	0	0	0
Mountainland	3,000,700	2,875,100	0	0	125,600	0	0	0
Ogden Weber	9,813,900	8,452,900	0	0	1,361,000	0	0	0
Salt Lake/Tooele	2,171,600	2,016,600	0	0	155,000	0	0	0
Southeast	1,036,000	882,900	0	0	153,100	0	0	0
Southwest	1,582,800	1,416,300	0	0	166,500	0	0	0
Uintah Basin	4,327,300	3,987,300	0	0	340,000	0	0	0
UCAT Custom Fit	3,108,100	3,108,100	0	0	0	0	0	0
UCAT Equipment	837,400	837,400	0	0	0	0	0	0
UCAT Administration	374,100	374,100	0	0	0	0	0	0
<b>UCAT TOTAL</b>	<b>\$44,855,400</b>	<b>\$39,971,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,883,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Utah Education Network**

CEU Distance Learning	\$1,454,000	\$1,454,000	\$0	\$0	\$0	\$0	\$0	\$0
UtahLINK	19,757,600	14,544,000	0	0	508,000	0	4,705,600	0
<b>UEN TOTAL</b>	<b>\$21,211,600</b>	<b>\$15,998,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$508,000</b>	<b>\$0</b>	<b>\$4,705,600</b>	<b>\$0</b>

<b>GRAND TOTAL - USHE (w/ UCAT) &amp; UEN</b>	<b>\$976,806,600</b>	<b>\$532,725,700</b>	<b>\$108,865,500</b>	<b>\$0</b>	<b>\$316,100,700</b>	<b>\$799,600</b>	<b>\$8,909,500</b>	<b>\$9,405,600</b>
---	----------------------	----------------------	----------------------	------------	----------------------	------------------	--------------------	--------------------



MEMORANDUM

May 26, 2004

TO: State Board of Regents

FROM: Richard E. Kendell

Subject: Progress Report: Administrative Efficiencies – Collaborative Opportunities Among Institutions

Issue

Regents have on two previous occasions received progress reports on collaborative efficiencies among institutions. This report will focus on two areas – Administrative Data Processing and Purchasing.

Background

Twice during 2003 the Board discussed its interest in pursuing opportunities for administrative efficiencies which could be achieved through increased collaboration among institutions. The Board directed the commissioner and institutional presidents to report periodically on their progress in six areas of collaboration. This memorandum and its attachment is intended as a brief progress on two areas of collaboration – Administrative Data Processing and Purchasing. The six areas are:

<u>Topic Area</u>	<u>Working Group</u>
Administrative Data Processing	CIOs (Chief Information Officers)
Facilities Management	UAPPA (Higher education facilities administrators)
Purchasing	UPAC (Utah Procurement Council, including State Purchasing Director)
Human Resources	UHEPAC (Utah Higher Education Personnel Advisory Committee)
Financial Aid	UHEAA with institutional financial aid directors
Academic Program Partnerships	CAOs (Chief Academic Officers)

Administrative Data Processing

Institutional CIOs work closely with Jerry Fullmer of the Commissioner's Office to negotiate system-wide contracts with vendors. Summarized in Attachment 1 are the major Information Technology contract areas, with an indication of which institutions participate in which contract area. The current amount of collaboration, and in many cases, standardization, is substantial.

Although we can't avoid some annual price increases, we are confident that our ability to talk with vendors as a system, plus Mr. Fullmer's negotiating tenacity, helps institutions achieve lower prices than they would be able to achieve individually.

#### Purchasing

Attachment 2 provides a glimpse of the history of collaborative activity among purchasing directors. Attachment 3 is a summary of the very substantial participation of higher education in purchasing through state contracts. Again, we are confident that this collaboration, as well as the use of established state contracts for purchases, achieves substantial savings. Representatives of UPAC will be available at the June Board meeting to respond to questions.

#### Recommendation

This progress report is provided as information. No action is requested.

REK/MHS

\_\_\_\_\_  
Richard E. Kendell, Commissioner

Attachments

## USHE - I. T. Joint Purchases

Company	Products	UofU	USU	WSU	SUU	Snow	DSC	CEU	UVSC	SLCC	SBR	Batc	OWatc	Datc	MLatc	UBatc
Adobe					Umb	Umb	Umb	Umb			Umb	Umb	Umb	Umb	Umb	Umb
Borland	Compiler/Languages			Yes					Yes							
Corel	Office Suite/Presentation															
Crystal Reports	Reporting tools			Self	Self	Self	Self	Self	Self	Self	Self					
Evisions	Formatting-Layout/Reporting tools		Yes	Yes	Yes	Yes	Yes	Yes	Yes	YD						
HP ESL/CSLG	Hardware/OS/NOS/Languages	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
McAfee	Anti-virus		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Microsoft	OS/NOS/Email/DB/Languages	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb
Microsoft	Office Suite/Presentation	YD	YD	YD	YD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MultiNet	Systems communication tools	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
NAI - Sniffer	Network trouble shooting tools		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
NAI Wireless Sniffer	Wireless Network sniffing tools	Yes	Yes						Yes	Yes						
Novell	NOS/Email/Group tools	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Oracle	Data Base/Languages	Self	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
SCT	Banner and Plus ERP systems		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
SCT Migration	Migration services and training		Yes	Yes	Yes	Yes	Yes	Yes	Yes							
SUN	Hardware/OS/Language	Self		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
TOAD	SQL Editor & Performance tools			Yes	Yes	Yes	Yes	Yes	Yes		Yes					
TouchNet	E-check/Credit Cards/Touch Phone		Umb	Umb	Umb	Umb	Umb	Umb	Umb	Umb						
Web-CT	Course ware tools	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						

Abbreviations: codes and meanings

Umb = Umbrella

Yes = Yes purchase through SBR

YD = Yes part - purchase direct

Self = Purchase direct

**Contracts no longer coordinated:**

AutoCad drafting and design tools

CA Erwin Datawarehouse tools

IBI Focus reporting tools

PowerQuest PC system tools

## Utah Higher-Ed Cooperative Purchasing

### Background:

In 1981, the Office of the Legislative Auditor General conducted an audit of the nine public institutions of higher education within State of Utah to assess the degree to which these institutions engaged in cooperative purchasing efforts. It was determined by the audit that the institutions for the most part acted independently in their purchasing initiatives. The audit indicated that significant savings could be generated if the schools were to combine their respective needs and enter into group contracting initiatives.

As a result of the audit, UPAC (Utah Procurement Advisory Council) was formed. This group represents the nine purchasing directors of public higher-ed, a representative from the Commissioner of Higher Ed Office, and the State Purchasing Director. Bylaws were written indicating that the group should meet at least quarterly to discuss common needs and to enter into group contracting efforts where feasible.

### Ongoing Initiatives:

UPAC has met consistently every two to three months since 1982 (minutes are kept of these meetings). In the past few years many of these meetings are held via video-conferencing or conference calls to reduce the cost of travel for those attending. The nine institutions of higher education, along with the State Purchasing Division and the Commissioner of Higher Ed Office have participated in a large number of contracting initiatives as a result of this coordination. Additionally, higher-ed is represented on most of the major state contracts committees (specification, evaluation and selection).

As a result of these initiatives, a high percentage of purchases from all institutions continue to be made on state contracts resulting in significant savings for higher-ed. At the University of Utah, for instance over \$33 million was spent using these contracts during the past fiscal year.

Additionally, UPAC has been directly or indirectly involved in many other cooperative initiatives specific to higher-ed over the years. These include contracting for natural gas at the wellhead, library sharing/loan programs, student and employee insurance, floor cleaners/polishers, employee moving contracts, lab supplies and equipment, purchasing card, UEN, etc.

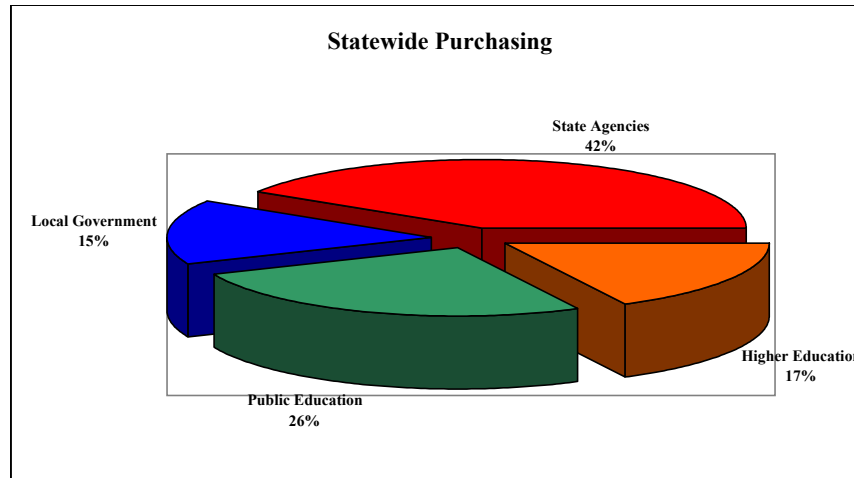
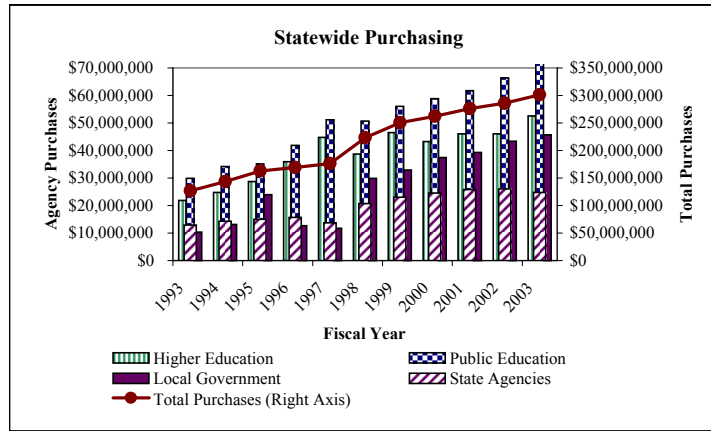
UPAC has successfully provided and continues to provide the best mechanism for group purchasing as well as for discussing contract issues and providing input on specifications and other needs. All participants in UPAC (including the state purchasing office) agree that the recommendations of the legislative audit have resulted in significant savings and in better communication between all higher-ed purchasing offices with regard to group purchasing and common initiatives.

There continue to be unique needs identified by each institution that have to be met by the regular bid processes at those institutions. Construction, campus services, many academic program and research purchases, many technology purchases, etc. do not lend themselves to group contracting. Additionally, there are needs that can be met only by having each of these purchasing offices deal with issues related specifically to each of their respective campuses.

**Summary of  
State Contract Purchases**

Fiscal Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Higher Education	\$21,874,912	\$24,777,335	\$28,730,588	\$35,888,663	\$44,749,584	\$38,717,590	\$46,536,074	\$43,206,241	\$46,000,000	\$46,042,000	\$52,542,119
Public Education	\$29,931,299	\$34,134,295	\$35,087,471	\$41,888,625	\$51,152,364	\$50,719,832	\$56,012,039	\$58,823,785	\$61,800,000	\$66,359,000	\$78,625,484
Local Government	\$10,304,756	\$13,156,754	\$23,978,391	\$12,630,561	\$11,716,081	\$29,920,111	\$32,924,368	\$37,392,941	\$39,300,000	\$43,374,000	\$45,738,071
State Agencies	<u>\$64,639,393</u>	<u>\$71,779,902</u>	<u>\$74,779,001</u>	<u>\$78,683,761</u>	<u>\$68,320,224</u>	<u>\$103,721,413</u>	<u>\$115,291,427</u>	<u>\$122,829,401</u>	<u>\$129,000,000</u>	<u>\$130,000,000</u>	<u>\$124,000,000</u>
Total Purchases (Right Axis)	\$126,750,360	\$143,848,286	\$162,575,451	\$169,091,610	\$175,938,253	\$223,078,946	\$250,763,908	\$262,252,368	\$276,100,000	\$285,775,000	\$300,905,674

Fiscal Year	2002	2003
Higher Education	\$46,042,000	\$52,542,119
Public Education	\$66,359,000	\$78,625,484
Local Government	\$43,374,000	\$45,738,071
State Agencies	<u>\$130,000,000</u>	\$124,000,000



MEMORANDUM

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: USHE – Draft Report, Recommended Refinements to Q & P Process

Issue

As Regents adopted priorities for USHE capital development requests for 2004-05 in September 2003, a number of questions were asked concerning the scoring process used as input to determine USHE priorities. This informational report is intended to update Regents on refinements to this process known as the Qualification and Prioritization (Q & P) process.

Background

The Q & P process is outlined in Regent Policy R741, *Capital Facilities Qualification and Prioritization Process*, which develops a nine-step point-scoring formula intended to help Regents weigh the relative need for various capital development projects. The formula attempts to balance two competing interests – the need to accommodate growth and the need to care for existing facilities. This is done through consideration of the following factors: (1) space needs based on current inventories and projected enrollment levels, (2) institutional priorities, (3) outside funding, (4) life-safety issues, and (5) infrastructure needs.

Because the Q & P process rates the need for future projects compared to current inventories, ensuring the consistency of current inventories across institutions is imperative to a fair scoring of system. Institutional representatives and the Commissioner's Office are working to clarify inventory definitions, as well as their interpretation, to improve the reporting of facility inventories. In preparation for the 2005-06 cycle, a number of improvements have been achieved, specifically: (1) correcting the over-counting of some space at the University of Utah, (2) adjusting the reporting of some space categories at Southern Utah University to be consistent with the practices of other institutions, (3) creating a comprehensive USHE facilities data dictionary with definitions and reporting methodologies, (4) convening the facility inventory staff from each institution to improve consistent understanding of definitions and reporting practices. Additional needed work in this area includes the continued delineation of some reporting definitions and standards, review facility submittals for consistency, and upgrades to the facilities inventory data

State Board of Regents  
May 26, 2004  
Page 2

warehouse in the Commissioner's Office to provide a system which will not only improve accuracy of facility reporting but also make possible space utilization comparisons.

Another area of concern for the Q&P policy includes the assignment of life safety points to projects which address serious risks to human life and the preservation of the facility. Although policy specifies that 25 points may be awarded in this category, the existing schema which determines how these points are awarded and distributed based on such factors as seismic and structural, mechanical, electrical, and other issues is unclear to Regents and institutions. During June and July, the Commissioner's Office will convene a group of institutional and DFCM representatives to develop recommendations on how this process can be made more transparent. The results of this work group will be reported to the Regents at the August meeting, in preparation for adopting 2005-06 capital development priorities in September.

Other areas of concern with the Q&P include the space standards used to determine need and the data drivers which are applied to those standards. In some cases, proxy measures for the data specified in Policy R741 are used because they are the closest measure available. While more precise data could possibly be gathered, institutions lack staff to compile this information. The most difficult area to assess in this regard is faculty and staff counts in space types eligible for state funding. The exploration of means to improve this situation is ongoing.

The final area of concern regarding the Q&P process relates to the actual use of the formulaic rankings to develop system priorities. In presenting the Q&P results last year, staff emphasized introductory language from R741, which states, "The nine steps however do not replace Regental deliberations which take into account other factors which are not quantifiable but nevertheless important..." Quantitative, formulaic outcomes can only provide a partial assessment regarding the needs of each project. However, the past the practice of brief institutional presentations to the Regents has not provided sufficient background information for Regents to base their decision on anything but the Q & P rankings. Members of other boards which rank facility projects, both the State Building Board and Capital Facilities Appropriations Subcommittee, invest significantly more time touring institutions and understanding the nature of institution's proposed facility projects. While this is an information only report, staff suggests that Regents discuss means that might provide greater opportunity for them to develop an understanding of the needs driving the different projects at each institution.

Commissioner's Recommendation

This is an information item only. No action is necessary.

Richard E. Kendell, Commissioner

REK/MHS/BLM

MEMORANDUM

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: USHE – Five-year Budget Forecast Scenarios

Issue

During their April meeting, the Finance, Facilities, and Accountability Committee requested staff to develop five-year budget forecast scenarios for the Utah System of Higher Education. These scenarios are still being developed and will be hand-carried and presented to the Regents at the June 3-4, 2004 meetings.

Commissioner's Recommendation

This is an information item only. No action is necessary.

Richard E. Kendell, Commissioner

REK/MHS/BLM



MEMORANDUM

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: SLCC Purchase of Metro Learning Center Building – Progress Report

Issue

In an effort to bring closure to an issue which recently came to the Board of Regents, we have requested that Salt Lake Community College provide a progress report on the purchase of the Metro Learning Center Building. The attached letter from Vice President Don Porter summarizes the sequence of events since the January meeting of the Regents.

Recommendation

This item is for information only. No action is requested.

Richard E. Kendell, Commissioner

REK/MHS

## **SLCC METRO LEARNING CENTER**

**A PROGRESS REPORT  
TO COMMISSIONER RICHARD KENDELL  
AND THE BOARD OF REGENTS  
THE UTAH SYSTEM OF HIGHER EDUCATION  
May 15, 2004**

At its January 16, 2004 meeting, the Board of Regents authorized Salt Lake Community College to proceed with its plans to complete its efforts to acquire ownership of the Metro Learning Center at 115 South Main Street in downtown Salt Lake City, provided that suitable financing would be put into place and that the leadership of the state legislature were informed of and in support of the proposed purchase. This goal has been accomplished, and the administration of Salt Lake Community College is excited about taking the next steps in developing the Metro Learning Center into a comprehensive learning facility and a vibrant part of the downtown community. The following is a brief report of the administration's efforts since the Board's January 16, 2004 meeting.

- We met with the USHE Commissioner to discuss the complete array of steps toward realization of the proposed purchase and implementation of SLCC's program plans for the Metro Learning Center.
- We met individually with each of the Utah State Senate and House of Representatives leaders to apprise them fully of our proposed purchase and to answer any questions or concerns that they might have about our plans. We successfully garnered full support from legislative leaders of our concept to (a) complete the purchase, (b) finance it with RDA and Zions Bank loan support, and (c) position the College for USHE Board of Regents and Utah State Legislative consideration and support of a revenue bond proposal within the next 2 or 3 years, as the College is able to demonstrate successful implementation of its programming and a positive revenue stream that will support such a revenue bond proposal.
- During its deliberations, the General Government and Capital Facilities Appropriations Subcommittee received testimony about SLCC's plan to acquire ownership of the Metro Learning Center and approved the College's plan.
- We worked within the federal bankruptcy process to acquire ownership of the building free and clear of liens, terminate the existing lease and obtain a release of claims being asserted by the Trustee and Bird Construction, all with the approval of the federal bankruptcy court pursuant to a confirmed plan of reorganization and orders that are now final and non-appealable. Accordingly, the prior lease has no further impact on the College and the College owns approximately 17,000 square feet of unimproved additional space in the Building for expansion or other revenue enhancing uses.
- We completed negotiations with the Salt Lake City Redevelopment Agency (RDA) on a \$2,487,500 loan for a term of 2 years with a 1-year extension option, at an interest rate of 0% for the first year and 2.5% for the second year, and 3% if the third-year option is exercised.

- We completed negotiations with the Zions First National Bank on a \$2,487,500 loan for a term of 2 years with a 1-year extension option, at an interest rate of 4.78% with a rate based on the then-current LIBOR (London Interbank Offered Rate).
- In order to complete the final negotiations and agreements on the two loans, SLCC agreed to commit \$600,000 as a cash down-payment at the time of closing, and approximately \$40,000 in final closing costs.
- The combined loans are to be repaid on the basis of a 20-year amortization table, payable monthly, with a balloon payment due at the end of the note.
- The blended interest rate on these loans is just slightly below the 3% interest rate used in all of the approval documentation and discussions.
- The purchase closed on April 15, 2004, which was within our original closing deadline.
- We completed the negotiations and agreed upon a construction contract with Bird Construction for an ADA and Seismic Compliance retrofit of the building. The project is well underway and is expected to be completed in time for our semester start-up in late August.
- Upon the advice of legislative leadership, we have included appropriate officials of the Utah Division of Facilities, Construction, and Maintenance (DFCM) in the final planning and construction stages of the ADA and Seismic Compliance retrofit project. The DFCM staff has been especially helpful in contributing to the progress of this project.
- We have initiated concrete discussions with the leadership of the Museum of Utah Art and History (MUAH) for the possibility of their partnership with SLCC. The MUAH is to be Metro Center's neighbor immediately to the South on Main Street and is interested in significant leased space and cooperative/collaborative program development. Our SLCC Assistant Attorney General and the attorney representing MUAH are collaborating on potential lease details and documents.
- We have also begun discussions with several other parties who may be interested in leasing office space on the 5<sup>th</sup> floor of the building. Several promising discussions are now in process, though no leases are yet signed.
- We have initiated academic program and curriculum planning with the SLCC academic leadership team. Though program discussions are continuing, several classes have been scheduled for the Metro Center in the semester that will commence in the next semester (August, 2004), have been included in SLCC's academic published schedules and promotional materials, and are available to students in the current registration cycles.
- We have selected and employed a Director for the Metro Learning Center whose sole responsibility is to put together the necessary staffing, planning, and operating activity that will enable our project to reach successful fruition at the earliest opportunity!

The SLCC administration is prepared to answer any questions or provide any additional information that would be helpful to the Commissioner or the members of the USHE Board of Regents.

May 26, 2004

TO: State Board of Regents  
FROM: Richard E. Kendell  
SUBJECT: General Consent Calendar

It is the recommendation of the Commissioner that the Regents approve the following items on the General Consent Calendar:

1. Minutes –
  - A. Minutes of the Regular Board of Regents Meeting held April 16, 2004 at Board of Regents' offices in Salt Lake City, Utah (Attachment 1)
  - B. Minutes of a Special Board of Regents meeting held April 29, 2004 at the University of Utah in Salt Lake City, Utah (Attachment 2)
2. Grant Proposals - Approval to submit the following proposals:
  - A. University of Utah – National Institutes of Health; "Micromolecular Phenotyping;" \$3,661,743 (\$1,276,189 first year). Professor Robert E. Marc, Principal Investigator
  - B. University of Utah – Public Health Service/National Institute of Biomedical Imaging/Engineering; "Biomechanics of the Semicircular Canals;" \$2,453,107. Richard D. Rabbitt, Principal Investigator.
  - C. University of Utah – University of Kentucky (Prime NSF); "Institute for Combustion Aerosol Research;" \$2,246,181. Ronald J. Pugmire, Principal Investigator.
  - D. University of Utah – Public Health Service/National Institute for Diabetes, Digest K; "Effect of High-Flux Dialysis on Biomarkers;" \$2,741,300. Alfred K. Cheung, Principal Investigator.
  - E. Utah State University – Department of Health and Human Services; "Champions for Progress Institute: Leadership Development for Implementation of Systems of Care for Children and Youth with Special Health Care Needs;" \$1,280,511. Richard N. Roberts, Principal Investigator.
  - F. Utah State University – National Science Foundation; "NIRT: Atom-Scale Silicon Integrated Circuits for Quantum Computation;" \$2,000,000. TC Shen, Principal Investigator.
  - G. Utah State University – US Department of Education, Financial Aid Office; "04-05 Pell;" \$10,000,000. Judy Lecheminant-Shelby, Principal Investigator.

- H. Utah State University – Institute of Education Sciences, Center for School of the Future; “Development of a Comprehensive System to Assist Administrators to Successfully Implement and Sustain Effective Educational Practices;” \$1,495,029. Richard P. West, Principal Investigator.
- I. Utah State University – National Aeronautics and Space Administration; “FIBR: Computation as an Interpretative Framework in Integrative Biology;” \$3,785,475. Keith Alan Mott, Principal Investigator.
- J. Utah State University – National Science Foundation; “National Center for Engineering and Technology Education;” \$11,241,806 (\$9,999,560 from NSF, \$272,800 from USU, and \$969,446 from other funds). Christine E. Hailey, Principal Investigator.
- K. Utah State University – National Science Foundation; “APOLO (Assessing Pedagogy and Optimizing Learning Outcomes) Project/Iowa State;” \$1,182,246. Gayle Bowen, Principal Investigator.
- L. Utah State University – Spectrum Astro; “Space Fire;” \$2,250,234. Blake Crowther, Principal Investigator.
- M. Utah State University – Duke University; “Epidemiology of Alzheimer’s Dementia in Cache County, Utah;” \$1,148,808. Maria C. Norton, Principal Investigator.
- N. Utah State University – National Science Foundation; “Environmental Transmission Competency for Mosquito-Vectored Viruses;” \$2,334,246. Robert Gillies, Principal Investigator.
- O. Utah State University – Department of Health and Human Services; “Microbial Metabolism of Aliphatic Alkenes, Epoxides, and Ketones;” \$1,725,600. Scott A. Ensign, Principal Investigator.
- P. Utah State University – USDA Agricultural Research - Basic & Applied Research; “Functional Genomics in Nature;” \$1,253,653. Bart C. Weimer, Principal Investigator.
- Q. Utah State University – USDA Cooperative State Research Service; “Implementation of Western Region Sustainable Agriculture Research and Education (SARE) Proposal;” \$2,721,126. V. Philip Rasmussen, Principal Investigator.
- R. Utah State University – Northrop Grumman; “Space Based Space Surveillance (SBSS);” \$6,764,578. Robert E. Anderson, Principal Investigator.

- S. Utah State University – BAE Systems; “Geostationary Operational Environmental Satellite (GOES) Hyperspectral Environmental Suite (HES) Formulation Phase Program - Interferometer Concept Design;” \$1,328,714. Ronald J. Huppi, Principal Investigator.
  - T. Utah State University – University of Colorado/LASP; “AIM/SOPHIE Solar Occultation for Ice Experiment;” \$2,108,170. Brandon Paulsen, Principal Investigator.
  - U. Utah State University – National Science Foundation; “IGERT: Integrated Water Science Research: Building Critical Thinking for a Scarce Resource;” \$3,246,114. David G. Tarboton, Principal Investigator.
  - V. Utah State University – DARPA; “BioAgent Luminescent LigandS (BALLS);” \$1,130,305. Linda Powers, Principal Investigator.
3. Grants Awarded
- A. Utah State University – Colorado University Laboratory of Atmospheric and Space Physics; “Aeronomy of Ice in the Mesosphere (AIM) Phase B for the Solar Occultation for Ice Experiment (SOFIE) Instrument and Science;” \$1,538,443. John Kemp, Principal Investigator.
4. Executive Session(s) — Approval to hold an executive session or sessions prior to or in connection with the meetings of the State Board of Regents to be held August 13, 2004, at the State Board of Regents’ offices in Salt Lake City, Utah, to consider property transactions, personnel issues, litigation, and such other matters permitted by the Utah Open and Public Meetings Act.

Richard E. Kendell, Commissioner

RK:jc  
Attachments

MINUTES OF MEETING  
 UTAH STATE BOARD OF REGENTS  
 BOARD OF REGENTS BUILDING, SALT LAKE CITY, UTAH  
 APRIL 16, 2004

TABLE OF CONTENTS

Roll Call	1
COMMITTEE OF THE WHOLE	
Engineering, Computer Science and Technology Initiative 2004-2005 Funding Recommendation from the Technology Initiative Advisory Board (TIAB)	3
Funding of Graduate Education	3
Follow-up Report on the March 11 Board of Regents Workshops	5
Research and Development	
Budget	
Accountability	
Reports of Board Committees	
<u>Academic, Applied Technology, and Student Success Committee</u>	
Southern Utah University – Transition Plan and Final Program Proposal for the Bachelor of Science Degree in Nursing Approved January 2004	6
Consent Calendar	6
Southern Utah University – Master of Business Administration Program, Three-Year Progress Report	6
Information Calendar	6
Higher Education Remedial Classes – Preliminary Report	6
<u>Finance, Facilities and Accountability Committee</u>	
Revision to Policy R512, <i>Determination of Resident Status</i>	7
Revision to Policy R513, <i>Tuition Waivers and Reduction</i>	7
UHEAA – Approving Resolution, SBR Student Loan Revenue Bonds, Series 2004Z	8
UHEAA – Approving Resolution, SBR Revenue Bonds Series 2004 (Office Facility)	8
Utah State University – Authorizing Resolution for Revenue Bonds for Living/ Learning Center Project, Series 2004C	9
Utah State University – Authorizing Resolution for Student Building Fee Revenue And refunding Bonds for the Stadium/Spectrum Facilities Project, Series A & B	10
College of Eastern Utah – Student Fee Increase	11
Utah Valley State College – Authorizing Resolution for Revenue Refunding Bonds, Series 2004 (Action deferred)	11
Utah Valley State College – Approval of Bond Authorizing Resolution, Purchase	11

Contract, and Sublease with Utah County to facilitate funding of the Baseball Stadium, Series 2004 (Action deferred)	
Consent Calendar	11
Continuation of March Break-out Groups Discussion – Managing Growth/ Budget Planning	11
UHEAA – Board of Directors Report	11
General Consent Calendar	11
Minutes	12
Grant Proposals	12
Grants Awarded	14
Executive Session	14
Report of the Chair	14
Higher Education Appropriations Subcommittee Meeting	
SLCC Presidential Search	
Vacancies on UHEAA Board of Directors	
Retirement of Associate Commissioner Deanna Winn	
Regents’ Regalia	
Report of the Commissioner	15
Adjournment	15



MINUTES OF MEETING  
UTAH STATE BOARD OF REGENTS  
BOARD OF REGENTS' OFFICES, SALT LAKE CITY, UTAH  
APRIL 16, 2004

Regents Present

E. George Mantes, Vice Chair  
Jerry C. Atkin  
Linnea S. Barney  
Daryl C. Barrett  
Bonnie Jean Beesley  
Kim R. Burningham  
William Edwards  
David J. Grant  
Michael R. Jensen  
David J. Jordan  
David L. Maher  
Jed H. Pitcher  
Maria Sweeten

Regents Excused

Nolan E. Karras, Chair  
James S. Jardine  
Charles E. Johnson  
David L. Maher  
Sara V. Sinclair  
Marlon O. Snow

Office of the Commissioner

Richard E. Kendell, Commissioner  
Don A. Carpenter, Executive Assistant  
Joyce Cottrell, Executive Secretary  
Richard Davis, Deputy Executive Director, Loan Purchase Program  
Jerry H. Fullmer, Director of Information Systems  
Kimberly Henrie, Budget Analyst  
Brad Mortensen, Assistant Commissioner for Finance and Facilities  
Phyllis C. Safman, Assistant Commissioner for Academic Affairs  
Mark H. Spencer, Associate Commissioner for Finance and Facilities  
Deanna D. Winn, Associate Commissioner for Academic Affairs  
Gary S. Wixom, Assistant Commissioner for Applied Technology Education and Special Projects

INSTITUTIONAL REPRESENTATIVES

University of Utah

A. Lorris Betz, Interim President  
David W. Pershing, Senior Vice President for Academic Affairs  
Paul T. Brinkman, Associate Vice President for Budget and Planning  
David Chapman, Dean of The Graduate School  
Laura Snow, Special Assistant to the President

Utah State University

Ron Godfrey, Vice President for Business and Finance  
Richard W. Jacobs, Budget Director  
Tom Kent, Dean of The Graduate School  
Brent C. Miller, Vice President for Research

Clinton G. Moffitt, Controller  
Sydney M. Peterson, Assistant Provost

Weber State University  
F. Ann Millner, President  
Kathleen Lukken, Interim Provost  
Norman C. Tarbox, Jr., Vice President of Administrative Services

Southern Utah University  
Steven D. Bennion, President

Snow College  
Michael T. Benson, President

Dixie State College  
Robert C. Huddleston, President

College of Eastern Utah  
Ryan L. Thomas, President

Utah Valley State College  
William A. Sederburg, President  
J. Karl Worthington, Associate Academic Vice President

Salt Lake Community College  
Judd D. Morgan, Interim President  
Julie Curtis, Assistant to the Academic Vice President  
Rand A. Johnson, Executive Assistant to the President  
David Richardson, Vice President of Academic Services

Utah College of Applied Technology  
Gregory G. Fitch, President  
Linda Fife, Vice President for Academic and Student Services and Campus President, Salt Lake-Tooele ATC

Representatives of the Press  
Shinika A. Sykes, *Salt Lake Tribune*  
Stephen Speckman, *Deseret Morning News*  
Amy K. Stewart, *Standard-Examiner*

Others  
Carl Empey, Zions Bank Public Finance  
Boyd Garriott, Office of the Legislative Fiscal Analyst

John Massey, Legislative Fiscal Analyst  
Kent Michie, Zions Bank Public Finance  
David Moon, Technology Initiative Advisory Board  
Kelly Murdock, Wells Fargo Public Finance  
Rob Timmerman, Utah Public Employees Association  
Blake Wade, Ballard Spahr  
Kevin Walthers, Office of the Legislative Fiscal Analyst  
Darrell White, Governor's Deputy for Education

Vice Chair George Mantes called the meeting of the Committee of the Whole to order at 9:10 a.m. He excused Chair Karras and Regents Jardine, Johnson, Maher, Sinclair and Snow. He encouraged the Regents to remain for the entire day so that a quorum could be maintained. The Regents were excused to their committee meetings at 9:15 a.m.

Following meetings of the Board committees and luncheon meetings, the Committee of the Whole reconvened at 1:20 p.m.

ENGINEERING, COMPUTER SCIENCE AND TECHNOLOGY INITIATIVE 2004-2005  
FUNDING RECOMMENDATION FROM THE TECHNOLOGY INITIATIVE ADVISORY BOARD

Commissioner Kendell introduced David Moon, who had been asked by John Sutherland to present the recommendations of the Technology Initiative Advisory Board (TIAB). Those recommendations were shown on page 2 of the Commissioner's cover letter to Tab R. The TIAB's proposal included matching dollars from the institutions. The board recommended that the funding be used in the institutions' highest priority areas to increase the capacity and number of graduates. Regent Jensen and President Benson expressed their appreciation for the funding recommendations given to the smaller schools for transfer students. **Regent Jensen moved approval of the TIAB's proposed recommendations. The motion was seconded by Regent Barrett and carried.**

FUNDING OF GRADUATE EDUCATION

Commissioner Kendell reminded the Regents that a need for strong graduate programs had been expressed in one of the workshops at the March Board meeting. The report in Tab S was in response to Regent Jardine's request at that meeting. A presentation was given by Dr. David Chapman, Dean of the Graduate School at the University of Utah, and Dr. Tom Kent, Dean of the Graduate School at Utah State University.

Dr. Chapman reported that nationally 1700 institutions are serving 1.9 million graduate students. Most of these institutions are master's-degree granting institutions. The Council of Graduate Schools (CGS) reports that master's degrees are growing by four percent annually. Education and business degrees account for half of that growth. Women earn 58 percent of the master's degrees. In contrast, doctoral degrees have decreased

by four percent since they peaked in 1998. The number of women earning doctoral degrees is rising and is currently 44 percent. Minority representation is improving but is still low.

Dr. Chapman remarked on the "aspirational gap," which he defined as expectations vs. reality. Studies show that 75 percent of college freshmen expect to earn a graduate degree. After five years, 39 percent had taken a graduate admissions exam, 41 percent had applied for admission, 35 percent had been accepted into at least one program, and 30 percent had enrolled in a graduate or first-professional program.

The goals for graduate and professional education are to: (1) educate the workforce of the future, (2) keep America competitive, (3) prepare scholars/citizens/specialists, and (4) provide professional qualification/certification.

Interesting statistics were given about the students presently in American graduate schools. It was noted that the funding of graduate students is highly dependent on the discipline. Partnerships have been made with state and federal government, private industry, institutions and the students. State government support includes the graduate student differential and subsidizes faculty scholarship. Federal government support includes fellowships, loan programs, and research projects. The private sector helps to fund tuition support for employees, research projects, and scholarships. The institutions provide funding through resource allocation, graduate student (TA) funding, tuition remission, and scholarship/research support. Students pay through tuition and fees and substantial foregone earnings.

At the present time, University of Utah graduate students are paying approximately 70 percent of the cost of their education, with the state paying 12 percent, the federal government paying 11 percent, and private industry paying 7 percent. Examples were given to demonstrate how graduate programs are discipline-specific.

The following were identified as graduate education issues: (1) graduate student support, (2) state budget cuts, (3) increased tuition and greater need for waivers and other financial aid, (4) Homeland Security, and (5) Higher Education Act reauthorization.

Dr. Chapman concluded by noting that foreign applications are down 40 percent this year, principally because foreign students cannot get visas. For the first time in history, Europe is producing more Ph.D.s than the United States, and Asia is close behind.

Dr. Kent explained the promises and challenges of graduate education: (1) *National visibility and reputation*. The University of Utah and Utah State University fall into the defined Carnegie classification for doctoral-specific institutions which are research extensive. (2) *Reciprocity between graduate programs and quality undergraduate programs*. The greatest challenge is funding. Money is needed to recruit and retain the best students. Maintaining quality programs in a time of funding difficulty is especially challenging. Dr. Kent reported that at USU, \$9.3 million was spent for graduate education in the form of stipends, fellowships, etc.

Vice Chair Mantes thanked Dr. Chapman and Dr. Kent for attending the meeting and explaining graduate education to the Regents.

### FOLLOW-UP REPORT ON THE MARCH 11 BOARD OF REGENTS' WORKSHOPS

Commissioner Kendell said plans were made at the meeting in Cedar City for follow-up reports from each of the three workshops.

Research and Development. A day was spent considering the importance of research and development, which is important to this State. The two research universities have been collaborating on ways they can increase the R&D capacity in Utah. The Arizona Legislature has just passed a \$400-500 million bond to improve the research infrastructure in that state. The University of Utah and Utah State University are now involving their trustees and plan to engage the business community. They have authorized a study to determine the true impact of research and development dollars on the state's economy. Commissioner Kendell complimented the two institutions for the work they have already accomplished. The state funds infrastructure, and it should also fund research and development. He noted that the state has a history of funding key infrastructure needs such as highways. The critical infrastructure need of the future may be the R&D capacity of higher education institutions.

Budget. In preparing a system budget for 2005-2006, the following questions arose and are being addressed by a small working group: What is the role of growth? How can we manage growth without funding? What is the capacity of students and families to afford tuition in the future? What is our policy on financial aid? Commissioner Kendell said we are still trying to determine the ground rules for next year's legislative session. The working group includes representatives from the Legislative Fiscal Analyst's office, the Office of the Commissioner, and the institutions. Consultants will be invited as needed. All of these drafts will be sent through the normal Regents' committee procedures.

Accountability. Our goal is to prepare an accountability report or performance report to inform the Legislature and the public of the goals of higher education and the key indicators that measure them. Several models have been studied already. This issue will be the focus of discussions for the next several months.

All of these issues, as well as Transferability of Credit (HB320) and a Report on Remediation (See Tab E), will be coming back to the Regents through the regular committee structure.

### REPORTS OF BOARD COMMITTEES

Academic, Applied Technology and Student Success Committee. Vice Chair David Jordan chaired the committee in the absence of Chair Jardine.

Southern Utah University – Transition Plan and Final Program Proposal for the Bachelor of Science Degree in Nursing Approved January 2004 (Tab A). Vice Chair Jordan reported some modifications to the transition plan. Southern Utah University was initially considering admitting students in Fall 2005; they will now admit students in Fall 2004. Weber State University will continue to have some faculty on campus until the last students graduate in 2005. SUU has already hired a chief nursing administrator. **Regent Beesley moved approval of the transition plan. The motion was seconded by Regent Sweeten and carried.**

Consent Calendar (Tab B). **On motion by Vice Chair Jordan and second by Regent Atkin, the following items were approved on the committee's consent calendar:**

1. Dixie State College – Emphasis in Accounting added to existing BS Degree in Business Administration
2. Utah State University
  - A. Discontinuance of the MA Degree in Dairy Science in the Department of Animal, Dairy and Veterinary Sciences, College of Agriculture
  - B. Discontinuance of BA Degrees in Agricultural Education, Agricultural Technology, and in Family and Consumer Sciences Education, Department of Agricultural Systems Technology and Education, College of Agriculture
  - C. Transfer of the Family Finance Emphasis within the BS Degree in Family and Consumer Sciences to the BS Degree in Family and Human Development, Department of Family, Consumer and Human Development, College of Education and Human Services
3. Weber State University
  - A. Deletion of Emissions Technician Certificate Program, Department of Sales and Service Technology, College of Applied Science and Technology
  - B. Addition of Honda PACT Emphasis within the existing AAS Degree in Automotive Service Technology, Sales and Service Technology Department, College of Applied Science and Technology
4. Utah College of Applied Technology – Fast Track approval of Paraeducator Certificate

Southern Utah University – Master of Business Administration Program, Three-Year Progress Report (Tab C). Vice Chair Jordan said when the Regents first approved this program in December 1999, they required a three-year review before permanent approval would be granted. In March 2004, 36 applicants were accepted. The University is working to achieve AACSB accreditation and is entering its sixth year of candidacy for the highest level of accreditation. Commissioner Kendell recommended permanent status, and the proposal passed affirmatively out of committee. **Regent Atkin moved the Commissioner's recommendation. The motion was seconded by Regent Jensen and carried.**

Information Calendar (Tab D). Vice Chair Jordan pointed out the items on the committee's Information Calendar which had been approved by the institutional Boards of Trustees. No Regent action was required.

Higher Education Remedial Classes – Preliminary Report (Replacement Tab E). Vice Chair Jordan reported a lively discussion in committee about remedial classes in higher education. This topic was the subject of a resolution in the 2004 Legislative Session (HCR 11). The Commissioner's Office is working actively to prepare background information to do the needed analysis. If students achieve a certain cut score on the ACT or another nationally normed exam, they are able to take the basic general education courses. If they do not achieve the cut score, however, most of the schools require a placement exam. Scoring above the cut score would allow students to go directly to the 1000 level courses. If an appropriate score is not achieved, the student is routed into the 900 series classes. This series of classes receives credit for financial aid but the classes are not credited toward graduation. There is no uniform system policy; every school sets its own cut score. Weber's score is very high, and seventy percent of all admitted freshmen get routed into the 900 series

of courses in math and English. CEU's cut score is lower, so that only ten percent of CEU's freshmen get routed into the 900 series of classes. This raises a question of articulation and transferability.

A subcommittee was formed consisting of Regents Beesley, Barney and Edwards to work with the Commissioner's Office and institutional staff to help the Regents understand this issue and to formulate a meaningful discussion with the Legislature. The discussion involved moving some of the remediation out of higher education and into high schools. Placement tests currently determine whether or not students require remediation.

Commissioner Kendell explained that the legislative resolution directed the USHE to get remedial course work on a more self-supporting basis. The Legislature indicated that the competencies were funded through public education and did not require additional funding through higher education. Some institutions use a nationally normed exam. Some use the CPT, some use the CAP test, and others have developed their own exam. The students need to be remediated at the appropriate level for them to enter the 1000 level courses.

Vice Chair Jordan said the subcommittee would be meeting on May 11 in a retreat with institutional representatives with responsibility for remedial education and Chief Academic Officers (CAOs). Commissioner Kendell asked the status of Performance Plus and U-PASS. Could the U-PASS cut scores be the same as those used in higher education? Regent Burningham said this was the goal, but it will take a considerable amount of time. It must receive great emphasis because this is practical and saves everyone money.

Vice Chair Mantes thanked Vice Chair Jordan for his report.

#### Finance, Facilities and Accountability Committee

Revision to Policy R512, *Determination of Resident Status* (Tab F). Chair Pitcher explained that the proposed revision was necessary to conform with legislation enacted in the 2004 session. HB 164 provided that members of the Utah National Guard who perform active duty service be considered to maintain continuous Utah residency for student residency purposes during such service. **Chair Pitcher moved approval of the proposed revision to Policy R512. The motion was seconded by Regent Atkin and carried.**

Revision to Policy R513, *Tuition Waivers and Reductions* (Tab G). Chair Pitcher explained that this policy revision was also necessary to conform with recent legislation. HB 65 directed that state colleges and universities waive undergraduate tuition for Utah students who have received a Purple Heart as a result of military service. **Chair Pitcher moved approval of the proposed revision to Policy R513. The motion was seconded by Regent Atkin and carried.**

UHEAA – Approving Resolution, SBR Student Loan Revenue Bonds, Series 2004Z (Tab H). Chair Pitcher reported that the UHEAA Board of Directors and the Student Finance Subcommittee had recommended issuance of \$83,100,000 of new tax-exempt bonds and \$35,000,000 of refinanced bonds. Parameters were shown on page 3 of Commissioner Kendell's cover letter. This action is necessary to ensure uninterrupted access of Utah students and families to student loans at least through December 2004. Additional bonds may be proposed for issuance late in 2004 or early in 2005. **On motion by Chair Pitcher and second by Regent Atkin, the bonds were approved with the following vote:**

YEA: Jerry C. Atkin  
Daryl C. Barrett  
Bonnie Jean Beesley  
William Edwards  
David J. Grant  
Michael R. Jensen  
David J. Jordan  
E. George Mantes  
Jed H. Pitcher  
Maria Sweeten

NAY: (None)

The resolution is as follows:

A RESOLUTION OF THE STATE BOARD OF REGENTS OF THE STATE OF UTAH (THE "BOARD") AUTHORIZING THE ISSUANCE AND SALE OF ITS STUDENT LOAN REVENUE BONDS, SERIES 2004Z, IN THE AGGREGATE PRINCIPAL AMOUNT OF NOT TO EXCEED \$120,000,000; AUTHORIZING THE EXECUTION OF AN TWELFTH SUPPLEMENTAL INDENTURE, A BOND PURCHASE AGREEMENT AND AN OFFICIAL STATEMENT, AND OTHER DOCUMENTS REQUIRED IN CONNECTION THEREWITH; AUTHORIZING THE TAKING OF ALL OTHER ACTIONS NECESSARY TO THE CONSUMMATION OF THE TRANSACTIONS CONTEMPLATED BY THIS RESOLUTION; AND RELATED MATTERS.

UHEAA – Approving Resolution, SBR Revenue Bonds, Series 2004 (Office Facility Project) (Tab I). Chair Pitcher reported that the Student Finance Subcommittee had recommended that the Regents adopt the Approving Resolution for the issuance and sale of bonds to acquire the remainder of the Board of Regents Building. This includes the first and second floors and mezzanine and provides for current and future expansion space. Details and parameters were included in the Commissioner's cover letter. Regent Jensen asked if the title to the building would be held by the State Board of Regents or UHEAA. Richard Davis said the title would be held by the Regents, since the bond is issued by the Board. UHEAA is the funding mechanism but the building belongs to the State Board of Regents. **On motion by Chair Pitcher and second by Regent Atkin, the bonds were approved with the following vote:**

YEA: Jerry C. Atkin  
Daryl C. Barrett  
Bonnie Jean Beesley  
William Edwards  
David J. Grant  
Michael R. Jensen  
David J. Jordan  
E. George Mantes  
Jed H. Pitcher



Maria Sweeten

NAY: (None)

The resolution is as follows:

A RESOLUTION OF THE STATE BOARD OF REGENTS OF THE STATE OF UTAH AUTHORIZING THE ISSUANCE AND SALE OF ITS REVENUE BONDS, SERIES 2004, (OFFICE FACILITY PROJECT) (THE "BONDS") IN THE AGGREGATE PRINCIPAL AMOUNT OF NOT TO EXCEED \$4,000,000; AUTHORIZING THE EXECUTION OF AN INDENTURE OF TRUST, A BOND PURCHASE AGREEMENT, AN OFFICIAL STATEMENT AND OTHER DOCUMENTS REQUIRED IN CONNECTION THEREWITH; AUTHORIZING THE TAKING OF ALL OTHER ACTIONS NECESSARY TO THE CONSUMMATION OF THE TRANSACTIONS CONTEMPLATED BY THIS RESOLUTION; AND RELATED MATTERS.

Utah State University – Authorizing Resolution for Revenue Bonds for Living/Learning Center Project, Series 2004C (Tab J). These bonds would finance the construction of an on-campus Living/Learning Center, a parking terrace, and food service upgrades in the Taggart Student Center. Conceptual approval was given previously, and the 2004 Legislature gave statutory authority for the issuance of the bonds in HB 238. Parameters were summarized in Attachment 1 to Tab J. **On motion by Chair Pitcher and second by Regent Atkin, the bonds were approved with the following vote:**

YEA: Jerry C. Atkin  
Daryl C. Barrett  
Bonnie Jean Beesley  
William Edwards  
David J. Grant  
Michael R. Jensen  
David J. Jordan  
E. George Mantes  
Jed H. Pitcher  
Maria Sweeten

NAY: (None)

The resolution is as follows:

SUPPLEMENTAL RESOLUTION AUTHORIZING THE ISSUANCE AND SALE OF UP TO \$41,000,000 AGGREGATE PRINCIPAL AMOUNT OF UTAH STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE STUDENT FEE AND HOUSING SYSTEM REVENUE BONDS, SERIES 2004C, OF THE STATE BOARD OF REGENTS OF THE STATE OF UTAH; AND PROVIDING FOR RELATED MATTERS.

Utah State University – Authorizing Resolution for Student Building Fee Revenue and Refunding Bonds for the Stadium/Spectrum Facilities Project, Series A and B (Tab K). Chair Pitcher explained that this bond would finance the construction and improvements to Romney Stadium, the Nelson Fieldhouse, and the Student Wellness Center. Conceptual approval was given previously, and the 2004 Utah Legislature gave statutory authority in HB 238. Parameters were provided on Attachment 1. **On motion by Chair Pitcher and second by Regent Atkin, the bonds were approved with the following vote:**

YEA: Jerry C. Atkin  
Daryl C. Barrett  
Bonnie Jean Beesley  
William Edwards  
David J. Grant  
Michael R. Jensen  
David J. Jordan  
E. George Mantes  
Jed H. Pitcher  
Maria Sweeten

NAY: (None)

The resolution is as follows:

A RESOLUTION OF THE STATE BOARD OF REGENTS OF THE STATE OF UTAH AUTHORIZING THE ISSUANCE AND SALE OF ITS UTAH STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE STUDENT BUILDING FEE REVENUE AND REFUNDING BONDS (STADIUM/SPECTRUM FACILITIES PROJECT) IN THE AGGREGATE PRINCIPAL AMOUNT OF NOT TO EXCEED \$11,810,000 TO BE ISSUED IN ONE OR MORE SERIES; AUTHORIZING THE EXECUTION AND DELIVERY OF A SECOND SUPPLEMENTAL INDENTURE OF TRUST, A BOND PURCHASE CONTRACT AND OTHER DOCUMENTS REQUIRED IN CONNECTION THEREWITH; AUTHORIZING THE TAKING OF ALL OTHER ACTIONS NECESSARY TO THE CONSUMMATION OF THE TRANSACTIONS CONTEMPLATED BY THIS RESOLUTION; AND RELATED MATTERS.

College of Eastern Utah – Student Fee Increase (Tab L). Chair Pitcher reported that CEU officials had requested that general student fees for 2004-2005 be reconsidered and increased by \$6 per year. President Ryan's letter (Attachment 1) explained that subsequent to the approval of the 2004-2005 student fees, it was determined that CEU was out of compliance with a covenant of the Burtenshaw Bond requiring the college to maintain 125 percent coverage for the debt service. Regent Edwards said the students have expressed concerns about fee increases. President Thomas said information was not provided to the students earlier because it was not available. The college entered into the Burtenshaw Bond eight years ago and the 125 percent coverage amendment cannot be changed. **Regent Grant moved approval of the fee increase. The motion was seconded by Regent Atkin and carried, with Regent Edwards voting against the motion.**

Utah Valley State College – Authorizing Resolution for Revenue Refunding Bonds, Series 2004 (Tab M) and Approval of Bond Authorizing Resolution, Purchase Contract, and Sublease with Utah County to facilitate funding of the Baseball Stadium, Series 2004 (Tab N). Chair Pitcher said the committee had deferred action on these two items, pending further discussion and negotiation. It was agreed that the Regents would consider these two items in a subsequent conference call.

Consent Calendar. On motion by Chair Pitcher and second by Regent Atkin, the following items were approved on the committee's consent calendar:

1. Implementation Date for Suggested Changes to Early Retirement Programs
2. 2004-2005 Tuition Rate for UCAT AAT Degree Students in General Education Courses
3. Utah Electronic College (UEC) 2004-2005 Tuition Rates

Continuation of March Break-out Groups Discussion – Managing Growth/Budget Planning (Tab P). Chair Pitcher said the committee had discussed the break-out issues from the March discussions on enrollment growth and had assigned additional work to Assistant Commissioner Mortensen. Information regarding the impact on tuition and quality will be available for the June Board meeting.

UHEAA – Board of Directors Report (Tab Q). Chair Pitcher thanked Associate Commissioner Norris and his staff for their excellent report.

Vice Chair Mantes thanked Chair Pitcher for his report.

#### GENERAL CONSENT CALENDAR

On motion by Regent Grant and second by Regent Pitcher, the following items were approved on the Board's General Consent Calendar:

1. Minutes – Minutes of the Regular Board of Regents Meeting held March 11, 2004 at Southern Utah University in Cedar City Utah, and March 12, 2004 at Dixie State College in Hurricane, Utah
2. Grant Proposals - Approval to submit the following proposals:
  - A. University of Utah – National Science Foundation; "ITR:NJS/ ASE\{DMC,SIM}: Continuous, Discrete, and Statistical Methods for 3-D Object Recognition;" \$3,874,525. Elaine Cohen, Principal Investigator.
  - B. University of Utah – National Science Foundation; "ITR: Architectures for Perceptive Embedded Systems;" \$2,373,705. Alan L. Davis, Principal Investigator.
  - C. University of Utah – National Science Foundation; "Collaborative Research: Communication Strategies for Very Large Sensor Networks;" \$2,020,001. B. Farhang-Boroujeny, Principal Investigator.

- D. University of Utah – Public Health Service; “Improving Measurement of Acute Pain;” \$2,659,129. C. Richard Chapman, Principal Investigator.
- E. University of Utah – Public Health Service/National Institute of General Medical Science; “Recoding: Dynamic Reprogramming of Genetic Readout;” \$2,683,199. John F. Atkins, Principal Investigator
- F. University of Utah – Public Health Service/National Institute of Diabetic Digest K; “Defining Hematopoietic Progenitors in Mouse Bone Marrow;” \$2,222,651. Gerald J. Spangrude, Principal Investigator.
- G. University of Utah – Public Health Service/National Cancer Institute; “Mapping and Cloning Prostate Cancer Predisposition Loci;” \$3,364,890. Lisa Cannon-Albright, Principal Investigator.
- H. University of Utah – Public Health Service/National Institute/Deaf Oth Comm D; “Forming and Patterning the Vertebrate Inner Ear;” \$2,369,019. Gary C. Schoenwolf, Principal Investigator.
- I. University of Utah – Public Health Service/National Cancer Institute; “Double-Targeted Macromacular Therapeutics for the Treatment of Ovarian Cancer;” \$3,576,148. Andrew P. Soisson, Principal Investigator.
- J. University of Utah – Public Health Service/National Institute of Dental Craniofa/Engineering; “The Vocal Fold Extracellular Matrix;” \$3,307,395. Susan L. Thibeault, Principal Investigator.
- K. University of Utah – Public Health Service; “Computational Biology and Bioinformatics Online;” \$3,217,758. Thomas E. Cheatham, Principal Investigator.
- L. University of Utah – Public Health Service/National Institute of Neurological Dis/Stro; “Identification and Characterization of Novel Therapeutics for the Treatment and Prevention of Epilepsy;” \$13,170,515. H. Steve White, Principal Investigator.
- M. University of Utah – National Science Foundation; “A New Multi-Scale Paradigm for Biomolecular Simulations;” \$3,204,778. Gregory A. Voth, Principal Investigator.
- N. University of Utah – National Science Foundation; “Collaborative Research: Computational Tools for Multiscale Dynamical Modeling of Blood Clotting and Vascular Biology;” \$2,306,832. Aaron L. Fogelson, Principal Investigator.
- O. University of Utah – National Science Foundation; “ITR0 (NHS)- (INT) Inter-Disciplinary Information Representation (IDIR);” \$2,991,905. Stefano A. Foresti, Principal Investigator.

- P. University of Utah – Public Health Service/National Eye Institute; “Animal Facility for New Moran Eye Center;” \$2,680,838. A. Lorris Betz, Principal Investigator.
  - Q. Utah State University – US Department of Agriculture; “Functional Genomics in Nature;” \$1,253,653. Bart C. Weimer, Principal Investigator.
  - R. Utah State University – BAE; “Geostationary Operational Environmental Satellite (GOES) Hyperspectral Environmental Suite (HES) Formulation Phase Program – Interferometer Concept Design;” \$1,328,714. Ron Huppi, Principal Investigator.
  - S. Utah State University – National Science Foundation; “Center for Assessing Pedagogy and Optimizing Learning Outcomes (APOLO)” in collaboration with Iowa State University; \$1,182,246. Gayle Bowen, Principal Investigator.
  - T. Utah State University – Spectrum Astro; “Demonstrating the Feasibility of Advanced, Cryocooled Focal Plane Array Technologies to Improve our Ability to Detect Smaller, Cooler and More Distant Objects via Use of Infrared Sensors, Ultimately Improving our Nation’s Defense and Astronomical Science Sensor Capabilities;” \$2,250,234. Blake Crowther, Principal Investigator.
  - U. Utah State University – National Institutes of Health; “Microbial Metabolism of Aliphatic Alkenes, Epoxides, and Ketones;” \$1,725,600. Scott A. Ensign, Principal Investigator.
  - V. Utah Valley State College – US Department of Education; “Psychology of Personal Excellence/Demonstration Project in Leadership Training;” \$1,500,000. Bruce Jackson, Principal Investigator.
3. Grants Awarded
- A. University of Utah – National Center for Research Resources; “General Clinical Research Center. CFDA 93.333. General Clinical Research Center Grant (M01). RFA PA-90-30 (Cap);” \$2,028,991. A. Lorris Betz, Principal Investigator.
  - B. University of Utah – Sports Medicine Research and Testing Laboratory; “Sports Medicine Research and Testing Laboratory at the University of Utah;” \$5,785,417. Dennis J. Crouch, Principal Investigator.
4. Executive Session(s) — Approval to hold an executive session or sessions prior to or in connection with the meetings of the State Board of Regents to be held June 3-4, 2004, at the College of Eastern Utah in Price, Utah, and Snow College in Ephraim, Utah, 1to consider property transactions, personnel issues, litigation, and such other matters permitted by the Utah Open and Public Meetings Act.

### REPORT OF THE CHAIR

Higher Education Appropriations Subcommittee Meeting. Vice Chair Mantes said a meeting of the Higher Education Appropriations Subcommittee had been scheduled for 9:00 a.m. on May 20 at Weber State University. He urged the Regents to be present, if at all possible, to discuss parameters of funding higher education in the future. Assistant Commissioner Mortensen reported that the meeting would be a round-table discussion with Regents, Presidents and Legislators. He has been working with the Legislative Fiscal Analyst's staff to come up with policy objectives to open the debate on the issues. These objectives will be distributed to everyone as they are defined. Fiscal Analyst Garriott said this would be an excellent opportunity for intercourse between the Legislature, Regents, and Presidents. The discussion will determine the direction for higher education in the future. Commissioner Kendell said he would send out a reminder to the Regents and Presidents.

SLCC Presidential Search. Vice Chair Mantes said a search committee is being formed to reinstate the Salt Lake Community College presidential search. Regent Bonnie Jean Beesley has agreed to chair the committee.

Vacancies on UHEAA Board of Directors. Vice Chair Mantes reported that David Maher would fill the vacant Regent position and that Ali Abegg will fill the vacant student position on the UHEAA Board .

Retirement of Associate Commissioner Deanna Winn. Vice Chair Mantes reported that Associate Commissioner Deanna Winn had announced that she would retire on June 30. She has been a very dedicated and loyal employee and she has done some great things. On behalf of the State Board of Regents, Vice Chair Mantes expressed his appreciation to Dr. Winn and wished her well.

Regents' Regalia. Vice Chair Mantes announced that the Regents' new robes had been received. He asked the Regents to take their new robes home with them at the conclusion of the meeting. The berets have not yet been received; they will be distributed later.

### REPORT OF THE COMMISSIONER

Commissioner Kendell thanked Associate Commissioner Winn for her many contributions to the Commissioner's Office and to the Utah System of Higher Education. She has been a great colleague. The Commissioner pointed out the Notable Accomplishments from the USHE institutions, which was in the Regents' folders. He noted that WSU had its first undergraduate research symposium. USU and the UofU have submitted over \$70 million in research grants during the last couple of months. The University of Utah received a \$5.8 million grant for sports medicine research and a testing laboratory. The Commissioner congratulated President Betz, who sponsored a grant for the General Clinical Research Center, for which the University was awarded over \$2 million.

### ADJOURNMENT

At 2:45 p.m. the Regents moved into executive session. The meeting was adjourned from there.

---

Joyce Cottrell CPS  
Executive Secretary

---

Date Approved

MINUTES OF SPECIAL MEETING  
UTAH STATE BOARD OF REGENTS  
UNIVERSITY OF UTAH  
April 29, 2004

Regents Present

Nolan E. Karras, Chair  
E. George Mantes, Vice Chair  
Linnea S. Barney  
Daryl C. Barrett  
William Edwards  
David J. Grant  
James S. Jardine  
Michael R. Jensen  
David J. Jordan  
Jed H. Pitcher  
Sara V. Sinclair  
Marlon O. Snow  
Maria Sweeten

Regents Excused

Jerry C. Atkin  
Kim R. Burningham  
Charles E. Johnson  
David L. Maher

Office of the Commissioner

Richard E. Kendell, Commissioner of Higher Education  
David L. Buhler, Associate Commissioner for Public Affairs  
Joyce Cottrell, Executive Secretary  
Mark H. Spencer, Associate Commissioner for Finance and Facilities

Representatives of the media and many members of the University of Utah community were also present, including members of the Board of Trustees, Presidential Search Committee, faculty, staff and community representatives.

Chair Nolan E. Karras called to order a special meeting of the Board of Regents at 4:25 p.m. He welcomed everyone and announced that the Board had spent the day interviewing candidates for the presidency of the University of Utah. Chair Karras acknowledged the presence of members of the University of Utah Board of Trustees, faculty, staff and the entire University community. He stated that the purpose of this meeting was to select the next President of the University of Utah, the state's flagship university. This is one of the state's most visible positions, and selecting presidents is the Regents' most important responsibility.

Chair Karras said the search process for this presidency had been modified somewhat from past searches. He thanked Commissioner Kendell and expressed the Board's appreciation for his assistance. He also thanked Regent Jardine and the Presidential Search Committee for their excellent work. Chair Karras expressed his appreciation to former President Bernie Machen for leaving the University in better condition than he found it. One reason the University of Utah is such a great institution is because of the people Bernie chose to fill key leadership positions. He acknowledged Senior Vice Presidents A. Lorris Betz and David W. Pershing and expressed the Regents' appreciation to them for their leadership. Drs. Betz and Pershing received a standing ovation from everyone in attendance. All of the candidates interviewed indicated that they recognized



the high quality of the institution. Chair Karras also thanked the Regents for the time they spent in this important process.

Regent Jardine said this had been his third presidential search for the University of Utah and the sixth search committee on which he has served. He asked the members of the Presidential Search Committee to stand and be recognized. He commended them for their cooperative spirit and camaraderie, which surpassed that of any other committee on which he had served.

Under the leadership of Commissioner Kendell, the Regents experimented with some new procedures for this search, which worked well because of the good faith and the shared goals of the University community. He praised the participation by members of the senior leadership and said the guidance they had given the committee on the candidates was invaluable. He also credited Commissioner Kendell for his excellent help in this process.

Regent Jardine said was very sad that all three great candidates could not be chosen, because he felt that he was losing two very good friends. The Regents realized that all three finalists were eminently qualified and able to lead the institution, and they deliberated carefully to best meet the needs of the University.

**Regent Jardine moved that the Board of Regents name Michael K. Young as the next President of the University of Utah. The motion was seconded by Vice Chair Mantes. Voting was unanimous.**

Commissioner Kendell escorted President-designate Young and his wife, Suzan, into the room and introduced them to the University community. Chair Karras asked President Young to say a few words and to introduce his wife.

President Young said he was happy to come back to Utah in this way. Since first meeting Regent Jim Jardine at the Harvard Law School, he has had great respect for this institution. He thanked the Regents for entrusting him with this responsibility, which is the opportunity of a lifetime. He commended the leadership team at the University for their knowledge, commitment and capacity for cooperation. In his entire career in higher education, he has never encountered this level of commitment to excellence.

Mrs. Young said she was excited to be here and thrilled to be part of the University of Utah team. She originally hails from Orem and still has family in the area. She thanked everyone for their support.

Chair Karras invited Dr. Lorris Betz and Dr. Dave Pershing to join the Youngs and led the applause for the University's great management team. He thanked President and Mrs. Young for their willingness to serve in this strenuous assignment.

The meeting was adjourned at 5:45 p.m.

---

Joyce Cottrell CPS, Executive Secretary

---

Date Approved