

AGENDA

MEETING OF THE UTAH STATE BOARD OF REGENTS

September 12-13, 2002

**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**

AGENDA
STATE BOARD OF REGENTS MEETING
UTAH STATE UNIVERSITY, LOGAN, UTAH
TAGGART STUDENT CENTER

Thursday, September 12, 2002

11:30 a.m. - LUNCHEON MEETING – STATE BOARD OF REGENTS,
1:00 p.m. UTAH STATE UNIVERSITY BOARD OF TRUSTEES,
PRESIDENT HALL AND COMMISSIONER FOXLEY
Center Colony Room

- Open Meeting
- Executive Session

1:00 p.m. - COMMITTEE OF THE WHOLE AND REGULAR BUSINESS MEETING OF THE BOARD
3:45 p.m. Ballroom

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|---|-------|
| 1. Overview of Master Planning Task Forces | Tab A |
| <ul style="list-style-type: none">• Task Force on Funding• Task Force on Institutional Missions and Roles• Task Force on Student Success• Report of Program Review Committee | |
| 2. 2003-2004 Capital Development Hearings | Tab B |
| 3. 2003-2004 Non-state Funded Capital Development Projects | Tab C |

4:00 p.m. PRESIDENT KERMIT HALL'S STATE OF THE UNIVERSITY ADDRESS
Science Learning Center Auditorium

6:00 p.m. DINNER
Institutional Residence
(By invitation)

Friday, September 13, 2002

8:00 a.m. - BREAKFAST MEETING WITH STATE BUILDING BOARD
10:00 a.m. Ballroom

10:15 a.m. -
11:45 a.m.

MEETINGS OF BOARD COMMITTEES

Academic and Applied Technology Committee Student Senate Chambers

ACTION:

1. Utah College of Applied Technology – AAT Degrees Tab D
 - Computer Aided Drafting and Design
 - Information Technology
 - Medical Assisting

DISCUSSION:

2. Policy R401, *Approval of New Programs, Program Additions or Program Changes* Tab E

CONSENT:

3. Consent Calendar, Academic and Applied Technology Committee Tab F
 1. University of Utah – Combine two majors in the Family and Consumer Studies Department Into Consumer and Community Studies
 2. Southern Utah University – Consolidate the Economics BIS Degree and the Managerial Economics BA/BS Degrees into one BA/BS Degree in Economics

INFORMATION:

4. Information Calendar, Academic and Applied Technology Committee Tab G
 1. University of Utah – Department of Music Name Change
 2. Utah State University – Name Change of Masters of Industrial Technology
 - C. Weber State University – Emphasis in Creative Writing
 - D. Weber State University – Recreation Minor
 - E. Southern Utah University – Program Deletions/Name Change/Majors to Minors

Finance and Facilities Committee Ballroom

ACTION:

1. Utah State University – Campus Master Plan Tab H
2. USHE – Long-term Enrollment Projections Tab I
3. University of Utah – 2002-2003 Budget for University Hospital and Clinics Tab J
4. UHEAA – Approving Resolution, SBR Student Loan Revenue Bonds, Series 2002X Tab K

DISCUSSION:

5. USHE – Follow-up to Task Force on Funding

INFORMATION:

6. UHEAA – Board of Directors Report Tab L
7. USHE – Information Technology Update Tab M
8. University of Utah – Olympic Legacy Park at Rice-Eccles Stadium Tab N

CONSENT:

9. Consent Calendar, Finance and Facilities Committee
- A. OCHE – Monthly Investment Report
- B. UofU and USU – Capital Facilities Delegation Reports
- C. Utah State University – Property Exchange
- D. Utah State University – Property Exchange
- E. Salt Lake Community College – Property Exchange
- F. Salt Lake Community College – Airport Hangar Lease
- G. Southern Utah University – Land Sale to Utah Department of Transportation

Tab O

12:00 noon -
1:00 p.m.

WORKING LUNCHEON
Ballroom

1. Report of the Chair
2. Report of the Commissioner
3. Reports of Board Committees
 - Academic and ATE Committee, Tabs D - I
 - Finance and Facilities Committee, Tabs J - O
4. General Consent Calendar

Tab P

1:00 p.m.
3:30 p.m.

INSTITUTIONAL BUDGET HEARINGS

Tab Q

1. Group 1 – Research universities and Utah Education Network (Walnut Room)
2. Group 2 – Regional/metropolitan universities and state colleges (Ballroom)
3. Group 3 – Community colleges (Student Senate Chambers)

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Projected times for the various meetings are estimates only. The Board Chair retains the right to take action on any agenda item at any time. In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify ADA Coordinator, at 60 South 400 West, Salt Lake City, UT 84101-1284, or at 801-321-7124, at least three working days prior to the meeting. TDD # 801-321-7130.

September 4, 2002

MEMORANDUM

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: Overview of Master Planning Task Forces

All three Master Planning Task Forces met on Thursday, August 29. Attachment 1 is a summary of the discussions of the task forces thus far, including a list of the topics of common interest to all three groups. The chairs of the task forces (Regents Nolan Karras, Charlie Johnson, and George Mantes) will report on their meetings and invite comments from the Regents and Presidents. The task forces will meet again on Friday, September 27, in the Board of Regents' Offices at the following times:

Student Success	10:30 a.m. - 1:00 p.m.
Funding	1:00 p.m. - 3:00 p.m.
Missions and Roles	3:00 p.m. - 5:00 p.m.

The Program Review Committee, chaired by Regent Jim Jardine, met on Monday, August 19, to develop the criteria for advancing program approvals during the current moratorium on new programs. That document (Attachment 2) will be presented to the Regents for their approval at the Board meeting on September 12.

Recommendation

It is the recommendation of the Commissioner that the Regents approve the criteria for advancing program approvals during the current moratorium on new programs.

Cecelia H. Foxley, Commissioner

CHF:jc
Attachments

September 4, 2002

2002 USHE MASTER PLANNING TASK FORCES

COMMON ISSUES OF THE THREE TASK FORCES

As a follow-up to Master Plan 2000, the Regents have formed three new planning task forces in the following areas: (1) Funding, (2) Institutional Missions and Roles, and (3) Student Success. Below are some common issues that have been identified by all three groups:

Accountability: implementation of efficiencies by institutions; opportunities for timely college completion through contracts and other programs.

Efficiency: creating better graduation efficiency; working with the Financial and Facilities Committee to encourage, measure, and communicate efficiencies; begin measuring what we value instead of valuing what we can measure.

Funding: adoption of formula funding; projection of a five year costs and revenues; the cost of investing in unprepared students; funding for more and better-prepared academic advisors; funding for performance of student learning outcomes and institutional goals; Utah funding per student as compared with peer institutions.

Geographic Accessibility: the need for the services community colleges provide in remote locations of the state.

Graduate Education: understanding its economic benefits to the state; agreeing that no new Research I universities are needed in Utah; understanding the problems associated with the new residency requirement and its impact on attracting and retaining graduate students.

Legislative Relationships: the need to increase communication with the Legislature for mutual understanding and support.

Technologically-delivered programs: the addition of associate degrees; providing courses and programs to remote locations through technology.

Tuition: issues over residency and tuition waivers; policies regarding tuition and financial aid; changes in the two-tiered tuition policy.

UCAT: The role of UCAT within the USHE; revision of the initial legislation in light of the State's financial situation and accreditation issues; an effective marketing strategy.

Master Planning Task Force on Funding

Task Force Charge: Develop a long-term financial plan, including demographics and projected state resources. Refine the funding formula and find a means for its implementation.

Chair: Regent Nolan Karras

Summary of Meetings, July 12, August 8, and August 29, 2002: The Task Force reviewed the state's economic climate, considered a five-year revenue projection model, and agreed to continue to work for legislative adoption of the funding formula, which would strengthen the role of the Regents and provide better support for students. The four components of the funding formula: (1) New Student Support, (2) Existing Student Support, (3) State Funded Compensation for Non-instructional Programs, and (4) Core Support/USHE Core Issues, would be funded proportionately according to available revenues. At this time UCAT will not be part of the formula. The Task Force is developing a five year cost projection based on: expected growth, including the enrollment growth of UCAT students; a tuition structure, including reconsideration of the existing two-tier system, determination of affordability given family income and financial aid policies; internal efficiencies such as consolidating some services, the use of adjunct faculty, increased use of technology, fast-track certificates, duplicate program eliminations, and increased space utilization; a peer group analysis for comparisons with like institutions; and other revenue possibilities such as taxation structures for community colleges. Institutional efficiency will be addressed by working more closely with the Finance and Facilities Committee of the Board.

Master Planning Task Force on Institutional Missions and Roles

Task Force Charge: Update institutional missions and roles as appropriate to meet education and training needs of the state, taking into consideration current fiscal constraints, the addition of UCAT to the System, etc.

Chair: Regent George Mantes

Summary of Meetings, August 8 and August 29, 2002: Like the other task forces, the Missions and Roles Task Force discussed ways of building a better relationship with the legislature. Its discussions included how higher education is conducted in Utah, with particular attention to the Utah Electronic College and UCAT, and the importance of appropriate roles and missions clearly structured for each institution. The initial intent of H.B. 1003, which created UCAT, was reviewed, and efforts are now underway to revise H.B. 1003 in light of the state's financial situation and accreditation demands on UCAT. Regents' Policies R-311 (Institutional Roles and Missions) and R-313 (Institutional Categories and Accompanying Criteria) are being reviewed to reflect consistency with a revised H.B.1003 and to assure that the appropriate categories of institutions are reflected along with the appropriate variables per institutional type.

A discussion on capacity included consideration of what percentage of students higher education can serve, at what cost, in what kinds of facilities, and in what locations. In addition, retention

of students according to their goals was discussed. The Task Force discussed incentives to encourage greater use of existing facilities and to attract more students to technologically-delivered courses, including the development and implementation of technologically-delivered associate degrees. Funding by institutional mission rather than enrollment may be more cost-effective, and additional funding directed to the Regents would promote incentives for attainment of targeted goals by institutions. In a discussion on differentiated missions, the Task Force acknowledged the need for more funding for graduate and professional education which brings economic benefits to the state. Community college programs, with multiple roles of transfer, remedial education, job training, and skills assessment, ought to be available throughout the state, delivered via technology where appropriate.

Master Planning Task Force on Student Success

Task Force Charge: Recommend ways in which student success and decision-making can be enhanced in admission, retention, graduation/completion and related processes. Guide the development of AdviseUtah and UtahMentor to ensure their success.

Chair: Regent Charlie Johnson

Summary of Meeting, July 12, August 8, and August 29, 2002: The Student Success Task Force continues to concentrate its efforts on the barriers and opportunities regarding student persistence and retention. While the Task Force acknowledged the need for more rigorous K-12 graduation and core standards in high school, it also acknowledged the purpose of the State Board of Education graduation requirements: to assure that Utah students will graduate. This does not preclude higher education from raising its admission standards nor encouraging parents, teachers, and counselors to assist their high school students to enroll in a more rigorous curriculum. The Task Force learned that the Utah Legislature discontinued support for the Student Education Plan (SEP) and the Student Education Occupation Plan (SEOP), both, of which, helped elementary, junior, and high school students to explore careers and plan for their future. The Task Force will review a paradigm for student success which includes two national consulting groups, John Gardner and Noel-Levitz, whose work predicts student success and offers models for improving the first year college experience. The group is also discussing the financial implications of investing in students who may not succeed and providing educational opportunities in remote areas of the state. In addition, Task Force members discussed the barriers experienced by graduate and professional students who are impacted by the new legislated requirements regarding residency and tuition waivers. It is believed that Utah may be exporting its graduate students as a result of the budget cuts. Institutional “Best Practices were reported. Some have produced better student retention as a result of these practices. The Task Force suggested that a strong marketing strategy be developed for UCAT. The next meeting will include action steps and their projected costs.

**PROGRAM REVIEW COMMITTEE'S RECOMMENDATIONS
ON EXCEPTIONS TO NEW PROGRAM MORATORIUM**

At the present time the Program Review Committee (PRC) supports the moratorium on the approval of new program proposals. Exceptions will be reviewed and granted in cases when the situation is compelling and supported by credible data based on the approved categories. Institutions will provide data that are accurate and comprehensive to support the program proposal being reviewed by the PRC prior to inclusion on the Regents' agenda.

Category I

Demonstrate cost savings and efficiencies

Provide budgetary details (names, salary data, etc.) that demonstrate cost savings to the department or institution. Examples of cost savings and efficiencies may include: positions eliminated through attrition and consolidation, and consolidation of departments, programs, etc. Confidential information will be provided under seal to the Commissioner.

Category II

Accreditation

Demonstrate the necessity of moving these programs forward in order to meet accreditation requirements. Accreditation requirements include initial establishment of a new institution or a new program, a change in the required entry-level credential, substantive change and/or new accreditation standards, etc.

Category III (for later consideration)

Urgent need

The Program Review Committee will discuss this issue at a later time. Institutions will be asked to offer opinions on what would be considered urgent. The Commissioner's staff will develop criteria that guide the discussion on what might be considered "urgent."

MEMORANDUM

September 4, 2002

TO: Utah State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: 2003-2004 Capital Development and Land Acquisition Hearings and Priorities

Issue

Attached for Regent consideration is a list of capital development priorities and land acquisition proposals for 2003-2004. Information on each USHE institution's top state-funded capital development priority for 2003-2004 is included. Presidents will briefly present the scope and need for these projects to the Regents. Also included are the results of the Qualification and Prioritization (Q & P) Process, which is established by Regent policy to assist in prioritizing capital development projects. Regents will be asked to take action to prioritize projects for 2003-2004. The USHE prioritized list will then be forwarded to the State Building Board, Governor, and Legislature for consideration during the 2003 General Session.

Background

Each year USHE institutions submit capital development proposals for Regent consideration. A summary of each institution's top priority for 2003-2004 is included here in Attachment 1. Presidents will briefly present the top state-funded capital development priority for their institutions. President Greg Fitch will also present the top priorities for UCAT. However, no Regent action is needed on UCAT projects because of separate statutory authority that gives the UCAT Board of Trustees the ability to establish priorities and forward them directly to the Building Board, Governor, and Legislature.

As input to the Regents in prioritizing these projects, the results of the Q & P are also presented. The Q & P process is outlined in Regent Policy R741. A graphical representation of this process can be found in Attachment 2. Policy R741 develops a point-scoring, numeric formula intended to help Regents weigh the relative need for various capital development projects. The present formula takes into account 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. A new factor – mission centrality/program criticality – which is being proposed is discussed in the Policy Implications section below.

The Q & P list does not represent all capital development needs in the USHE. Institutions are allowed to submit only their top few projects for consideration. In addition, the institutional submissions have been pared down more (based on Q & P points) to a list of 9 projects and one land acquisition proposal.

Five of these projects, each involving the renovation or replacement of existing space with life-safety issues, have received special review as required by Policy R741. These projects were reviewed by DFCM architects and engineers to determine the severity of the life safety issues associated with the projects. In all cases, and in compliance with Policy R741, these projects received extra priority points due to their urgency.

Attachment 3 shows the actual points awarded through the Q & P process. Attachment 4 is a prioritized listing based on Q & P points that the Regents are asked to consider and prioritize.

Policy Implications

One element which may not be adequately considered by the Q & P process is the centrality to an institution's mission or the criticality of programs that would be housed in a capital development project. As a result, these projects only become ranked highly in the Q & P if they meet demonstrated space needs at the institution, alleviate life safety concerns, have outside funding, and are a high institutional priority. Regents could choose three alternative actions to address this situation:

- (1) Amend policy R741 to create a new category of points to be awarded in the Q & P process based on centrality to mission or criticality of programs for the proposed project (see Attachment 5, R741, Capital Facilities Qualification and Prioritization Process);
- (2) Adjust the Q & P priority rankings to consider these factors external to the Q & P process that should be weighed in prioritizing; or
- (3) Maintain the priority suggested by the Q & P scoring system, requiring projects that are central to an institution's mission or house critical programs to compete for prioritization based on the existing Q & P point system.

Recommendation

It is the recommendation of the Commissioner that the Regents review the attached list of capital development priorities and land acquisition proposals for 2003-2004, discuss the policy implications related to the current Q & P point system, and adopt a prioritized list of projects to be forwarded to the State Building Board, the Governor, and the Legislature for consideration.

Cecelia H. Foxley, Commissioner

USHE 2003-2004 Capital Development Projects (Institutions' #1 Priorities Only)

University of Utah

Marriott Library Renovation: University of Utah officials propose to renovate the original Marriott Library building, which was constructed in 1968. Although an addition to the library opened in 1996, structural and life safety concerns, along with the need to increase the functionality of the existing space, necessitates this renovation project. Programs provided in the facility include library administration, public services (such as collections, reference stations, classrooms, and multimedia center), special collections, and technical services. The renovation would provide the opportunity to reorganize existing space that is unusable or configured poorly to better meet the dynamic needs of a research university library in the technology age. The size of the renovation project is 291,422 gross square feet (GSF). The University is currently conducting programming and design with non-state funds for this project to document the extent of life safety issues and better determine the construction costs. The preliminary cost estimate is \$58 million. The University has secured \$17 million in non-state funding to apply toward the total construction cost. A \$254,000 increase in state-funded operations and maintenance (O & M) is anticipated.

Utah State University

Merrill Library Replacement: The Merrill Library consists of several 1960s additions that are attached to and wrapped around a core building which was built in 1930 and acts as the main library for the USU campus. Programming has determined that replacement will provide the most cost-effective solution to numerous problems. The replacement plan anticipates razing 220,736 GSF and building an addition on the north end of the existing Cazier Science and Technology Library, which was originally designed to accommodate expansions to both the north and the east. The facility is extremely inefficient and has many severe safety and security concerns. Strong growth in enrollment and research is expected to continue, which will increase the need for expanded collections in both printed and digital formats that are already inadequate. Special collections and archives are growing rapidly, and there is a lack of space for growing numbers of library patrons. The institutional goal to attain Association of Research Libraries (ARL) status will require collections to be expanded significantly. Technology advances necessitate an improvement in the delivery of services and information. More resources will need to be directed to information technology infrastructure, computers, networks, and other electronic information systems. Library resources for distance education must be extended as technology allows educational opportunities to reach more people. The project's cost estimate is \$42,000,000 and the increased State Funded O&M is \$600,000.

Weber State University

Swensen Gymnasium: WSU proposes to remodel and renovate an estimated 42,800 GSF of a 85,000 GSF building originally constructed in 1962. This building is heavily used but has had only minor improvements or functional enhancements since its construction, and does not adequately

support the needs of the three departments depending upon this facility for course and activity offerings. According to a 2001 ISES evaluation (state consultant), major infrastructure upgrades are required, including: guardrail safety and access upgrades, improved fire alarm and detection system, installation of a wet-pipe fire sprinkler system, lever actuated locksets and adjustable closers, HVAC system redesign and replacement, replacement of secondary electrical system, upgrade of interior lighting, and replacement of the swimming pool filtration and heating system. In addition, the thermal glazing in the exterior is inefficient, ceiling and flooring materials are worn, and all piping for the plumbing is rapidly deteriorating galvanized steel. An important component of the proposed project is to extend the campus chilled water system to Swensen Gymnasium, which is not air conditioned. The total cost estimate is \$8,500,000, of which \$5,500,000 is requested from state support and \$3,000,000 is committed from the Stewart Educational Foundation. As the renovation is completed, WSU expects to request additional state-funded O & M of \$75,400.

Southern Utah University

Teacher Education Building: SUU proposes to construct a new Teacher Education Building consisting of 92,630 GSF. The building will include faculty offices, classrooms, technology laboratories, and a K-6 Professional Development/Laboratory School named the "Thunderbird School of the 21st Century." The new building will also house a Center for Best Practices in Teacher Education with emphasis on Math, Science, and Technology Education. Although SUU is the second largest producer of teachers among Utah's public institutions, it uses a building that is 104 years old. The enrollment growth rate in Teacher Education (undergraduate and graduate) has been approximately 6 percent per year. To accommodate current needs, teacher education students and faculty are presently spread across five different buildings on campus. Most are housed in the Old Main Building, which is severely lacking in space and in infrastructure for teaching with today's advanced technologies. The building's heating/cooling systems are also a serious problem. (The existing Old Main space will be utilized by other departments and does have historical value.) A new building site is available on the north east side of campus. In 1998, plans were made to acquire and renovate the Cedar City Middle School with intentions to use this building as the future home for a Teacher Education building. Due to a host of unforeseen problems, the middle school building has since been demolished and the site is available. The cost estimate is \$16,581,300 with increased state funded O&M of \$481,300 and new program costs of \$373,000.

Snow College

Classroom Building: Snow is proposing construction of a new 30,000 GSF Classroom Building to house the Social Science Division, the Business Department, and provide general classroom space. Currently, Social Science is located in an old auto paint shop built in 1938 and Business is located on the west campus. Neither existing facility is adequate. Approximately 10,519 GSF in the existing Social Science facility and the old theater would be demolished to accommodate the proposed new classroom building. The proposed new building will provide needed space to accommodate the long-term growth of Snow College and will replace two very old worn down buildings with a new building on one of the most visible parts of the campus. The estimated cost is \$5,000,000, with an additional request of \$135,000 for state-funded O & M. The existing O & M on

the building to be razed has already been committed to the O & M for the new Performing Arts building.

Dixie State College

Health Sciences Building: DSC is proposing construction of a new building to house growing academic programs in health sciences. The Health Science Department is composed of three sets of curricular offerings, including certificate, applied associate degrees, and lower division transfer programs: 1) Nursing (CAN, PN, AND), 2) Dental Hygiene, and 3) Emergency Medical Services (EMT, Paramedic, and related EMS-related training). These programs are currently located in various buildings on campus and at donated or leased space in medical and dental offices within the city of St. George. Space in off-campus locations is only available for instructional use during evenings and weekends. Current academic staffing includes 12 full time and 48 part time faculty. These programs currently serve 210 FTE students. The proposed building is 70,000 GSF. The cost estimate is \$15,400,000 with new O & M funding of \$835,000. The capacity of the campus central utility system is adequate to accommodate the proposed building.

College of Eastern Utah

Fine Arts Complex: The FAC Project includes programming, design, demolition, new construction, and renovation of a two-story structure surrounding the existing Geary Theatre on both sides and the rear. The plan is for a new 54,834 GSF building and for renovating the 11,861 GSF Theater. The plan would also demolish approximately 4,800 GSF of the existing Theatre lobby/restroom area; 6,549 GSF of the Music Building; and the 25,584 GSF of the Science Building. The Theater will be renovated due to the following existing concerns: asbestos texture on the auditorium ceiling, no fire sprinkler system in the auditorium, lobby, attic, or basement dressing rooms; lack of adequate reinforcing steel in the masonry walls; roof supporting system not seismically attached to supporting masonry walls; exposed, wood, tongue and groove roof decking material. Many ADA and life safety issues exist in the building to be demolished. (Complete renovation of the existing Science Building was estimated at 3 million dollars.) The proposed project includes space to be used for Theater/Drama, Music, Dance, and Art, as well as some central administrative offices. Total cost estimate is \$10,500,000, of which \$9,500,000 is requested as state funding and \$1,000,000 is from a non-state source. New state funded O & M requested is \$224,500.

Utah Valley State College

Vineyard Elementary School/Alpine Life & Learning Center: This project involves the purchase of existing buildings and land from the Alpine School District. Vineyard Elementary School is a 40,506 GSF facility on 11.88 acres. The Alpine Life & Learning Center is 37,571 GSF comprised of five manufactured buildings located on land leased from UVSC. Minor renovation will be needed for restroom facilities, and some upgrading of phone and data systems will be needed. These buildings provide the College with much needed growth space. The school will also become the primary facility for Teacher Education, a mission-critical function of UVSC. This is also a significant

opportunity for the College to purchase almost twelve acres contiguous to the College's northern boundary. Estimated cost is \$9,000,000, with an additional \$425,700 needed for O & M.

Salt Lake Community College

Health Sciences Building: SLCC is requesting to plan and build a new 102,000 sq. ft. Health Sciences Center at the Jordan Campus on site three of the master plan. The project will cost an estimated \$17,000,000, with increased State Funded O&M of \$612,000. Health care services instruction has been an integral part of SLCC since the College was founded in 1948. Improvements in technology and growth in enrollment has expanded the college's health care programs to their current level. Programs impacted included: Nursing, Medical Assistant, Medical Laboratory Technician, Physical Therapy Assistant, Radiological Technology, and Surgical Technology. Since 1996 student enrollment has seen a dramatic increase. The size of the student population, faculty requirements, lack of facilities and diversity of the required training has necessitated locating the program over three campuses. Space and enrollment is restricted, students are on waiting lists, and local employers continue to request increases in enrollments. The teaching spaces in the Health Sciences Center will be flexibly designed and high-tech-equipped so they can be used by other programs when not used by Health Sciences, thus providing space to meet general student space needs at the Jordan Campus. Space vacated as a result of this proposed project will be reused by other programs in need of extended space so there will be no reduction in O & M for existing space.

Land Descriptions

Weber State University – IHC McKay-Dee Hospital Property: WSU officials wish to purchase the IHC McKay-Dee Hospital Property directly across Harrison Boulevard from the University's Ogden campus. The property consists of about 22.5 acres of land plus a 192,932 square foot parking garage. The existing hospital facility would likely be demolished. While the property could serve to immediately address the University's growing parking problem, it will also serve as a strategic acquisition for future expansion of the landlocked Ogden campus. A purchase price and agreement has not been negotiated. WSU seeks between \$4,000,000 and \$6,000,000 of state funds to pursue this purchase.

Utah College of Applied Technology

The Utah College of Applied Technology (UCAT) Board of Trustees met on June 5, 2002, and approved the following capital projects (in priority order):

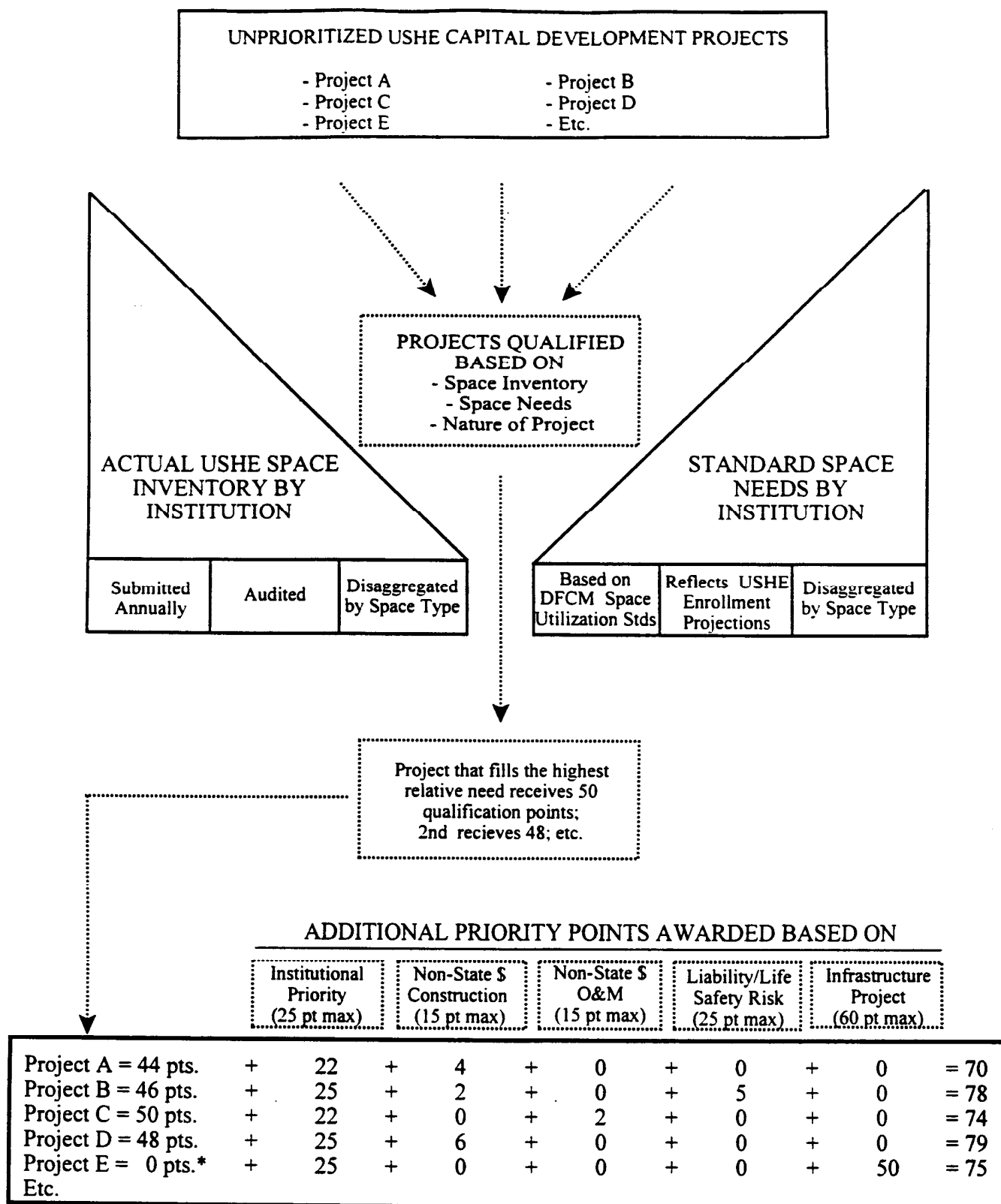
1. Uintah Basin ATC – Vernal Campus, \$9,224,000
2. Bridgerland ATC – Advanced Technology Building, \$5,000,000 to \$6,250,000
3. Davis ATC – High Tech Building, \$12,403,000

The UCAT Board of Trustees utilized "A Guide to the Capital Facilities/Property Approval Process" and evaluated projects within the parameters and specifics of HB 1002 (UCA 53B-2a-112. New

Capital Facilities). This presentation is in line with UCAT's efforts to operate as a member college within the USHE while remaining faithful to its statutory obligations.

Uintah Basin ATC – Vernal Campus: UBATC proposes building a 61,920 GSF facility in Vernal to house a number of UCAT applied technology programs as well as some 4-year and Master's programs that would be offered in the facility by USU. Currently UBATC programs are offered in 5 temporary classroom trailers and at Uintah School District facilities, and the USU Science facility is at capacity. The preliminary cost estimate for the project is \$9,224,000 with a future anticipated state-funded O&M request of \$309,600.

USHE Qualification and Prioritization Formula (Q&P)



* Project is an infrastructure project and receives no qualification points but is eligible for an extra 56 priority points.

USHE Qualification and Prioritization Formula

Q&P Results for 2003-2004

September 4, 2002

Rank	Project	"Q" Points ⁽¹⁾	O&M Points ⁽²⁾	Other Funds Points ⁽³⁾	Life Safety Points ⁽⁴⁾	Function Points ⁽⁵⁾	Priority Points ⁽⁶⁾	Total Points	With Revised R741	
									Mission/ Program Points ⁽⁷⁾	Total Points
1	USU Merrill Library Replacement	50			12		25	87		87
2 (tie)	UU Marriott Library Renovation	44		5	9		25	83		83
2 (tie)	WSU Swensen Gymnasium Renovation	46		7	5		25	83		83
4	CEU Fine Arts Complex	42		1	7		25	75		75
5	UVSC Vineyard Elementary/Alpine Life & Learning Ctr. Purchase	48					25	73		73
6	SLCC Health Sciences Building	40					25	65	4	69
7 (tie)	DSC Health Sciences Building	38					25	63	4	67
7 (tie)	SUU Teacher Education Building	36			2		25	63	5	68
9	Snow Classroom Building	34		2			25	61		61

Notes:

- (1) **Q Points:** These reflect (a) How much space (by space type) the institution has in its inventory, (b) how much space it needs based on 5-year enrollment projections and space standards, and (c) how well the space needs gap between (a) and (b) are met by the proposed project. The project that fills the highest relative need receives 50 points, with the next highest ranked project receiving 48, the next 46, etc (R741.4).
- (2) **O&M Points:** Points are awarded to projects that obtain non-state funded O&M endowments. Between 0 and 15 points are available depending on the size of the endowment compared to the total cost of the project.. A project receives 1.5 points for each 5% of O&M that can be covered from the endowment. At 75% and above, the project received 15 points (R741.5.3.3).
- (3) **Other Fund Points:** These points are awarded to projects that are funded partly by non-state funds. Between 0 and 15 points are available depending on the proportion of non-state funding in the project. A project receives 1 point for each 5% that is non-state funded. At 75% and above, the project received 15 points (R741.5.3.2).
- (4) **Life Safety Points:** These points are awarded to renovation projects with "very significant legal and/or health/life safety risks." Between 0 and 25 points are available. The awarding of points is based on a formal evaluation of the facility, utilizing external engineering and/or architectural reports and DFCM personnel (R741.5.3.4).
- (5) **Function Points:** Function points are awarded to infrastructure projects based on the urgency for such projects. Up to 60 points are available (R741.5.3.5).
- (6) **Priority Points:** Institutional priority points are assigned by the institutions to their various projects being submitted. An institution's top priority receives 25 priority points, second receives 22 points (if available), third receives 19 points (if available). The amount of points available varies by institution: (a) UU and USU = 80 points, (b) WSU, SUU, SLCC, and UVSC = 50 points, (c) Snow, Dixie, and CEU = 30 points (R741.5.5.1).
- (7) **Proposed New Category of Points --Mission Centrality/ Program Criticality Points:** Consideration may be given to adding points based on a project's ability to house an academic program which is especially central to an institution's mission or meets a recognized critical statewide program priority.

USHE Capital Development and Land Acquisition Priorities

Proposed Regent Priorities for 2003-2004

September 4, 2002

Rank	Project	State Cost Request	Previous State Funds	Estimated State O&M ⁽¹⁾	Private Funds	New GSF ⁽¹⁾	Remodeled GSF	Disposed GSF	Net Additional GSF	Major Infrastructure
1	USU Merrill Library Replacement	\$42,000,000	\$800,000	\$600,000	\$0	220,736		220,736	0	
2 (tie)	UU Marriott Library Renovation	\$41,000,000	\$0	\$254,000	\$17,000,000		291,422		0	
2 (tie)	WSU Swensen Gymnasium Renovation	\$5,500,000	\$0	\$75,400	\$3,000,000		81,538		0	
4	CEU Fine Arts Complex	\$9,500,000	\$0	\$224,500	\$1,000,000	54,834	11,681	36,933	17,901	
5	UVSC Vineyard Elementary/Alpine Life & Learning Ctr. Purchase	\$9,000,000	\$0	\$425,700	\$0	78,077	0	0	78,077	
6	SLCC Health Sciences Building	\$17,500,000	\$0	\$612,000	\$0	102,000	0	0	102,000	
7 (tie)	DSC Health Sciences Building	\$15,400,000	\$0	\$835,000	\$0	70,000			70,000	
7 (tie)	SUU Teacher Education Building	\$16,581,300	\$0	\$481,300	\$0	92,630		17,016	75,614	
9	Snow Classroom Building	\$5,000,000	\$0	\$135,000	\$750,000	30,000		10,519	19,481	
Land	WSU McKay-Dee Hospital Property	\$4M to \$6M	\$0	TBD	\$2M to \$4M				N/A	
UCAT	UBATC -- Vernal Campus ⁽²⁾	\$9,224,000	\$0	\$309,600	\$0	61,920	5,000		61,920	
Totals				\$3,642,900		648,277	384,641	285,204	363,073	

Notes:

(1) Figures are preliminary estimates and subject to Regents, DFCM, and/or institutional review.

(2) The top priority project for UCAT is listed for Regent information only. This project is not to be prioritized against other USHE projects.

R741, Capital Facilities Qualification and Prioritization Process

R741-1. Purpose

To provide a quantified assessment of capital facilities requirements in the System. There are nine steps which constitute the Capital Facilities Qualification and Prioritization Procedure with steps one through eight relating to the qualification of projects. The final step, step nine, involves setting priorities among projects from the nine institutions in the system. The nine steps however do not replace Regental deliberations which take into account other factors which are not quantifiable but nevertheless important, such as the current funding climate, political considerations, and acceptability of certain kinds of projects.

R741-2 References

2.1. Utah Code [§53B-6-101](#) (Master Planning - Board Establishes Criteria to Meet Capital Budgetary Needs)

2.2. Utah Code [§53B-20-101](#) (Property of Institutions to Vest in State Board)

2.3. Utah Code [Title 63A, Chapter 5](#) (State Building Board - Division of Facilities Construction and Management)

2.4. Policy and Procedures [R710](#), Capital Facilities

2.5. Policy and Procedures [R720](#), Capital Facilities Master Planning

R741-3. Definitions

3.1. "Assignable Area" is the sum of the areas in all rooms that can be used by the building occupants to conduct their responsibilities.

3.2. "Gross Area" is the sum of all floor areas of a building based on exterior dimensions.

3.3. "Nonassignable Area" is the sum of the circulation, custodial, mechanical and structural areas or the difference between gross and assignable area.

3.4. "Prioritization" is the determination as to which projects are most important to do.

3.5. "Qualification" is the determination if a particular type of space is needed, as determined through the use of planning guidelines.

R741-4. Qualification

4.1. Step 1: Assemble an Inventory of Institutional Space by Room Type -

Each institution annually prepares and submits a complete inventory of campus physical facilities space by room type. The relationship between types of space on institutional campuses is as follows:

4.1.1. Types of Space - The relationship between types of space on institutional campuses is that the gross area (the sum of all floor areas of a building based on exterior dimensions) is made up of two parts: (1) the assignable area (the sum of the areas in all rooms that can be used by the building occupants to conduct their responsibilities, such as classrooms, laboratories, offices, and certain unclassified spaces), plus the (2) nonassignable area (the sum of the circulation, custodial, mechanical and structural areas.)

Note: The inventory required by this procedure will be concerned with assignable areas located in campus facilities.

4.1.2. Categories of Space or "Room Types" - Categories of space, called "room types," for which assignable square feet inventories are submitted include those defined below. For a complete definition and description of these sorts of rooms, see the Revised 1992 Higher Education Facilities Inventory and Classification Manual, published by the National Center for Education Statistics. Institutions shall determine and report total assignable square feet at the institution using the twelve categories of room types listed below.

- a. Classroom Facilities (Room Type Codes 110 and 115):
- b. Laboratory Facilities (Room Type Codes 210, 215, 220, and 225):
- c. Research Laboratories (Room Type Codes 250 and 255):
- d. Office and Conference Space (Room Type Codes 310, 315, 350 and 355):
- e. Study Facilities (Room Type Codes 410, 420, 430, 440 and 455):
- f. Physical Education Facilities (Room Type Codes 520, 523, and 525):
- g. Special Use Facilities (Room Type Codes 510, 515, 530, 535, 540, 545, 550, 555, 560, 570, 575, 580, 585 and 590):
- h. General Use Facilities (Room Type Codes 600 to 699)
- i. Support Facilities (Room Type Codes 700 to 799)
- j. Health Care Facilities (Room Type Codes 800 to 899)
- k. Residential Facilities (Room Type Codes 900 to 999)

1. All Other Room Type Codes including unclassified, nonassignable, and structural areas.

4.2. Step 2: Determine Square Feet in Projects Already Approved for Planning or Funded for Construction but not yet Operational (and Other Changes to the Inventory Based on the Proposed Construction Projects):

4.2.1. Space to be Added - The primary purpose of this step is to incorporate into the inventory an accounting of space which will be added, remodeled or renovated in the future and for which funds have already been specifically allocated.

4.2.2. Space to be Demolished - A second aspect of this step is to provide information on the assignable square feet of campus facilities which are scheduled for demolition either currently or as a part of the proposed construction projects.

4.2.3. Complete Inventory - Thus, in order for the Commissioner's Office to have a complete facilities inventory, each institution provides a description of each funded capital facilities project, indicating when such projects will become operational and the amount of space these projects will add to the inventory or the amount of space to be renovated or remodeled in the project. The same information is needed for those campus facilities which are slated for demolition and removal from the inventory. As is the case with the annually submitted inventory, the information is to be provided for those room types and functions specified in the previous step.

4.3. Step 3: Develop and Adopt Space Factors and Standards - Space factors and standards for each room type are used in combination with enrollment projections to calculate space requirements for future years, as described later in step 5. This section presents the planning standards and guidelines used in the calculation process. The space standards to be used for each room type are described as follows:

4.3.1. Standards for Classroom Facilities (Room type codes 110 and 115) - Form of the standard: Assignable square feet (ASF) of classroom facilities per full-time equivalent (FTE) student, which consists of two components:

- a. Assignable square feet (ASF) per weekly student contact hour (WSCH) in classrooms. ["Weekly student contact hours" (WSCH) are synonymous with "weekly student hours" (WSH) and "student contact hours" (SCH)];
- b. Weekly student contact hours (WSCH) in classrooms per full time equivalent (FTE) student.

4.3.1.1. Classroom Utilization Standards Table - The following table includes classroom utilization standards adopted by the Division of Facilities, Construction

and Management and the State Building Board, utilization standards considered among the most stringent in the nation to achieve. The standards call for 75 percent scheduling of all classrooms during a 45-hour week, with a two-thirds station occupancy rate. They use a WSCH/FTE factor based on institutional type developed among the nine System institutions and the Commissioner's Office.

Type of Institution	ASF/N	RUR	SOR	WSCH/FTE
Research University	18.0	33.75	.667	12.5
Metro/Regional University	18.75	33.75	.667	13.0
Community College	19.5	33.75	.667	13.5

4.3.1.2. Formulas - The factors displayed in the table are then used in the following formulas. The first equation (1) is used to determine assignable square feet per weekly student contact hour for classroom space. ASF/WSCH describes a mathematical relationship between space allowed for each station (assignable square feet per station, ASF/N), the usage of rooms (room utilization rate, RUR, defined as the number of hours per week a room is scheduled for use), and occupancy (station occupancy ratio, SOR, defined as the proportion of stations used when the room is scheduled for use). The second equation (2) converts the results of the first equation to total assignable square feet of classroom space required:

a. $ASF/WSCH = (ASF/N)/[(RUR)*(SOR)]$

b. $ASF = (ASF/WSCH) * (WSCH/FTE) * (\text{Number of FTE Students})$

Note that the equations are based on inventory and enrollment information gathered during the fall term at each institution, i.e., the third week enrollment report for fall term and an institutional space inventory reported and predicted for the same period of time.

4.3.2. Standards for Laboratories (Room Type Codes 210, 215, 220 and 225):
 - Form of the Standard: Assignable Square Feet of laboratory facilities (Code 210, 215, 220, and 225) per Full Time Equivalent Student, which consists of two components:

a. Assignable square feet (ASF) per weekly student contact hour (WSCH) in laboratory facilities, and

b. Weekly student contact hours in laboratories per full time equivalent student.

4.3.2.1. Space Utilization Standards - As was the case with classroom space and for the same reasons, space utilization standards have been established for laboratories as follows:

- a. Assignable square feet per station (ASF/N).
- b. Room utilization rate (defined as the number of hours per week a class laboratory is scheduled for use - RUR).
- c. Station occupancy ratio (defined as the proportion of stations used when the class laboratory is scheduled for use - SOR).
- d. Weekly student contact hours in class and open laboratories per full time equivalent student.

4.3.2.2. Table of Space Utilization Standards - The standards call for 50 percent scheduling of all class labs during a 45-hour week, with a station utilization rate of 80 percent. The values of the standards and guidelines for class laboratory space are:

Type of Institution	ASF/N	RUR	SOR	WSCH/FTE
Research University	65	22.5	.80	4.5
Metro/Regional University	65	22.5	.80	5.0
Community College	65	22.5	.80	6.0

In addition to the above standards and coefficients, a vocational education adjustment factor was added to account for differences in institutional roles and missions, as follows: UofU, 1.10; USU and WSU, 1.25; SUU, 1.35; and community colleges, 1.5.

4.3.2.3. Formulas - The use of these guidelines in formulas conforms to that described for classrooms in the previous section:

- a. $ASF/WSCH = (ASF/N)/((RUR)*(SOR))$
- b. $ASF/FTE = (ASF/WSCH) * (WSCH/FTE)$

4.3.3. Research Laboratories (Room Type Codes 250 and 255): - Form of the Standard: Assignable square feet per faculty member by type of institution and by broad groupings of disciplines.

Note that the planning standards are based on total number of full time equivalent (FTE) faculty in the discipline group. Accordingly, some assumptions have been made about the proportions of faculty engaged in research at each of the types of

institutions. These assumptions are reflected in the assignable square feet allowances per FTE faculty for each institutional type.

4.3.3.1. Planning Standards - The planning standards are as follows:

Discipline Groupings	University	ASF/FTE Faculty Institutional Types Master's Degree & 4-Year Inst.	Community Colleges
Arts, Letters, Humanities, Behavioral Sciences, Business, Law, Communications	0	0	0
Architecture, Social Work, Education, Special Education	50	5	0
Agriculture, Natural Sciences	500	50	0
Allied Health	500	50	0
Nursing, Health, Math, Geography, Anthropology	300	30	0
Engineering, Natural Science, Pharmacy	1,000	100	0
Psychology, Computer Science	500	50	0
Trades and Technology	0	0	0
DCE, Extension, Other	0	0	0

The preceding standards do not suggest where such space is located. It is common, for example, that space used for theoretical research is located in the faculty member's office area.

4.3.4. Office and Conference Facilities (Room Type Codes 310, 315, 350 and 355): Form of the Standard: Assignable square feet of office facilities per full time equivalent (FTE) staff member or faculty requiring such space. In addition there is an allowance for additional square footage per FTE staff member or faculty for office service and conference facilities. The standard does not design individual rooms but allows for all office and conference needs on the campus.

4.3.4.1. Space Standards - The space standards are:

Type of Organizational Unit	Type of Institution	ASF/FTE Staff Required Space	Service and Conference Space - ASF/FTE Staff
All Units	All Institutions	130	40

4.3.5. Study Facilities (Room Type Codes 410, 420, 430, 440 and 455): NOTE: Study facilities space needs are based on American Library Association (ALA) and American Research Library Association (ARLA) standards and guidelines, as modified and adopted in the 1988 Utah Statewide Library Study commissioned by the State Legislature and conducted by external consultants in cooperation with DFCM and USHE institutions.

4.3.5.1. Minimum Library Holdings - With regard to the minimum number of library holdings, the guidelines are:

1. For Universities the minimum collection size should be:

- a. 85,000 volumes.
- b. 100 volumes per FTE Faculty Member.
- c. 15 volumes per FTE Student.
- d. 6,000 volumes per Master's Field when no Doctorate in the field is offered.
- e. 3000 volumes per Master's Field when Doctorate is offered.
- f. 25,000 per Doctorate Field.
- g. 350 per Undergraduate Major or Minor Field.
- h. 6,000 volumes per Sixth Year Specialist Degree Field.

2. For Community Colleges the minimum collection size should be:

- a. 28,000 volumes.
- b. 50 volumes per FTE Faculty Member.
- c. 5 volumes per FTE Student.
- d. 165 volumes per Subject Field of Study.

4.3.5.2. Study Space - The standards for study space are: 26 Assignable Square Feet per Station (ASF/N) with stations for 20 percent of the FTE student enrollment and 12.5 percent of the FTE faculty.

4.3.5.3. Holdings Storage Space - The space required for storage of library collections decreases as the number of volumes increases, namely: .10 ASF for 0-150,000 volumes; .09 ASF for 150,000-300,000 volumes; .08 ASF for 300,000-600,000 volumes; and .07 ASF for volumes beyond 600,000.

4.3.6. Physical Education (Room Type Codes 520, 523, and 525): - The guideline for physical education space is 35,000 ASF minimum plus 6 ASF per FTE student beyond the first 1,000 FTE students.

4.3.7. Special use facilities (Room Type Codes 510, 515, 530, 535, 540, 545, 550, 555, 560, 570, 575, 580, 585 and 590):

General use facilities (Room Type Codes 610, 615, 620, 625, 630, 635, 650, 655, 660, 665, 670, 675, 680, 685 and 690); and

Support facilities (Room Type Codes 710, 715, 720, 725, 730, 735, 740, 745, 750 and 760).

Within this category are a large number of different types of space. Most of these cannot be related firmly to a readily measurable variable within the institution.

4.3.7.1. Possible Future Comprehensive Standard for Three Categories of Space - When grouped together, the combination of these three categories of space (Special, General, and Support) seems to reveal a generally consistent pattern from one institution to another. However, the formula does not presently address this category of space although a common coefficient or separate coefficients may be proposed in the future.

4.4. Step 4: Project Enrollments - Models have been created in the Commissioner's Office to project institution-by-institution enrollments up to 10 years into the future. These projections are used to estimate facility requirements for a 10-year planning horizon.

4.5. Step 5: Calculate the Required Assignable Square Feet Required by Type of Space - Space required by room type is calculated using USHE enrollment projections and the space standards discussed in section 4.3.

4.6. Step 6: Determine the Incremental Assignable Square Feet Required - Based on space standards and enrollment projections, step 5 determines how many assignable square feet of each given room type generally are required to meet the needs of the institution. Step 6 determines the need or excess capacity for each room type at the institution when compared to the complete space inventory. The determination process compares space required as calculated by step 5 with space available as established by the inventory process, described in steps 1 and 2.

4.7. Step 7: Assemble and Evaluate the Proposed Capital Projects - This step gathers space and related information from each institution on the proposed capital facilities development projects for which State Board of Regents and Legislative approval is requested for construction, acquisition or operation and maintenance (O & M). Project descriptions, including a breakout of room types

and the effects of renovation on room types, are submitted simultaneously to the Commissioner's Office and DFCM.

4.8. Step 8: Conduct a Comparison of the Proposed Projects with Need and Implement the Qualification Process - This step compares the requested capital facilities projects with the net amount of space required as determined in step 6. This comparison by type of space and by planning year identifies actual percentage needs for space. In the case of remodeling and renovation projects, the procedure is adjusted slightly. The amount of the space to be remodeled in the proposed project will be subtracted from the inventory, prior to processing step 6. Then, the proposed project will be compared with a net space requirement exclusive of the space to be remodeled. Qualification of the remodeling projects is determined in the same way: i.e., is the space to be remodeled or renovated actually needed. Projects, whether involving new, remodeled or renovated space, which exceed the calculated net requirements (as determined in step 6) will not qualify for further consideration. Those which do qualify will be put through the prioritization process, outlined in step 9.

R741-5. Priorities - Step 9: Determine priorities for the projects which are determined to be qualified

5.1. Principles - One of the major difficulties in determining priorities among capital facilities development projects is that the total list of projects consists of a mixture of different kinds of construction projects, in many cases divergent in the purposes they serve, the manner in which they can be evaluated for funding, and their acceptability as high priority needs. For example, some projects are directly related to the primary activities of the institution (instruction, research or public service) while others are largely invisible to the public or constituents of a campus but are nonetheless indispensable for orderly, efficient, effective institutional operation. These differences make the task of interleaving priorities across institutional lines difficult at best. The prioritization procedure is based on the following principles:

5.1.1. There are two primary types of institutional capital facilities development projects--institutional infrastructure projects, and mission and role projects.

5.1.2. These two types of projects must be interleaved in order to allow for orderly, simple consideration by the Regents and subsequent modification and recommendation to the Utah State Building Board, the Governor and the Utah Legislature.

5.1.3. The relevant factors required to rank each type of project are similar but not identical.

5.1.4. Even in those cases where the factors used to rank particular projects are the same, the weight of the factors for each type of development project are different.

5.1.5. The interleaving of the types of projects, once ranked, is accomplished by having the maximum number of "points" generated by each type of project be the same.

5.1.6. Individual development projects are categorized based on the primary purpose of the facility and cannot be ranked in multiple categories. (e.g., points for need, or points for infrastructure, but not both.)

5.1.7. The ranking procedure allows for special substantiated circumstances such as legal or life threatening urgency or imminent loss of function.

5.2. Categories of Development Projects - The two categories of capital facilities development projects are:

5.2.1. Capital Facilities Development Projects Related Primarily to Institutional Infrastructure - These are projects designed and required primarily to improve or expand institutional infrastructure, including distribution of utilities, central storage, treatment of hazardous chemicals, heating and air conditioning systems, etc.

5.2.2. Capital Facilities Development Projects Related Primarily to Institutional Mission and Role - These are projects designed and required primarily to allow the approved mission and role of the institution to be accomplished. These projects pertain to remodeling of current facilities and construction of new space which house the primary programs and activities of the institution.

The pertinent factors and "scoring system" for the factors within the categories are:

5.3. Scoring System - Prior requirement: Before any project can be considered as a legitimate "Institutional Mission and Role" project, the facility must be included in the institution's approved master plan and the programs to be housed in the facility must have been approved by the Board of Regents. If the approval does not exist, the project will not be prioritized.

5.3.1. Project Qualification Ranking - Definition: The rank of the project based on the results of the qualification process. Ranking of each mission and role project will be accomplished as follows:

5.3.1.1. For each institutional mission and role project, a percentage of need will be calculated which displays the percent which the calculated need (based on the planning guidelines) exceeds the currently available space for a specific type of space.

5.3.1.2. For those institutional mission and role projects which include more than one type of space, then a percentage need will be calculated for each type of space in the project (again based on the planning guidelines), and then a weighted percentage for the entire project will be calculated based on the relative proportions each of the types of space represent of the total assignable square feet in the project.

5.3.1.3. The percentages resulting from the calculations described in sections 5.4.2.1 and 5.4.2.2 above will then be ranked sequentially from the highest to the lowest.

Points will be assigned to the ranked projects: 50 to the highest ranked project, 48 to the next highest, 46 to the next highest, and so on in even numbered increments to the lowest ranked project.

5.3.2. Nonappropriated Funding - Points may be awarded based on the documented proportion of the project's anticipated costs to be derived from nonappropriated sources of funds.

- A project with zero to five percent nonappropriated funding receives zero points. Thereafter, one point is added for each five percent increment up to a maximum of fifteen points for a project with seventy-six percent or higher nonappropriated funding.

5.3.3. Private Operation and Maintenance (O & M) Endowments - Points shall be awarded to projects in the Q&P formula where an O&M endowment [is] has been established from external private donations to maintain the facility (excluding student revenue fees, auxiliary revenues, research overhead moneys, or other funds generated and managed by the institutions).

Points in the Q&P formula for projects with O&M endowments shall be awarded based on the size of the endowment as a percentage of the total cost of the project, as follows: 0-5=0, 6-10=1.5, 11-15=3, 16-20=4.5, 21-25=6, 26-30=7.5, 31-35=9, 36-40=10.5, 41-45=12, 46-50=13.5, 50%+=15 points.

5.3.4. Factors for Bonus Points - In addition to the above criteria, an additional factor, "Associated Liability and Imminent Loss of Function," is included to be used on a bonus point basis. It allows high priority to be given to projects designed to resolve substantiated legal and/or life threatening liability or threatened with immediate loss of function of the existing facility due to natural disaster, closure because of violations of legal/safety/other requirements, or similar circumstances. The "Associated Liability and Imminent Loss of Function" can be applied only under these circumstances:

5.3.4.1. Only if the project has been given the highest possible priority by the institution requesting support (or if all projects above it on the institution's priority

list are of the same urgency due to liability or imminent closure and have met all the conditions listed).

5.3.4.2. Associated liability and imminent loss of function - Points may be awarded where the institution has substantiated by a statement from a qualified engineer, fire marshal, or attorney that a very significant legal and/or health/life safety risk is being solved by completion of the proposed project. "Very significant" is defined as, "the realistic estimate of the liability exceeds the cost of the project," as determined by the Commissioner's Office with assistance from an external consultant funded by the submitting institution. Also, these points may be awarded if there is a substantiation of the threatened, imminent loss of the function should the project not be authorized, as is the case when natural disasters have destroyed a particular academic building or code violations cause the structure to be closed.

- Points awarded range from zero to twenty-five based upon the severity of liability or loss of function as determined above.

5.3.5. Functionality of Infrastructure Projects - The Office of the Commissioner, in consultation with the Division of Facilities Construction and Management, may award points for infrastructure projects depending on the suitability of the current facility for the purposes intended.

- Imminent nonfunctional or nonexistent	41- 60	(Must be institution's top priority project in order to be considered.)
- Operational but seriously deficient	21- 40	
- Operational but deficient	1-20	

5.4. Interleaving of Projects - The interleaving of Institutional Infrastructure projects with Institutional Mission and Role projects in order to recommend to the Regents a single prioritized list will be accomplished by summing the total number of points generated by each project.

5.5. Institutional Priorities - Additional points are added to each project total based on the priority given to each project by the institution. The awarding of points for institutional priority is based on the following rules:

5.5.1. The total number of points available to a given institution to distribute to its Capital Facilities Development projects is generally based on the "size" of the institution. This rule reflects the fact that larger institutions generally have more

facilities needs than do the smaller institutions. Available points are as follows:

- UofU and USU	80
- WSU, SUU, UVSC, and SLCC	50
- Snow, Dixie, and CEU	30

5.5.2. No project ranked by an institution can receive more than 25 points. This rule states that a top priority project at a smaller institution is of equal value to the top priority project of a larger institution. The interval between the points assigned to an institution's top priority and each priority thereafter must be at least 3 points. For example: if an institution assigns 25 institutional priority points to its top project, it may assign no more than 22 points to its second priority and no more than 19 points to its third priority.

5.5.3. No two projects from any given institution can be awarded the same number of points. This rule forces each institution to rank order its development projects.

5.6. Regent Priority List - The points generated by the "Institutional Priority" procedure are then added to the totals generated by the previously described steps. These totals are ordered from highest to lowest with the result that institutional infrastructure and institutional mission and role projects are combined onto one list, and the project which has generated the most points is recommended to the Regents as the highest priority project in the system, at the current time.

5.7. Operation and Maintenance Costs (O & M) - The estimated O & M costs for each facility and the source of funding those costs will be listed for each facility on the priority list and will be approved by the Regents as part of the approval process for construction or acquisition of each facility.

5.7.1. In determining the number of facilities to be recommended for construction or acquisition, the Regents will consider the magnitude of future O & M obligations and the potential impact of approval on other components of the operating budget. The goal of the Regents is that future annual state funded O & M costs on approved new facilities should not represent a disproportionate share of new ongoing appropriated state tax funds.

5.7.2. The intent of the Regents is to encourage proper consideration of the O & M impact on future operating budgets at the time new capital facility projects are approved, since O & M costs cease to be optional after facilities are in place and will be recommended for funding under the Regent's O & M policy.

R741-6 Special Points for Institutional Mission Centrality or USHE Program Criticality

6.1 Special Points - In addition to factors currently included in the numeric scoring scheme which comprises the Qualification and Prioritization Formula (Q&P), other factors may arise which do not lend themselves to quantification or do not fit into an existing Q&P category. Two such factors are institutional mission centrality and USHE statewide program criticality. Up to five additional points may be assigned to a project which demonstrates the need to house a program which is especially central to an institution's mission or meets a recognized USHE statewide critical program priority. A project with the highest centrality or criticality need is assigned up to five points, a second project up to four points, a third project up to three points, and so forth.

(Approved July 22, 1988, amended May 26, 1989, April 17, 1992, May 14, 1993, November 16, 1993, March 25, 1994, September 23, 1994, September 11, 1997, July 12, 1999, and September 13, 2002.)

MEMORANDUM

September 4, 2002

TO: Utah State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: 2003-2004 Non-state Funded Capital Development Projects

Issue

Attached for review and approval by the Regents are descriptive materials for five non-state funded capital development projects, three from Utah State University and two from Weber State University.

Background

The 2000 Utah Legislature passed legislation that altered the process for approving projects built or acquired with non-state funds in the USHE. Most non-state capital projects will continue to require approval from the Regents, State Building Board, and State Legislature. A small number of projects, however, no longer require the approval of all three bodies. Up to three different approval paths exist for non-state funded capital development projects.

The 2003-2004 project descriptions are segregated into two sections based on the two different applicable paths to approval for non-state funded capital development projects. Each section begins with an explanation as to why the projects presented in the section must follow the specific approval route addressed there. Once approved by the Regents, projects needing additional approvals will be forwarded on to the appropriate body for consideration.

Projects Needing Regent, Building Board, and Legislative Approval

Projects in this category are major development projects that are being built on state land and for which state involvement will be needed in the future, i.e. funding for state operations and maintenance (O&M) or capital improvements, or for Legislative authorization to bond. Three of the five projects fall into this category. They are as follows:

USU Laboratory Animal Research Center Addition. Using grants and institutional funds, USU proposes building a \$600,000 addition to the Laboratory Animal Research Center (LARC). LARC provides housing and animal care for the small animal research and teaching needs of the USU campus. The size of the addition would be 2,300 gross square feet (GSF), and would include a minimally finished cage storage room and a fully finished area divided into five animal rooms. The building's mechanical system would also be upgraded to meet ventilation requirements for the animal rooms. Operations and

maintenance (O&M) expenses for the addition would be \$12,200, for which USU plans to seek 100% state support.

USU Quinney Biology/Natural Resources Building West Entrance Addition. The Quinney Biology/Natural Resources (BNR) Building was constructed in 1961 and contains instructional and research space for the Department of Biology and other departments within the College of Natural Resources. In addition, there is a large 300-seat auditorium that is used for a variety of University classes. The West Entrance Addition is the first of three phases of renovation and additions to the BNR Building. This project would enhance access and circulation space for the auditorium, provide additional laboratory space for teaching and research, and significantly improve the image of the facility by creating an entire new main entrance with new landscaping that will also be used as an outdoor laboratory for Natural Resources classes. The addition consists of 3,600 GSF and carries an estimated cost of \$1,900,000. The annual projected O&M increase is \$22,900, and the University is requesting state support for 100% of the O&M requirements.

WSU Teaching and Learning Technology Center Renovation/Remodel. With the relocation of the Collett Art Building occupants to the newly constructed Kimball Visual Arts Center, WSU has received private support to convert this 1966 two-story facility into the Teaching and Learning Technology Center. The new center will include a 7 days per week, 24 hours per day information commons, faculty technology support, and the Communication Arts and Technology Services area, along with the potential to house other programs such as WSU-Online or Student Technology Consultants as the building infrastructure is upgraded. The estimated cost to renovate the 18,361 GSF is \$3,000,000. The University seeks 100% state support for anticipated O&M cost increases of \$16,300.

Projects Needing Regent and Building Board Approval

Projects in this category are development projects that are being built on state land and for which no legislative assistance will be sought for financing the project presently or in the future. These projects are as follows:

USU Locker Room Building. USU proposes building a 2-level 9,660 GSF locker room facility near the existing track which will contain shower and locker facilities, a meeting room, and offices for the track, soccer, and softball athletic programs. Current locker room and coaching offices for the track, soccer, and softball programs are either inadequate or non-existent. The estimated cost of \$1,400,000 for the project will be provided by private donations and athletic funds. The University is not requesting state support for O&M.

WSU Track and Field Locker Rooms. This project would provide a 4,420 GSF locker room facility for the men's and women's track and field teams at WSU. Currently the women's track team shares an inadequately small locker room with the women's soccer program. This project would be built on the south end of the west football stadium stands to match the appearance of the weight room on the north end. The

facility will include two 45-locker rooms with training and equipment areas. The estimated cost is \$750,000 and would be provided from private donations. WSU will provide the estimated \$20,000 per year in O&M costs through non-state sources.

Policy Implications

Regents Policy R710, Capital Facilities, makes specific distinction between non-state funded facilities for which the Regents will request state-funded O&M and those for which the institution will need to find non-state sources for O&M. Three relevant categories of on-state funded facilities exist in R710: (1) facilities the Regents will automatically support for stated funded O&M, (2) facilities for which the Regents automatically require sources other than state funding for O&M, and (3) facilities that will be considered on a case-by-base basis.

State-funded O&M – Policy language related to the first O&M category is as follows:

"An acquisition, construction, or remodeling project funded from private sources, or from a combination of private sources and other non-state appropriated funds will be eligible for state appropriated O&M when the use of the building is primarily for approved academic and training purposes and associated support and is consistent with the programmatic planning and facilities master plan requirements of the institutions."

Projects requesting O&M that clearly fall under this category include: (1) USU Quinney Biology/Natural Resources Building West Entrance Addition, and (2) WSU Teaching and Learning Technology Center Renovation/Remodel.

Non-state Funded O&M – The portion of R710 that disallows certain facilities from being supported by state-funded O&M reads as follows:

"In most cases, if the acquisition, construction or remodeling project is not primarily for approved academic and training purposes or associated support, it will not be eligible for state appropriation O&M funding. Examples of such space might include research space not generate student credits or the equivalent thereto, football stadia, softball, baseball, soccer fields, basketball arenas, self-support auxiliary space, i.e., college bookstores, food service, student housing, recreational services, student organizations, private vendors and student health services spaces, etc."

Neither of the two projects that fall into this category – the USU Locker Room Building and the WSU Track and Field Locker Rooms – have requested state-funded O&M.

Case-by-Case – A third part of Policy R710 allows for case-by-case exceptions for certain types of facilities:

"The Board, on a case by case basis, may determine that an acquisition, construction or remodeling project to be used primarily for purposes other than approved academic and training purposes and associated support should be eligible for state appropriated O & M funds in whole or in part. Each request for such Board consideration must be accompanied by a detailed statement showing how space types included in the facility will relate to important institutional activities such as instruction, research generating student credits, and service within the institution's role statement. Examples of such space might include museums, theaters, community outreach and research spaces administered by academic units that generate academic student credits or the equivalent thereto, etc.."

The project for which an exception to Policy R710 has been requested is the USU Laboratory Research Animal Center Addition. Material in Attachment 1 provides added detail on this project. A summary of all five projects is listed in Attachment 2.

Recommendation

It is the recommendation of the Commissioner that the Regents consider and adopt an exception to Policy R710 for the USU Laboratory Research Animal Center Addition so that it is eligible to be supported for state-funded O&M. It is also recommended that all five non-state funded projects presented in this tab be approved.

Cecelia H. Foxley, Commissioner

Capital Development Project Non-State Funded Request Need Statement

(Note: In order to facilitate brevity, instructions in italics may be deleted in the submitted document.)

Agency/Institution: Utah State University

Project Name: Laboratory Animal Research Center Addition

Project Type: Design/Construction
(Design/Construction, Construction, Planning, Purchase, Renovation etc.)

Preliminary Cost Estimate: \$600,000

Total Project Space (Gross Square Feet) 2,300

New Space (Gross Square Feet)	2,300
Remodeled Space (GSF)	0
Space to be Demolished (GSF)	0

Increase in State Funded O&M \$12,200

New Program Costs \$0

New FTEs Required (Included in additional O&M amount)

Sources of Funding Grants, Institution Funds

Existing Facility:

Currently the LARC animal space is fully occupied. The antiviral research group's animal needs have increased and a significant additional increase is expected in the future.

Project Description:

This project proposes an addition to the Laboratory Animal Research Center (LARC) including a minimally finished cage storage room and a fully finished area divided into five animal rooms. The building mechanical systems also need to be upgraded to meet the ventilation requirements of the animal rooms.

Planning/Programming:

Programming will not be necessary for this project.

Site and Infrastructure:

The proposed addition is within the existing building site.

Justification/Business Plan:

The mission of the LARC is to provide housing and animal care for the small animal research and teaching needs for the entire campus. This project is needed in order to meet both the current and future animal care needs in support of ongoing teaching and research.

USHE Non-state Funded Capital Development Projects

Requests Requiring Approval for 2003-2004

September 4, 2002

Project	<u>Approvals Needed</u>			Source of Funding	Estimated Additional GSF	Estimated Project Dollar Amount	Estimated State O&M Request
	<u>Regents</u>	<u>Building Board</u>	<u>Legis-lature</u>				
USU - Laboratory Animal Research Center Addition	✓	✓	✓	Grants/Institutional Funds	2,300	600,000	12,200
USU - Locker Room Building	✓	✓		Private Donations/Athletics Funds	9,660	1,400,000	0
USU - Quinney Biology/Natural Resources Building West Entrance Addition	✓	✓	✓	Private Donations	3,600	1,900,000	22,900
WSU - Teaching Learning Technology Center - Renovation/Remodel	✓	✓	✓	Private Donations	0	3,000,000	16,300
WSU - Track and Field Locker Rooms	✓	✓		Private Donations	4,420	750,000	0
Totals					19,980	\$7,650,000	\$51,400

2002-2003 Regents Non-State Funded Projects Request:	324,700	\$63,000,000	\$693,300
2001-2002 Regents Non-State Funded Projects Request:		\$262,840,000	\$3,033,900
2000-2001 Regents Non-State Funded Projects Request:		\$81,250,000	\$846,400
1999-2000 Regents Non-State Funded Projects Request:		\$105,412,000	\$1,193,050

MEMORANDUM

September 4, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: Utah College of Applied Technology Associate of Applied Technology (AAT) Degrees in Computer Aided Drafting and Design, Information Technology and Medical Assisting – Action Items

Issue

Utah College of Applied Technology (UCAT) officials request approval to offer Associate of Applied Technology (AAT) Degrees in Computer Aided Drafting and Design (CADD), Information Technology (IT), and Medical Assisting (MA) effective fall, 2002.

Background

In September, 2001, the Utah State Legislature passed H.B. 1003, creating the Utah College of Applied Technology. Comprised of ten regional colleges across the State of Utah, the UCAT is the tenth institution in the Utah System of Higher Education (USHE), and has a specific charge, in statute, to develop and deliver Associate of Applied Technology Degrees in an open-entry/open-exit, competency-based format. Five of the regional applied technology colleges (ATCs) — the Bridgerland ATC, Ogden-Weber ATC, Davis ATC, Central ATC and Uintah Basin ATC — are well-established institutions with a long history of offering competency-based certificates of completion in an open-entry/open-exit environment. The other five ATCs — the Salt Lake-Tooele ATC, Mountainland ATC, Southeast ATC, Southwest ATC and Dixie ATC — are at different levels of institutional maturity with instructional offerings ranging from courses to certificate programs.

Creation of the proposed AAT Degrees, the first to be developed by the UCAT, involved an extensive process of evaluating current course and program offerings at the ten UCAT colleges. The decision to develop degrees in the proposed areas was based upon criteria which included the following:

- Supply and demand
- National standards
- Political climate

- Strength of the current curriculum across UCAT regions and regional needs
 - Wage and career path
 - Feasibility of creating the foundation for a future Bachelor of Applied Technology (BAT) Degree

Faculty teams comprised of representatives from each of the regional colleges met over a period of several months to develop each proposed degree, constructing them in a manner that provides a core curriculum at each regional college that will deliver the degree, as well as elective choices that meet regional needs. The general education courses for the proposed degrees, consisting of 13 semester credits, were developed to be consistent with those required for the Associate of Applied Science Degree at other USHE institutions. Courses were selected to maximize ease of transferability to other USHE colleges and universities.

The three proposed degrees are built upon the foundation of strong certificate programs already offered at several UCAT campuses with existing budgets, faculty, staff, equipment and learning resources in place. Students are currently enrolled in these certificate programs. The addition of the general education component will provide an opportunity for these students to obtain an associate degree with no additional expense to the State of Utah. It is important to note that approval for these degrees is requested for one institution, the Utah College of Applied Technology. There will be no additional expense associated with delivery of the proposed degrees on UCAT campuses that already offer a certificate program. If, through future regional master planning efforts, it is mutually determined that there is a need for the UCAT to offer these degrees in other regions, it will be the responsibility of the appropriate UCAT regional college administration to budget accordingly.

Preliminary student survey information, which is included in each of the attached proposals, shows significant student interest in the three proposed degree programs. Projected enrollment estimates for each of the proposed programs are included in the attached proposals. In addition, labor market information from sources including the Utah Department of Workforce Services and the U.S. Department of Labor are included in each of the proposals. According to the U.S. Department of Labor, employment opportunities for drafters are expected to increase about as fast as the average for all occupations (10 to 20 percent) through 2010; and much faster than the average for all occupations (36 percent or more) for information technology workers and medical assistants.

Policy Issues

During the proposal review process, representatives from other USHE institutions raised several questions related to the proposed AAT Degrees. Some of the questions were specific to the particular

degree and have been addressed by UCAT officials, but others were general and illustrated the need for clarification about the degrees that will be offered by the UCAT.

1. **Potential Duplication of Effort:** Officials from SUU and SLCC asked for clarification regarding whether approval of the proposed degrees is for each regional college or for the Utah College of Applied Technology. These questions were founded upon concerns about possible duplication of degree programs in regions where other USHE institutions already offer the Associate of Applied Science Degree in one or all of the proposed program areas.

Degree approval will be for the Utah College of Applied Technology — not for each regional college. Therefore, although not all regional colleges may be prepared to offer a degree at the time of Regents' approval, they may offer the degree at a later time **if resources are available and regional planning efforts support such a program offering**. This highlights the critical importance of an ongoing, serious, formal regional planning process with all ATE providers participating. This is the only way the concerns regarding the duplication of program offerings can be properly addressed. Development of such a process, in conjunction with the Utah State Office of Education, is currently underway.

Officials at SLCC also requested that Regents' Policy R315-5, *Service Area Education Coordination Plans*, be applied in the review process of the proposed degrees. It is important to note, as indicated in the response of UCAT officials to this concern, that this policy was approved before the UCAT existed. The policy will need to be revised to include UCAT's role in the delivery of applied technology education (ATE) in the state of Utah, which is defined by statute as statewide. Again, it is the regional planning process, with all ATE deliverers in the region participating, that will be most effective in addressing concerns regarding duplication.

2. **General Education:** Representatives from several USHE institutions expressed confusion regarding the way in which the general education component of the proposed degrees will be delivered. The UCAT is not authorized to offer the general education courses required for completion of the AAT Degree. Regional colleges are, and will continue to be, involved in negotiations with the other USHE institutions for the delivery of these courses. The objectives of the courses and the credit awarded will be consistent with standard practice at the offering institution. UCAT students currently have the option of taking traditional general education courses on a USHE campus or via distance delivery. In addition, USHE institutions are being asked to develop courses, for delivery on UCAT campuses, that will be offered on a more flexible schedule with a content focus more specific to workplace applications.
3. **College Credit:** The UCAT is precluded, by its authorizing legislation, from offering college credit. However, the proposed degrees include references to "credit equivalents." These credit

equivalents are based upon 30 clock hours to one semester credit hour, which is consistent with U.S. Department of Education's definitions for federal financial aid. The use of credit equivalents was adopted to provide a way of indicating the "value" of the student's educational experience, in the same way that semester credits assign such a value. It is important to remember that the UCAT is an open-entry/open-exit institution that uses a competency-based instructional model. Credit equivalents are in no way intended to be a measure of seat time, but rather as a means to equate the value of the educational attainment of students in both a credit and non-credit environment.

4. **Program Review Committee:** The new Program Review Committee, consisting of Regents Jim Jardine (chair), Pamela Atkinson, Daryl Barrett, and George Mantes, has reviewed these three AAT Degrees and recommends Board approval, based on the "Category II – Accreditation" exception to the moratorium on the approval of new programs.

Options Considered

After the Regents have reviewed the proposal from the Utah College of Applied Technology to offer Associate of Applied Technology Degrees in Computer Aided Drafting and Design, Information Technology, and Medical Assisting, they may raise issues, request additional information, deny the request or approve the request.

Commissioner's Recommendation

It is the recommendation of the Commissioner that the Regents approve the Utah College of Applied Technology's request to offer Associate of Applied Technology Degrees in Computer Aided Drafting and Design, Information Technology, and Medical Assisting effective Fall 2002.

Cecelia H. Foxley, Commissioner

CHF/LF
Attachments

SECTION I

The Request

Utah College of Applied Technology (UCAT) officials request approval to offer an Associate of Applied Technology (AAT) Degree in Computer Aided Drafting and Design, effective Fall 2002. The institutional Board of Trustees approved this program on May 1, 2002

SECTION II

Program Description

Complete Program Description - The proposed Computer Aided Drafting and Design Program is hands-on and competency-based. The Program will prepare students for drafting (mechanical, architectural, structural, civil, piping, graphic illustrator, and electrical) careers. Drafting technicians prepare working drawings from design layouts, sketches and verbal instruction; prepare drawings using conventional methods as well as a CAD (Computer Aided Drafting) system; undertake tracing work, drawing changes, single detail drawings, and full project drawings and checking; perform mathematical calculations related to the above fields using algebra, trigonometry, plane and solid geometry, applied mechanics, strength of materials, and basic physics; and use calculators, computers, the Machinery's Handbook, and other engineering reference materials. They must be capable of producing neat and legible lettering both freehand and with specialized equipment. In addition, the drafting technician's tasks require working closely with both professional and nonprofessional people. They also do liaison work between the shop or field and the engineering office.

Faculty with extensive industry and technical backgrounds will instruct students in current industry standard practices. The program is designed to prepare students to be competitive for employment upon graduation. Although students may not be able to complete the entire degree at every regional college, they will be able to complete components of the degree and then finish the program at another campus. A matrix outlining the availability of the AAT Degree and associated courses at each UCAT regional can be found in Appendix A.

A summary of requirements for completion of the Associate of Applied Technology Degree follows. Thirty clock hours equates to one semester credit equivalent. The complete curriculum for the proposed program, including course descriptions, is included in Appendix B.

No sample class schedule is provided. Because all UCAT regional colleges operate on an open-entry/open-exit model, it is difficult to outline a proposed semester schedule. Instead, students are encouraged to take courses, which total six classroom hours per day (for full-time), transitioning from one course to the next as competencies are mastered, until such time as they have met the degree requirements.

General Education Requirement - 13 Semester Credits/390 Clock Hours

General education courses are consistent with those required for the Associate of Applied Science degree at other USHE institutions. Courses were selected to maximize ease of transferability to other USHE colleges and universities. The general education component, when delivered in a traditional format,

will total 13 semester credits. Using a conversion factor of 30 clock hours to one semester credit, this equates to 390 clock hours.

Technical Core Courses – 690 Clock Hours/23 Semester Credit Equivalents

The technical core classes for the UCAT Computer Aided Drafting and Design AAT Degree have been developed utilizing the Developing a Curriculum (DACUM) process and the Utah State Office of Education Program Planning and Curriculum Development Guide for Drafting/CAD, published July 2001. The guide was developed using the National Occupational Skill Standards for Computer Aided Drafting that was published in August 1994.

Students must complete a minimum of 690 hours or 23 semester credit equivalents. Core courses are required for all students who wish to earn the AAT Degree.

Technical Elective Courses – A Minimum of 810 Clock Hours/27 Semester Credit Equivalents

The technical elective courses are unique to specific regional colleges. The technical electives allow each region the flexibility to meet the specialized market demands of their area as well as utilize their resources to their maximum benefit. Students must complete a minimum of 810 hours or 27 semester credit equivalents and specialize in at least one technical elective area while completing the degree requirements. Students may select the balance of their elective course work from different specialization areas, with advisor approval of the student's elective course work plan. Students may not be able to complete the entire degree at every regional college, but will be able to complete components of the degree and then complete the program at another campus.

The proposed degree requires a total of 1890 clock hours, or 63 semester credit equivalents.

Purpose of Degree - The Utah College of Applied Technology is directed, by statute (53B-2a-104), to develop competency-based associate of applied technology degrees to be offered by the regional applied technology colleges. During the process of determining which certificate programs at the regional colleges would provide the best foundation for these AAT degrees, UCAT officials considered several factors including the following: (1) supply and demand, (2) programs that must address national standards; (3) the strength of the current curriculum, (4) wage/career path, and (5) the feasibility of creating the foundation for a future Bachelor of Applied Technology Degree in the area. The proposed AAT Degree in Computer Aided Drafting and Design meets these criteria.

In addition, the proposed degree provides students who are working toward a certificate with the opportunity to pursue the level of training and education that is appropriate for them. The program has been developed with recognition of the importance of multiple entry and re-entry points for students who wish to return and build upon previously attained competencies. Certificates for the completion of segments of the curriculum will be available to students in the degree program. And, although students will not be able to complete the degree in its entirety at each UCAT campus, they will be able to complete parts of the curriculum and apply that course work at other campuses for completion of the degree. The proposed degree not only gives students the appropriate credentials for the competencies that they have achieved, but also provides them with an appropriate pathway to further training, education, and degrees at one of the other Utah System of Higher Education Institutions.

Admission Requirements - There are no special admission requirements for this program. Admission is consistent with general UCAT admission procedures and guidelines.

Student Advisement - One of the strengths of the Utah College of Applied Technology is the individualized advising that students receive. Qualified career guidance technicians and career counselors are available to students and College applicants who are interested in career exploration and career decision-making, including training options. Occupational interests, transferable skills, and other factors that contribute to developing informed training and employment goals can be reviewed with career guidance staff in Student Services. Office counselors are available to review progress and program issues and to make training modifications as needed during the training process. Students are also encouraged to meet with CADD faculty for advising needs.

Justification for Number of Hours - The proposed AAT Degree requires 1890 clock hours. This is equivalent to 63 semester credit hours, which is within the standard hours for an Associate of Applied Science Degree.

External Review and Accreditation - All current Utah College of Applied Technology programs maintain active employer advisory committees. These committees meet regularly to advise Regional College faculty and management on program, curriculum, and instructional issues. Additionally, at some Regional Colleges, the committee annually completes and submits a written report on the program. A list of members of the Computer Aided Drafting and Design Employer Advisory Committee is included in Appendix C.

Projected Enrollment: Projected headcount enrollment for the first five years of the program follows. Based on preliminary student surveys, the figures represent a conservative estimate of the number of students at the ten regional colleges who are expected to pursue the AAT Degree.

	FY 02	FY 03	FY 04	FY 05	FY 06	FY07
UCAT (TOTAL)						
Projected Degree Enrollments	141	150	158	166	171	179

Expansion of Existing Program: The proposed Computer Aided Drafting and Design AAT Degree builds upon the foundation of an existing program and, with the addition of a general education component, provides an additional option for students. Students currently enrolled at the UCAT regional colleges have different goals. Some students may desire a certificate of completion; others may be enrolled in short-term employment upgrade options. For this reason, current enrollment figures are not necessarily relevant to the proposed degree, and are not included here.

Faculty - A certificate program already exists with faculty in place. No additional faculty are required for the program. In keeping with the UCAT's emphasis upon preparing students to meet current workforce needs, faculty have extensive experience in industry along with the necessary educational credentials to provide students with the most current knowledge in this ever-changing and advancing field. This particular field is dramatically impacted by the rapidly advancing technology and both students and faculty are forced to "keep-up" with technology. A list of existing faculty who will support the proposed program can be found in Appendix C.

Staff - The Utah College of Applied Technology and its member regional colleges will administer the Computer Aided Drafting and Design AAT Degree Program. As this is an existing certificate-based program at the regional colleges, no additional administrative or secretarial/ clerical staff will be required.

Library - The Regional Colleges, (formerly applied technology centers), have not historically had centralized libraries. Instead, appropriate resources (manuals, textbooks, and industry documents) are available in the individual program areas. The current Computer Aided Drafting and Design materials are adequate and the projected operating expenses for the program are sufficient to ensure the necessary replacement and supplemental materials purchases. The creation of UCAT, for which accreditation will be sought through the Northwest Commission on Colleges, requires expanded library resources. These resources will be provided through UCAT membership in the Utah Academic Library Consortium (UALC). UALC membership provides students with access to all existing Utah academic libraries through resource sharing agreements. Students also have electronic access to on-line collections through the Pioneer Library.

Learning Resources - Sufficient financial resources are available on an annual basis to provide in-program and on-campus space, time, materials, equipment, and media access to maximize potential for all students. The library/media program provides print, non-print, and electronic materials, which directly support school goals and curriculum reflecting a diversity of learning styles, levels of skill, and cultural differences. Electronic resources are available to provide technical access in proportion to the number of students being simultaneously served.

SECTION III

Need

Program Necessity - The proposed degree responds to a current and estimated future need for highly trained individuals to meet the needs of local business and industry. Drafting specialization varies geographically, depending on the needs of local industry — the UCAT has designed this degree to accommodate those regional needs. As Utah continues to expand in highly technical industries as a means of promoting economic development, having highly-trained and appropriately qualified employees to meet the demand is essential. The presence of a highly trained workforce throughout the various regions of the state will attract the attention of potential high-tech, start-up companies, which in turn, will add significant value to the state's efforts in economic development.

Computer Aided Drafting and Design is involved with virtually every product that is manufactured or constructed in this state or across the country. Drafting work has many specialties and affects many different aspects of daily life. For example, Aeronautical drafters prepare engineering drawings detailing plans and specifications used in the manufacture or repair of aircraft, missiles, spacecraft, and any of their related parts. Architectural drafters draw architectural and structural features of buildings and other structures. Civil Drafters prepare drawings and topographical and relief maps used in major construction or civil engineering projects, such as highways, bridges, pipelines, flood control projects, and water and sewage systems. Electrical drafters draw wiring diagrams, circuit board assembly diagrams, schematics, and layout drawings used in the manufacture, installation and repair of electronic devices and components. Mechanical Drafters prepare detail and assembly drawings, indicating dimensions, fastening methods, and other requirements. This is just a small sampling of the drafting specialties and the impact these specialties have on local business and industry.

In keeping with UCAT's mission, the emphasis of the proposed program is on hands-on, open-entry/open-exit, competency-based training. Classroom and laboratory activities are intertwined to provide students with the technical skills necessary to be successful in their respective industries, and properly prepared for continuing their education at one of the other Utah System of Higher Education institutions if they so choose.

Labor Market Demand - Career opportunities remain strong in the industry. Drafting jobs are available with architects, cities, counties, states, the federal government, engineering and surveying companies, mines, research and development companies, and the mechanical, structural steel, architectural development, electrical and electronics, construction, and fire protection industries.

Industrial growth and increasingly complex design problems associated with new products and manufacturing processes are expected to expand the demand for drafting services. Further, drafters are beginning to break out of the traditional drafting role and increasingly do work traditionally performed by engineers and architects, thus increasing the need for drafters. However, the greater use of CAD equipment by drafters, as well as by architects and engineers, should limit demand for lesser-skilled drafters. In addition to those created by employment growth, many job openings are expected to arise as drafters move to other occupations or leave the labor force. Opportunities should be best for individuals who have at least two years of postsecondary training in a drafting program that provides strong technical skills and who have considerable skill and experience using CAD systems. CAD has increased the complexity of drafting applications while enhancing the productivity of drafters. It also has enhanced the nature of drafting by creating more possibilities for design and drafting. As technology continues to advance, employers will look for drafters with a strong background in fundamental drafting principles, a higher level of technical sophistication, and an ability to apply this knowledge to a broader range of responsibilities.

According to the U.S. Department of Labor, the employment of drafters is expected to grow about as fast as the average (10 to 20 percent) for all occupations through 2010. Projections for the State of Utah for annual job openings for drafters, from now through the year 2008, are 150 per year. (Source: U.S. Bureau of Labor Statistics and Utah Dept. of Workforce Services).

Earnings for drafters vary by specialty and level of responsibility. Median hourly earnings of architectural and civil drafters were \$16.93 in 2000. Median hourly earnings of architectural and civil drafters in engineering and architectural services in 2000 were \$16.75. Median hourly earnings of electrical and electronics drafters were \$18.37 in 2000. In engineering and architectural services, the average hourly earnings for electrical and electronics drafters were \$17.30. Median hourly earnings of mechanical drafters were \$18.19 in 2000. The average hourly earnings for mechanical drafters in engineering and architectural services were \$16.98. (Source: U.S. Department of Labor *Career Outlook Catalog*.)

Student Demand - Yearly student demand is driven by two independent but interrelated dynamics: (1) the constantly changing technology which impacts even smaller employers who are impelled into CAD-type operations regardless of their particular businesses, and (2) the reputation for excellence surrounding the applied technology colleges. Because this degree has so many varying specialties and competencies, there is a high student demand for this subject matter. Preliminary student surveys indicate that over half of currently enrolled students are interested in pursuing the AAT Degree. After completing the requirements for an AAT Degree in Computer Aided Drafting and Design, graduates may immediately enter the workforce as entry-level or intermediate-level drafters. Within just a few years of practical on-the-job

experience, appropriately degreed drafters quickly advance to become senior drafters, designers, or supervisors. In addition, many graduates will pursue continuing education in fields of architecture or engineering, either immediately upon completion of their A.A.T. degree or while employed

Similar Programs - Although there are programs at other USHE institutions with some overlapping content at both the associate and bachelor's level, the proposed Associate of Applied Technology Degree is a new degree which has never before been offered in the State of Utah. It is important to remember that a CADD Certificate Program has existed at many of the regional colleges for many years. The proposed degree builds upon that program, and offers an alternative delivery format (open-entry/open-exit) and an alternative way in which students can progress through their program of study and demonstrate mastery of the material (a competency-based approach). This alternative approach is expected to appeal to some students and not to others. The student's choice will depend upon his/her goals and the type of educational experience that he/she desires. What is most important is that the Utah System of Higher Education will, with the addition of the AAT Degree, provide an additional opportunity for students to complete their training and education goals.

Collaboration with and Impact on Other USHE Institutions - The creation of the Utah College of Applied Technology has brought about new relationships between the former ATCs and the other USHE institutions. Because the UCAT cannot offer general education course work for credit, representatives from the regional colleges are currently coordinating with the other USHE institutions in their regions for the delivery of the general education component of the AAT Degree. UCAT students will be encouraged to pursue educational opportunities beyond the regional college level, and it is hoped that many of them will go on to earn bachelors and advanced degrees. Weber State University and Utah Valley State College have developed Bachelors of Applied Technology (BAT) Degrees which are also being submitted for Regents' approval. These degrees have been developed cooperatively with regional ATC partners and will provide a clear path for some students to move from the AAT degree to a Bachelor's degree in their chosen field of study. In addition, nearly all regional applied technology colleges have already negotiated regional articulation agreements with their USHE partners. Those ATCs that do not have these agreements, will seek them as part of the development of AAT degree programs and the creation of general education courses.

Benefits - By providing training that meets the needs of industry, and provides an alternative instructional delivery format and assessment process for students, the UCAT and the USHE are able to show the taxpayers a demonstrable return on their investment. The proposed degree is particularly well suited as it provides a path to employability in a relatively high-demand field.

It is anticipated that the AAT Degree will appeal to students who have not previously viewed themselves as "college bound". Their training experience at a UCAT regional college will provide the student with a foundation for success if they choose to enroll in other USHE programs to continue their education. USHE institutions will benefit from students who are motivated, self-starters, and take responsibility for their education.

Consistency with Institutional Mission - The Utah College of Applied of Technology was created for the purpose of providing open-entry/open-exit, competency-based short-term, certificate and degree programs that prepare students to enter the job market. Clearly, the proposed Associate of Applied Technology Degree program is market-driven and provides technical training to individuals seeking employment and upgrade training.

SECTION IV

Program and Student Assessment

Program Assessment – Goals for the proposed program and Utah College of Applied Technology measurements of success follow. The program goals will be evaluated yearly to determine that the program is meeting the needs of business and industry as well as the needs of students. Industry standards for successful employment will guide goal setters. Enrollment, completers, and employment will be evaluated to determine if the program is performing as required with an employment goal of 90 percent or better.

Outcome Goal	Evaluation Method
80% of students who are formally admitted to the program will graduate.	Graduation data provided by regional colleges
90% of graduates who are seeking employment are placed in jobs.	Placement data provided by regional colleges
Program graduates will meet industry standards established by regional college program advisory committees comprised of representatives from at least three technology firms.	Monitoring and verification by regional colleges

Expected Standards of Performance - The Utah College of Applied Technology will use the nationally recognized Designer/Drafter curriculum from the 1998 DACUM Research Chart. These are the tasks and duties identified by practicing Designer/Drafters as essential skills for designer/drafters. The local craft advisory committees for the regional ATC will verify and modify, if needed, the competencies for the various regions across the state. These competencies, which must be mastered for completion of the program, are included in Appendix E.

Student Assessment - Instructors will teach students through hands-on competency skill training, and will assess students using a combination of hands-on skill competency testing and written examination. These tests will be correlated with business and industry standards established by advisory committees. Students will demonstrate competency in each curriculum requirement individually. In addition, cumulative written examinations will be administered and the combination of competency testing and written examinations will be used to determine student status. Finally, each student's success on-the-job will be monitored and the instructors will evaluate job performance with input from employers to determine if the student's competency (as demonstrated) in the program matches industry needs.

Continued Quality Improvement - Ongoing program quality improvement will be achieved through feedback from the Program Advisory Committee, composed of active, concerned members who work cooperatively with the instructors, administrators, and governing board to improve the quality of the applied technology education program. The main responsibility of the Advisory Committee is to review current program content and operations. School personnel, in turn, have the responsibility of implementing changes, if appropriate, and reporting to the committee.

The purpose of the Advisory Committees at the local level is to assure continuing relevance of applied technology programs. The attainment of high-quality technical training would not be possible

without the close involvement of knowledgeable persons from the business and industry community. The nature of technical change requires that training institutions be kept informed of the current and anticipated needs of business and industry. Advisory Committees act as a link between the education system and the business community through deliberations focusing on common needs and goals.

A list of Program Advisory Committee chairs for each regional colleges offering this degree follows. A complete list of committee members is included in Appendix D.

Shauna Hillyard , NACO Industries – Bridgerland ATC
 Don Naser, Hales Sand & Gravel - Central ATC
 Jason Felt, Ensign Engineering & Land Surveying - Davis, ATC
 Ron Smith , Internal Revenue Service – Ogden-Weber ATC
 Hal Marshall , Uintah Engineering & Land Survey – Uintah Basin ATC

SECTION V

Finance

Budget – The projected budget for the first five years of the proposed program follows. It is important to note that these budget figures are based upon the current operating budget for the existing certificate programs at each regional college that will be offering the entire AAT Degree. Budget figures include support for high school and adult students, certificate candidates, upgrade training, apprenticeship students (where appropriate) and the proposed AAT Degree. No additional funds are required; this operating budget is currently in place.

Additionally, the funds identified under capital equipment are those deemed necessary to continue the program at its present level of performance.

	FY 02	FY 03	FY 04	FY 05	FY 06
UCAT Total					
Salaries	\$565,785	\$565,785	\$577,101	\$588,643	\$600,416
Benefits	\$193,030	\$193,030	\$202,682	\$212,816	\$62,400
Current Expense	\$62,390	\$62,400	\$62,400	\$62,400	\$62,400
Capital	\$23,130	\$23,100	\$23,100	\$23,100	\$23,100
Total	\$844,335	\$844,315	\$865,282	\$886,958	\$909,372

Funding Sources - The Computer Aided Drafting and Design program is already established at the College and, therefore, has sufficient funds to continue operation. The addition of an Associate of Applied Technology Degree does not require any resources that are not already allocated.

Impact on Existing Budgets - Because this degree is based upon an existing program, no impact on existing budgets is anticipated.

Appendix A

Availability of the AAT Degree and Related Course Work by UCAT Regional College

AAT Degree in CAD/Drafting										
	BATC	CATC	DATC	DXATC	MATC	OWATC	SLATC	SEATC	SWATC	UBATC
Core Courses	X	X	X			X				X
Mechanical Design	X	X	X			X				X
CAD	X	X	X							X
Architectural Design	X	X	X			X				X
Computer Graphics	X	X				X				X
Structural Steel	X	X	X			X				
Process Pipe Des.	X	X	X			X				X
Civil Design	X	X				X				X
Electronics Design	X	X								
Coop Work Exp	X	X	X			X				X
*Anticipated for next year using existing faculty										

Appendix B

UCAT Computer Aided Drafting and Design Associate of Applied Technology Degree Curriculum

General Education Requirement

General education courses are consistent with those required for the Associate of Applied Science degree at other USHE institutions. Courses were selected to maximize ease of transferability to other USHE colleges and universities. The general education component, when delivered in a traditional format, will total 13 semester credits. Using a conversion factor of 30 clock hours to one semester credit, this equates to 390 clock hours.

Technical Core Courses

The technical core classes for the UCAT Computer Aided Drafting and Design AAT Degree have been developed utilizing the Developing a Curriculum (DACUM) process and the Utah State Office of Education Program Planning and Curriculum Development Guide for Drafting/CAD, published July 2001. The guide was developed using the National Occupational Skill Standards for Computer Aided Drafting that was published in August 1994.

Students must complete a minimum of 690 hours or 23 semester credit equivalents. Core courses are required for all students who wish to earn the AAT Degree.

Technical Elective Courses

The technical elective courses are unique to specific regional colleges. The technical electives allow each region the flexibility to meet the specialized market demands of their area as well as utilize their resources to their maximum benefit. Students must complete a minimum of 810 hours or 27 semester credit equivalents and specialize in at least one technical elective area while completing the degree requirements. The balance of the technical electives may be taken from different specialization areas with advisor approval of the student's elective course work plan. Students will not be able to complete the entire degree at every regional college, but will be able to complete components of the degree and then complete the program at another campus.

GENERAL EDUCATION REQUIREMENTS	Hours	Semester Credits
Composition	90	3
English 1010 – Introduction to Writing		
Math		
Math 1050 – College Algebra	120	4
Human Relations	90	3
Electives (related to the degree)	90	3

	Total General Education	390	13
CORE COURSES - 690 hours	Hours	Credit Equiv.	
Technical Drafting	120	4	
Basic Computer Aided Drafting	120	4	
Architectural Drafting	120	4	
Pictorial Drafting	90	3	
Computer Literacy	90	3	
Occupational Skills	60	2	
Applied Technical Math	90	3	
Total Core Courses	690	23	

ELECTIVE COURSES - 810 hours minimum required		
Mechanical Design Electives	Hours	Credit Equivalents
Mechanical Drafting	60	2
Machine Design	60	2
Production Drafting (GD&T)	90	3
Engineering Design	90	3
3D Parametric Solid Modeling	120	4
Descriptive Geometry	60	2
Manufacturing Processes	60	2
Machine Shop	90	3
Principles of Technology 1	60	2
Principles of Technology 2	60	2
Special Problems in Mechanical Design	15-60	.5-2
Computer Aided Design Electives	Hours	Credit Equivalents
Advanced Computer Aided Drafting	90	3
Computer Technology	90	3
Programming for CAD	90	3
Computer Numerical Control (CNC)	90	3
Special Problems in CAD Design	15-60	.5-2
Architectural Design Electives	Hours	Credit Equivalents
Residential Architectural Drafting	120	4
Commercial Drafting & Detailing	120	4
Architectural 3D Modeling & Rendering	90	3
Architectural CAD	90	3
Special Problems in Architectural Design	15-60	.5-2
Computer Graphics Design		
3D Modeling & Animation Design	120	4

Technical Illustration	90	3
Character Design	90	3
Computer Illustration	90	3
Computer Graphics	90	3
Web Design	90	3
Special Problems in Illustration Design	15-60	.5-2
Structural Steel Design Electives	Hours	Credit Equivalents
Structural Steel Detailing	90	3
Structural Design Applications	90	3
Special Problems in Structural Design	15-60	.5-2
Process Pipe Design Electives	Hours	Credit Equivalents
Process Pipe Drafting	90	3
Pipe Fabrication & Design	90	3
Special Problems in Pipe Design	15-60	.5-2
Civil Design Electives	Hours	Credit Equivalents
Civil Drafting	90	3
Topographical Drafting	90	3
Surveying	60	2
Special Problems in Civil Design	15-60	.5-2
Electronics Design Electives	Hours	Credit Equivalents
Electronic Fundamentals	90	3
Electronic Drafting Design	90	3
Electronic CAD	90	3
Special Problems in Electronic Design	15-60	.5-2
Cooperative Work Experience	Hours	Credit Equivalents
Cooperative Work Experience	15-180	.5-6
Total Electives	810	27
General Education	390	13
Core	690	23
Drafting Electives	810	27
Total	1890	63

UCAT Computer Aided Drafting & Design AAT Degree
Associate of Applied Technology Degree Requirement Course Descriptions

Core Competencies

Technical Drafting

4 Credits Equivalent (120 Hours)

This class teaches the use of basic techniques for mechanical drafting. Instruction is given on techniques such as: lettering, use of drawing equipment, geometric construction, sketching, multi-view drawings, dimensioning, section views, auxiliary views, and the introduction of computer aided drafting.

Competencies:

- Use and maintain basic drafting equipment
- Demonstrate correct lettering and sketching techniques
- Utilize basic geometric construction
- Utilize hardcopy reproduction processes
- Construct multi-view drawings (orthographic projection)
- Construct sectional drawings
- Construct auxiliary drawings
- Apply basic annotation and dimensions to a drawing
- Use a CAD system as a drafting tool

Basic Computer Aided Drafting

4 Credits Equivalent (120 Hours)

The course is an introduction to the use of computer aided drafting software and hardware. Instruction will be given on items such as: hardware and software, operating systems, coordinate systems, drawing commands, editing commands, and plotting.

Competencies:

- Use operating systems for the CAD environment
- Identify hardware of CAD workstations
- Configure CAD workstations
- Utilize Cartesian coordinate systems
- Execute application software for CAD
- Develop CAD drawings
- Modify CAD drawings
- Plot CAD drawings

Architectural Drafting

4 Credits Equivalent (120 Hours)

This class teaches the basic theory for architectural drafting and includes techniques such as: history, lettering, equipment, sketching, room design, sections, elevations, foundation design, and details, and the hardware and software used in architectural computer aided drafting.

Competencies:

- Use and maintain basic drafting equipment
- Demonstrate correct architectural lettering and sketching techniques
- Demonstrate architectural history and design principles
- Demonstrate room planning

- Construct plot plan drawings
- Construct foundation plans
- Construct floor plans
- Construct stair detail drawings
- Construct fireplace details
- Construct elevation drawings
- Apply principles of residential architectural drafting
- Use a CAD system as a drafting tool

Pictorial Drafting

3 Credits Equivalent (90 Hours)

A course in pictorial drawing representation, which includes topics such as: oblique, isometric, diametric, assemblies, exploded assemblies, shade and shadow techniques, and perspective drawings.

Competencies:

- Construct isometric drawings
- Construct oblique drawings
- Construct perspective drawings
- Apply shadowing and shading techniques
- Use a CAD system as a drafting tool

Computer Literacy

3 Credits Equivalent (90 Hours)

This course provides a fundamental understanding of computing including knowledge and use of computer hardware, software, and operating systems. The course will cover basic use and common features of applications (word processing, spreadsheet, and database) including internet use and e-mail. Recommended prerequisite: keyboarding 25 wpm.

Competencies:

- Identify computing fundamentals such as computer hardware, software, and operating systems
- Learn to navigate the windows environment
- Gain knowledge of primary applications such as common program, word processing, spreadsheet, and database functions
- Learn to use online computing including Internet and electronic mail

Occupational Skills

2 Credits Equivalent (60 Hours)

A course in occupational job skills such as: resume writing, interviewing skills, business relations, business and team management, technical writing, portfolio development, and presentation design.

Competencies:

- Construct a portfolio
- Construct a resume
- Develop interview skills
- Apply team management skills
- Develop presentations
- Apply technical writing skills

Applied Technical Math**3 Credits Equivalent (90 Hours)**

A course designed to teach practical problems in mathematics for drafting and CAD. The course will cover topics such as: applied geometry, applied algebra, applied trigonometry, graphs, ratio and proportion, measurement, and other applied math skills relating to design.

Competencies:

- Demonstrate mastery of basic arithmetic
- Solve problems using geometry
- Solve problems using algebra
- Solve problems using trigonometry
- Apply math skills to solve design problems

Mechanical Design Electives**Mechanical Drafting****2 Credits Equivalent (60 Hours)**

A course designed to teach topics such as: threads, fasteners, weldments, developments, dimensioning and tolerancing. Students will produce sets of complete working production drawings.

Competencies:

- Produce different types of threads on drawings
- Produce flat pattern developments
- Apply industry standard dimensions to drawings
- Apply industry standard tolerances and fits to student drawings
- Complete entire set of working drawings including proper dimension techniques
- Identify different types of fasteners
- Produce working drawings involving weldments

Machine Design**2 Credits Equivalent (60 Hours)**

A course designed to teach principles and techniques of machine drafting such as: symbols, conventions used in the representation of gears, cams, jigs, fixtures, belts, and chains as well as the use of tools and equipment for measuring and material specification.

Competencies:

- Apply correct industry approved symbols to working drawings
- Produce drawings utilizing gears, cams, jigs, or fixtures
- Produce drawings that apply principles and techniques of machine drafting
- Identify various measuring tools utilized in producing drawings
- Identify various measuring tools utilized in machine shops
- Identify materials and abbreviations used in producing drawings

Production Drafting (GD&T)**3 Credits Equivalent (90 Hours)**

Advanced principles and techniques of production drawings such as: geometric dimensioning and tolerancing, assembly and production dimensioning, general tolerancing, symbols and terms, geometric characteristics, classes of fit, surface quality, and production specifications.

Competencies:

- Identify various GD&T symbols and terms used in production drawings
- Produce general tolerancing to produced drawings
- Identify proper placement of datums
- Produce feature control frames and properly place on drawings
- Produce drawings with proper GD&T symbols attached

Engineering Design**3 Credits Equivalent (90 Hours)**

A course in engineering problem solving covering subjects such as: design group projects, the design process, mechanical systems, electrical systems, energy systems, and design for manufacturability. This course is designed to help students develop an understanding of stresses and loads, with an introduction to statistics, dynamics, and strength of materials.

Competencies:

- Understand the engineering profession and its disciplines
- Demonstrate engineering problem solving
- Demonstrate the design process
- Analyze mechanical systems
- Analyze energy systems
- Use a computer system for engineering design
- Use a computer system for engineering data analysis
- Understand design optimization
- Understand design budgets
- Develop engineering presentations
- Design for manufacturability

3D Parametric Solid Modeling**4 Credits Equivalent (120 Hours)**

A course covering advanced 3D solid modeling and parametric design. Topics covered include: sketching planes, extruding, lofting, sweeps, feature manager, mating parts, assemblies, and complete working drawings from parametric models.

Competencies:

- Develop sketching planes
- Develop models using extrude, loft, and sweep
- Apply constraints
- Develop assembly models
- Develop a complete set of working drawings from a 3D model

Descriptive Geometry**2 Credits Equivalent (60 Hours)**

The fundamentals of descriptive geometry covered in this course are: skew lines, piercing points and plane intersections, perpendicular relationships, revolution, intersection and development, and vector geometry.

Competencies:

- Apply fold lines to drawings
- Prepare drawings utilizing piercing points problems
- Prepare drawings involving intersections

- Prepare drawings involving development
- Prepare drawings involving vector geometry

Manufacturing Processes

2 Credits Equivalent (60 Hours)

A course designed to teach principles and techniques of manufacturing processes and material specification such as: finishes, casting, forging, plastics, welding, symbols, jigs, and fixtures as well as the use of tools and equipment for measuring and material specification.

Competencies:

- Identify welding processes
- Draw welding representations
- Define and describe various manufacturing materials, material terminology, numbering systems, and material treatment.
- Discuss casting processes and terminology
- Explain the forging process and terminology
- Describe manufacturing processes
- Define and draw the representation of various machined features
- Explain tool design and drafting practices
- Discuss the statistical process quality control assurance system
- Evaluate the results of an engineering and manufacturing problem
- Explain the use of computer aided manufacturing (CAM) in today's industry
- Discuss robotics in industry
- Describe plastic manufacturing processes

Machine Shop

3 Credits Equivalent (90 Hours)

A course designed to teach principles and techniques of manufacturing processes by learning to operate the lathe and the mill. Students will be trained in areas of machining and inspection, blueprint reading, and GD&T with the use of manual machines as well as an introduction to Computer Numerical Control (CNC) machines.

Competencies:

- Read shop drawings
- Demonstrate shop safety
- Use layout tools
- Demonstrate proper use of measuring tools
- Demonstrate proper use of hand tools
- Operate metal working equipment
- Operate a lathe
- Operate a mill
- Discuss computer numerical control

Principles of Technology I

2 Credits Equivalent (60 Hours)

An applied physics course that covers scientific concepts of work, force, rate, resistance, energy, power, transformers, and mathematic computations necessary to perform experiments involving momentum as applied to mechanical, fluid, and electrical systems found in modern industry. Laboratory activities featuring measurement and instrumentation are emphasized.

Competencies:

- Calculate force and torque
- Calculate work
- Understand linear, angular, and flow rate
- Calculate resistance
- Calculate potential and kinetic energy
- Calculate mechanical, fluid, and electrical power
- Calculate mechanical, fluid, and electrical force transformers, linear and angular momentum

Principles of Technology II**2 Credits Equivalent (60 Hours)**

This applied physics course covers mathematic computations necessary to perform experiments involving scientific concepts of vibrations, energy, conversion, transducers, radiation, light, and time constraints as applied to mechanical, fluid and electrical systems found in modern industry. Laboratory activities featuring measurement and instrumentation are emphasized.

Competencies:

- Understand waves and vibrations
- Calculate mechanical, fluid, electrical, and thermal energy conversion
- Calculate mechanical, fluid, electrical, and thermal transducers
- Understand radiation
- Understand light and optical systems
- Calculate time constants

Special Problems in Mechanical Design**.5-2 Credits Equivalent (15-60 Hours)**

This is an advanced course in mechanical layout and design using CAD and solid modeling techniques. Students, with approval, may design and layout projects of their choice. Final details are designed so they could be fabricated in a machine shop.

Competencies:

- Demonstrate the applied concepts of mechanical design
- Use a computer system for mechanical design
- Apply industry standards of mechanical design

Computer Aided Design Electives**Advanced Computer Aided Drafting****3 Credits Equivalent (90 Hours)**

This class teaches the use of computer-aided drafting software. The class will also cover basic and advanced functions of current industry standard CAD software such as: symbol libraries, isometrics, 3D, slides, file translation, scanning, animation, attributes, as well as linking CAD with word processors and database programs, lisp, advanced 3D, screen menus, icon menus, line type creation, hatch pattern creation, text font creation, customization, and installation. The course will also cover topics such as: introductory 3D solid modeling and parametric design using current industry standard modeling programs.

Competencies:

- Know what symbols are
- Create symbol libraries
- Apply symbols to increase drawing productivity

- Know how to use external references in multiview layouts in drawings
- Know how to create a bill of materials and assign attributes to enhance drawing details
- Create isometric drawings with associated dimensioning
- Know the basic principles for three-dimensional drawings
- Understand and apply external commands, scripts, and slide shows for drawing presentation
- Have a basic understanding of the Windows file manager

Computer Technology

3 Credits Equivalent (90 Hours)

A course designed to teach advanced computer skills for the CAD environment, covering topics such as: system administration, computer networking, PC repair, maintenance, and computer upgrades.

Competencies:

- Understand microcomputer hardware and software
- Build a computer system
- Install, configure, and upgrade a workstation
- Describe the function of a motherboard, processor, and memory
- Install and configure operating systems
- Install and configure application software
- Install and configure a network card
- Troubleshoot networking systems

Programming for CAD

3 Credits Equivalent (90 Hours)

A course designed to teach customizing of the CAD environment using advanced computer skills such as: lisp programming, visual basic programming and menu modification.

Competencies:

- Understand and apply the basic elements that comprise an AutoLISP program
- Create and use AutoLISP program files
- Create and use storage data lists
- Understand and apply the math functions used in AutoLISP programs
- Apply the various techniques, expressions, looping, and list manipulation to create programs
- Understand the basic principles of selection sets
- Know how to create, use, and debug AutoLISP programs for use in drawings
- Understand the basic use of symbol tables
- Know the basic programming of dialog boxes

Computer Numerical Control (CNC)

3 Credits Equivalent (90 Hours)

A course designed to teach G & M Code programming. The class is designed for those interested in advancing their skills in the machining CAD CAM software. Advanced training will be covered in the conversion of CAD 3D models into machined parts.

Competencies:

- Demonstrate understanding of G&M Coding
- Convert CAD drawings to G&M code
- Operate industry standard CNC software
- Use a computer system to control machining equipment

Special Problems in Computer Aided Design .5-2 Credits Equivalent (15-60 Hours)

This is an advanced course in computer design using CAD and solid modeling techniques. Students, with approval, may design and layout projects of their choice. Final details are designed so they could be fabricated in a machine shop or put forward in a proposal format.

Competencies:

- Demonstrate the applied concepts of computer-aided design
- Use a computer system for computer aided design
- Apply industry standards of computer-aided design

Architectural Design Electives

Residential Architecture 4 Credits Equivalent (120 Hours)

A course designed to guide the student through the development of a complete set of residential building plans. The class includes topics such as: introduction to building codes, site planning, energy conservation, and solar energy alternatives plus detailing stairs, doors, windows, and other architectural elements.

Competencies:

- Draw floor plans
- Draw exterior and interior elevations
- Draw sections and details
- Develop site plans
- Apply building code principles
- Develop complete set of construction drawings

Commercial Drafting & Detailing 4 Credits Equivalent (120 Hours)

A course in commercial design specifications such as: zoning and regulations, plan development, and commercial architectural requirements. Students will develop a complete set of commercial building plans.

Competencies:

- Determine occupancy, fire restrictions, and egress requirements
- Determine buildable area and zoning restrictions
- Apply ADA standards
- Develop reflected ceiling and enlarged floor plans
- Develop building elevations
- Develop sections and details
- Identify commercial building materials
- Develop project manual sections

Architectural 3D Modeling & Rendering 3 Credits Equivalent (90 Hours)

A course covering advanced 3D architectural modeling and parametric design. Architectural 3D CAD models will be developed, animated, and rendered. Presentation style drawings will be produced. Students will learn current industry standard modeling, rendering, and animation software.

Competencies:

- Develop 3D model
- Add materials and textures
- Create scenes and environments
- Create and control camera views
- Control lighting, shading, and color

Architectural CAD**3 Credits Equivalent (90 Hours)**

A course on the development of working drawings for a residence using the computer and current, industry standard, architectural CAD software. The class includes introduction to architectural 3D models. Students will develop a complete set of residential building plans using CAD.

Competencies:

- Create walls and roofs
- Insert windows and doors
- Insert plumbing and cabinetry
- Control entity display
- Develop complete construction drawings from 3D models

Special Problems in Architectural Design**.5-2 Credits Equivalent (15-60 Hours)**

This is an advanced course in computer design using CAD and solid modeling techniques. Students, with approval, may design and layout projects of their choice. Final details are designed so they could be submitted to a building department for approval and construction or presented in a proposal format.

Competencies:

- Demonstrate the applied concepts of architectural design
- Use a computer system for architectural design
- Apply industry standards of architectural design

Computer Graphics Design Electives**3D Modeling & Animation Design****3 Credits Equivalent (90 Hours)**

A course covering advanced 3D modeling and parametric design. 3D CAD models will be developed, animated, and rendered. Presentation style drawings will be produced. Students will learn current industry standard modeling, rendering, and animation software.

Competencies:

- Use a computer system for modeling and animation
- Produce 3D CAD models
- Develop computer animations
- Construct presentation drawings
- Apply shading and lighting techniques
- Apply materials to 3D models

Technical Illustration

3 Credits Equivalent (90 Hours)

A course covering topics such as: the production of pictorial drawings using oblique, isometric, perspective drawings, vanishing points, exploded views, fasteners, line contrast, and various shading techniques. Students will learn current industry standard, rendering, and illustration software.

Competencies:

- Produce and render oblique drawings
- Produce and render isometric drawings
- Develop and render perspective drawings
- Prepare presentation drawings
- Produce drawings with shading techniques
- Use a computer for illustration

Character Design

3 Credits Equivalent (90 Hours)

A course covering advanced 3D Character modeling and animation design. 3D character models will be developed, animated, and rendered. Presentation style drawings will be produced. Students will learn how to design, build, texture, rig, and animate three-dimensional characters using current industry standard character animation software.

Competencies:

- Develop 3D characters
- Animate 3D characters
- Render 3D characters
- Apply materials to models
- Develop presentation animations

Computer Illustration

3 Credits Equivalent (90 Hours)

A course designed to teach the student techniques and procedures for developing artwork and computer graphics using a personal computer and current industry standard illustration software.

Competencies:

- Use a computer system as a rendering tool
- Illustrate drawing objects
- Learn to operate current industry illustration software
- Print illustrated drawings

Computer Graphics

3 Credits Equivalent (90 Hours)

A course designed to teach fundamental techniques and principles for editing images. Creation of digital and photo images from scanning or video capture will also be covered.

Competencies:

- Use a computer system for editing digital images
- Learn and operate current industry image editing software
- Print digital images
- Scan images
- Use a digital camera

Web Design

3 Credits Equivalent (90 Hours)

A course covering web design creation and publication to the Internet. The course will cover areas such as: basic HTML, HTML forms, HTML graphics, HTML editors, publishing to the Internet, and basic web design and graphic layout principles.

Competencies:

- Use a computer system for developing web pages
- Learn and operate current industry web page design software
- Develop web pages using HTML
- Place graphics in web pages
- Publish a web site to the Internet
- Understand web design graphic principles

Special Problems in Computer Graphics Design

.5-2 Credits Equivalent (15-60 Hours)

This is an advanced course in illustration design using CAD techniques. Students, with approval, may design and layout illustration design projects of their choice. Final details are designed so they could be put forward in a proposal or portfolio format.

Competencies:

- Demonstrate the applied concepts of computer graphics design
- Use a computer system for computer graphics design
- Apply industry standards of computer graphics design

Structural Steel Design Electives

Structural Steel Detailing

3 Credits Equivalent (90 Hours)

A course covering topics such as: the fundamentals of structural design, structural steel detailing of beams, columns, braces, templates, marking and numbering systems, bill of materials, welding symbols, and erection drawings to AISC standards.

Competencies:

- Identify take off process
- Identify structural shapes and sizes
- Identify miscellaneous steel shapes and applications
- Identify connection types, bolted, welded, knife, and bearing
- Identify bill of materials
- Identify job specifications
- Identify AISC standards

Structural Design Applications

3 Credits Equivalent (90 Hours)

This course includes topics such as: the proper views and dimensioning practices for columns, stairways, handrails, cross-bracing, tank bottom layouts, tank shell, and tank framing drawings. Also introduces general estimating procedures.

Competencies:

- Create shop drawings for structural members
- Create shop drawings for miscellaneous steel

- Create placement drawings
- Create isometric structural connection drawing, detailing
- Demonstrate take off process
- Create bill of materials

Special Problems in Structural Steel Design .5-2 Credits Equivalent (15-60 Hours)

This is an advanced course in structural design using CAD techniques. Students, with approval, may design and layout structural design projects of their choice. Final details are designed so they could be fabricated or put forward in a proposed format.

Competencies:

- Demonstrate the applied concepts of structural steel design
- Use a computer system for structural steel design
- Apply industry standards of structural steel design

Process Pipe Design Electives

Process Pipe Drafting 3 Credits Equivalent (90 Hours)

A course covering topics such as: single-line and double-line pipe symbols, flow diagrams, notes, material lists, and instrumentation diagrams. The class covers both isometric and orthographic projection piping drawings using CAD to develop drawings.

Competencies:

- Identify piping connection
- Identify material specifications
- Demonstrate pipe sizing and joining process
- Identify hydraulic theory and formulas
- Identify and use Project Data Management (PDM)

Pipe Fabrication & Design 3 Credits (90 Hours)

A course studying piping connections such as welded, screwed, soldered, flanged, bell and spigot, using manufacturer and reference materials specifications. The class covers information on pipe sizing and specifications, methods of joining pipe, valves, pumps, tanks, vessels, tubing, fittings, and hydraulic theory and formulas.

Competencies:

- Identify pipe symbols, flow diagrams, and instrumentation diagrams
- Demonstrate take off process
- Create material list
- Create isometric and orthographic projection pipe drawing
- Create placement drawings

Special Problems in Process Pipe Design .5-2 Credits Equivalent (15-60 Hours)

This is an advanced course in pipe design using CAD techniques. Students, with approval, may design and layout pipe design projects of their choice. Final details are designed so they could be fabricated or put forward in a proposal format.

Competencies:

- Demonstrate the applied concepts of process pipe design
- Use a computer system for process pipe design
- Apply industry standards of process pipe design

Civil Design Electives**Civil Drafting****3 Credits Equivalent (90 Hours)**

A course covering the preparation of drawings associated with surveying and the related computations. Includes cartography, mapping, basic surveying, mapping scales, legal descriptions, contour lines, property and subdivision plot drawing, and plan-profile sheets.

Competencies:

- Demonstrate basic surveying procedures
- Demonstrate civil drafting theory and design principles
- Construct contour drawings
- Construct cross-sectional drawings
- Construct open traverse drawings
- Construct mapping scale drawings
- Construct property surveying drawings
- Construct sub-divisions drawings
- Use a CAD system as a drafting tool

Topographical Drafting**3 Credits Equivalent (90 Hours)**

This course studies map drawing, contours, stadia points, plans and profiles and introduces surveying procedures.

Competencies:

- Identify symbols and legends of mapping
- Demonstrate cartography theory and design principles
- Construct contour drawings
- Construct closed traverse drawings
- Construct mapping scale drawings
- Construct basic plan and profile drawings
- Demonstrate basic surveying procedures
- Use a CAD system as a drafting tool

Surveying**2 Credits Equivalent (60 Hours)**

A course covering the history of surveying mathematics, field notes, measurement and computations, basic surveying instruments and equipment, leveling procedures, GPS, bearing computations, topography, mathematical traverse closures, area computations, and basic property surveying.

Competencies:

- Demonstrate surveying history and theory principles
- Demonstrate right triangle trigonometry theory
- Demonstrate field note taking procedures
- Demonstrate use of basic surveying equipment

- Demonstrate leveling procedures
- Demonstrate basic property surveying techniques

Special Problems in Civil Design

.5-2 Credits Equivalent (15-60 Hours)

This is an advanced course in civil design using CAD techniques. Students, with approval, may design and layout civil design projects of their choice. Final details are designed so they could be fabricated or put forward in a proposal format.

Competencies:

- Demonstrate the applied concepts of civil design
- Use a computer system for civil design
- Apply industry standards of civil design

Electronic Design Electives

Electronic Fundamentals

3 Credits Equivalent (90 Hours)

The course covers topics such as: basic electronic theory, study and application of DC and AC concepts, semiconductors, digital electronics, and microcomputers.

Competencies:

- Understand basic electronic theory
- Understand theory of DC/AC circuits
- Understand semiconductor/analog circuits
- Understand digital gates, circuits, and systems
- Understand basic repair and theory of microcomputers

Electronic Drafting Design

3 Credits Equivalent (90 Hours)

A course designed to teach principles and techniques of electronic drafting which includes topics such as: block flow and single line diagrams, electronic symbols, schematic and logic diagrams, printed circuitry, packaging, pictorial drawing, wiring diagrams, and introduction to CAD in electronic drafting.

Competencies:

- Understand basic electronic theory
- Construct block, single line, flow, decision, and process diagrams
- Identify electronic symbols, components, and references
- Develop schematic and logic diagrams
- Generate printed circuit board layout drawings
- Develop electronic enclosure drawings
- Develop electronic pictorial drawings

Electronic CAD

3 Credits Equivalent (90 Hours)

A course designed to teach advanced principles and techniques of electronic drafting using computer aided design and current industry standard electronic drafting CAD software.

Competencies:

- Operate industry standard CAD equipment to develop electronic drawings
- Understand basic electronic theory

- Construct block, single line, flow, decision, and process diagrams
- Identify electronic symbols, components, and references
- Develop schematic and logic diagrams
- Generate printed circuit board layout drawings
- Develop electronic enclosure drawings
- Develop electronic pictorial drawings

Special Problems in Electronic Design .5-2 Credits Equivalent (15-60 Hours)

This is an advanced course in electronics design using CAD techniques. Students, with approval, may design and layout electronics design projects of their choice. Final details are designed so they could be fabricated or put forward in a proposal format.

Competencies:

- Demonstrate the applied concepts of electronic design
- Use a computer system for electronic design
- Apply industry standards of electronic design

Cooperative Work Experience

Cooperative Work Experience .5-6 Credits Equivalent (15-180 Hours)

This course gives students the opportunity to apply knowledge and techniques learned in the classroom to an actual job experience. Classroom instruction must precede the job experience, or the student must be enrolled in the program at the same time as the work experience.

Competencies:

- Demonstrate and apply drafting concepts
- Work in the drafting industry
- Operate industry standard CAD software

Appendix C

Faculty

Bridgerland Applied Technology College

John E. Davidson, Dept. Head/Instructor

Qualifications:

Master of Science at Utah State University in Industrial Technology GPA 4.0

Project Completion Spring 2002.

Currently taking classes towards a PHD in Education - Curriculum & Instruction at Utah State University

Bachelor of Science, Utah State University, Logan, Utah, 1988

Major: Industrial Technology Education - College of Engineering.

Special Emphasis: Drafting\Industrial Technology

State of Utah Technology Certification

Endorsement Area: Secondary Education\ Technology Education\ Drafting\Multimedia Design\Vocational Drafting\ Trade & Industrial Certification

Drafting 2 yr. Diploma, Utah State University, Logan, Utah, 1986

Owner/Designer, Specialized Design Systems SDSCAD, 1987 to present

Instructor/Dept. Head, Bridgerland Applied Technology College 1987 to present

Project Designer/Department Manager, Weslo Inc. 1985-1988

Minette Morris, Instructor

Qualifications:

Drafting Certificate Bridgerland Applied Technology Center, 1995

State of Utah Technology Education Certification

Endorsement Area: Multimedia Design\Vocational Drafting\ Trade & Industrial Certification

Instructor, Bridgerland Applied Technology College 1995 to present

Desktop Publishing, Western Ag Credit, 1998 to present

Jason Peterson, Instructor

Qualifications:

Associate of Science, Utah State University, 1998

Drafting Certificate Bridgerland Applied Technology Center

State of Utah Technology Education Certification

Endorsement Area: Vocational Drafting\ Trade & Industrial Certification

Instructor, Bridgerland Applied Technology College 2001 to present

Drafter/Tool Designer/Engineering Assistant, Autoliv, 1993 to 2001

Callan Salmon, Instructor**Qualifications:**

Bachelor of Science, Utah State University, Logan, Utah, 1997
Major: Industrial Technology Education - College of Engineering.
Special Emphasis: Drafting\Industrial Technology
State of Utah Technology Certification
Endorsement Area: Secondary Education\ Technology Education \ Drafting \Vocational
Drafting \ Trade & Industrial Certification
Instructor, Bridgerland Applied Technology College 2001 to present
Instructor, Box Elder High School 1997 to 2001
Tool Designer, Autoliv, 1995-1997
Draftsmen, Hyclone Laboratories, 1994-1995

Jim Williams, Instructor**Qualifications:**

Bachelor of Science, Virginia Polytechnic Institute, Blacksburg, Virginia, 1968
Major: Structural Engineering - College of Engineering.
State of Utah Technology Education Certification
Endorsement Area: Vocational Drafting\ Trade & Industrial Certification
Instructor, Bridgerland Applied Technology College 1997 to present
Project Engineer, Nucor Steel, 1995-1996
Systems Engineer, Systems Applications & Technologies, Inc., 1994-1995
Engineer/Owner, Executive Drafting Services, 1993-1995
Project Engineer, Schreiber Foods Inc., 1992-1993
Senior Engineer, Thiokol Corporation, 1979-1992

Central Applied Technology College**Jay Craig Conder****Qualifications:**

BA in Industrial Arts with emphasis in Drafting/Metal Fabrication
Secondary teaching endorsement/Trade & Industrial Certification
Special training in professional development & total quality management
Special training in advanced AutoCAD procedures
Instructor, Southern Utah State College 1978 to present
Sr. Draftsman, Robert T. Dewey, AIA 1980 – 1984
Owner/Sr. Design Draftsman, Professional Drafting Services 1974 - Present

Davis Applied Technology College**Dan Higley****Qualifications:**

Utah State Board of Education Professional License Level II
15 Years Industry Experience
7 Years Education Experience
American Society for Quality Certified Mechanical Inspector

Tim Feltner**Qualifications:**

Civil Design certificate from SUU – 1996
Associate in Design Technology from SUU – 1997
B.S. Degree in Technology Education from SUU – 1998
Utah State ATE endorsement in Carpentry and Drafting
Current Utah State General Contractors License
15 Years of related Industry Experience
Currently working towards Master in Education from WSU

Jeff Clark, Instructor**Qualifications:**

Bachelor of Science, Business Management. Brigham Young University
Professional Educator License, State of Utah
Endorsements: Business Management
Industry Experience: 25 years
Teaching Experience: Ten years
Member: Utah Business and Computer Education Association

Ogden Weber Applied Technology College**John Johnson, Instructor****Qualifications:**

Bachelor of Science, Brigham Young University, 1978
Major: Industrial Arts Education
State of Utah Technology Education Certification
Endorsements: Trade and Industrial Certification\ Drafting\ Graphic Arts
Industry Experience: Five years
Teaching Experience: 23 years
Instructor, Ogden Weber Applied Technology College
Adjunct Instructor, Weber State University
Drafter, Burnswick National Inc.

Alan Turner, Instructor**Qualifications:**

Bachelor of Science, Utah State University, 1969
Major: Industrial and Technical Education
State of Utah Technology Education Certification
Endorsements: Trade and Industrial Certification\ Drafting\ Woods\ Cabinetry\ Machining\
Welding\ Building Construction
Industry Experience: Eight years
Teaching Experience: 32 years
Instructor, Ogden Weber Applied Technology College
Architectural Drafter, Thair Blackburn
Engineer, Cutter Lab
Building Construction and Architectural Drafting, Kent Smith Construction Co.

Rex Thornock, Instructor**Qualifications:**

Drafting Certificate Ogden Weber Area Vocational Center
State of Utah Technology Education Certification
Industry Experience: Nine years
Teaching Experience: Five years
Civil Engineer, KHI Engineering
Drafter, Bourns and Chromalox

Uintah Basin Applied Technology College**Robert Naylor, Drafting Instructor****Qualifications:**

Master Education at Utah State University
Projected completion May 2003
Bachelor of Science, Southern Utah University, 1985
Major: Industrial Arts
Associate of Science, Dixie College, St. George, Utah, 1983
State of Utah Technology Education Certification
Utah Level 2 Educational License
Endorsement Area: Secondary Education\ Trade & Industrial Drafting\ Trade & Industrial
Cabinet and Millwork\ Technology Education
Instructor, Uintah Basin Applied Technology College, 1998 to present
High School Instructor 1985 to 1998
Adjunct Instructor, Weber State University, 1994 to 1998
Adjunct Instructor, Salt Lake Community College, 1989 to 1992
Industrial Employment Experience 13 years

Appendix E

Competencies for the AAT Degree in Computer Aided Drafting and Design

Architectural Design Emphasis - DACUM

FOCUS STATEMENT

The Architectural Drafter is one who assists the design professional in the production of documents throughout design and construction of the built environment.

DUTIES

- A. DRAFTING
 - 1. Dimension a drawing
 - 2. Utilize line weights
 - 3. Produce graphics
 - 4. Apply notes
 - 5. Apply symbols
 - 6. Apply hatching
 - 7. Produce construction drawings
- B. DOCUMENT PREPARATION
 - 1. Interpret sketches
 - 2. Organize Layout
 - 3. Draft images
 - 4. Coordinate images
 - 5. Evaluate drawings
- C. COMPUTER INFO SYSTEMS
 - 1. Build database
 - 2. Save database
 - 3. Establish detail library
 - 4. Archive files
 - 5. Back-up files
 - 6. Save files
 - 7. Retrieve files
 - 8. Purge files
- D. SURVEY
 - 1. Take photographs
 - 2. Measure site
 - 3. Measure structure
 - 4. Identify existing materials
 - 5. Identify systems

6. Document existing conditions
 7. Sketch existing conditions
- E. CONSTRUCTION ADMINISTRATION
1. Review shop drawings
 2. Verify compliance with specifications
 3. Perform site visits
 4. Answer contractor questions
 5. Prepare job conference reports
 6. Justify change order requests
 7. Prepare as-built drawings
- F. RESEARCH
1. Obtain code requirements
 2. Utilize product references (Sweets)
 3. Utilize CSI Format
 4. Update library resources
 5. Retrieve drawing archives
 6. Research architectural precedents
- G. PROFESSIONAL DEVELOPMENT
1. Update drafting skills
 2. Attend trade shows
 3. Attend continuing education programs
 4. Serve on committees
 5. Read trade journals
- H. PRESENTATIONS
1. Construct physical model
 2. Generate 3-D computer model
 3. Produce perspective drawing
 4. Render a drawing
 5. Assemble presentation boards
- I. GENERAL OFFICE FUNCTIONS
1. Transport documents
 2. Retrieve files
 3. File documents
 4. Make prints
 5. Provide equipment support
 6. Transfer electronic files
 7. Answer phone
 8. Send fax
 9. Comply with standards

- J. PROFESSIONAL REPRESENTATION
1. Send transmittals
 2. Answer technical questions
 3. Assist with client presentations
 4. Take notes at meetings
 5. Act as an ambassador for company
 6. Maintain confidentiality

Knowledge & Skills

Drawing
Scales
Listening
Communication
(Verbal, Written, Technical)
Computer Literacy
Construction
Mathematics
Design
Professional Practice Options

History/Theory of
Architecture
History/Theory of Art
Problem Solving
Time Management
Manual Graphics
CAD Graphics
(Civil, Structural, Mechanical,
Electrical, Plumbing,
Architectural)

Traits & Attitudes

Accountable
Self-motivated
Adaptable
Organized
Attention to Detail
Willingness to Learn
Consistent
Flexible
Dependable

Reliable
Confident
Professional
Commitment to Profession
Patient
Recognizable Limitations
Art Aptitude
Team Player
Spatial Visualization

Tools & Equipment

PowerPoint
DWF (Drawing Web Format)
FTP (File Transfer Protocol)
Site
CAD Systems
E-Mail
Modeling Tools
Drafting Instruments
3-D Modeling Software

Word Processing
Plotter
Copier
Blueprint Machine
Calculator
Scanner
Desktop Publishing
Internet
Spreadsheets

Appendix D

Advisory Committee Lists

Bridgerland Applied Technology College

Ralph Anderson – Watkins Printing
Kurt Becker – Utah State University
Gary Blazzard – Design West
Dave Damstedt – Sky View High School
Drew Demler – Icon Health and Fitness
Skip Dopp – Bridgerland Applied Technology College
Brad Ellis – Icon Health and Fitness
Flint Hamblin – Specialized Analysis Engineering
Lanny Herron – JHCH Architects
Shauna Hillyard, Chair – NACO Industries
John Jensen – Icon Health and Fitness
Keith Nelson – Mountain Crest High School
Tom Peterson – Utah State University
Ed Reeve – Utah State University
Bryce Sorensen – JHCH Architects
Glen Biddulph – Designer/Draftsman (Self-employed)

Central Applied Technology College

Don Naser, Chair – Hales Sand & Gravel
Pete Monson – UDOT
Tristan DeMille – Jones & DeMille Engineering
Jeff Issa – UDOT
Steve Ehninger – EFT Architects
Daniel Rhodes – Modular One
Brent Lambson – Jones & DeMille Engineering

Davis Applied Technology College

Jason Felt, Chair – Ensign Engineering & Land Surveying
Wendell Perry – LifeTime
Mark Todd – SCI
Alan Bennion – Smurfit – Stones Container

Ogden Weber Applied Technology College

Barry Arnold – ARW Engineers
Dean Dickemore – RDD Enterprises
Anne Ernst – The Boeing Company
Nathan T. Nielson – Superior Air Handling
Kerry Rasmussen – Semiconductor Products, Inc.
Bill Salerno – Salerno Bertoldi Architects
Ron Smith, Chair – Internal Revenue Service

Uintah Basin Applied Technology College

Rudolfo Avalos – Architect, Ute Tribe Housing

Brent Benson – Moon Lake Electric

Hal Marshall – Chair, Uintah Engineering & Land Survey

Sabra Marshall – Ute Tribe Education Department

Wayne McAllister – USDA Natural Resources

Josh Ogden – Jetway Systems

Jerry Slauch – Sunrise Engineering

Gary York – Gary York & Associates

SECTION I

The Request

Utah College of Applied Technology (UCAT) officials request approval to offer an Associate of Applied Technology Degree in Information Technology, effective Fall 2002. The institutional Board of Trustees approved this program on May 1, 2002

SECTION II

Program Description

Complete Program Description: The Information Technology program provides individuals with the skills required to find employment in the rapidly changing field of Information Technology, one of the fastest growing industries in the world. Students will learn hardware, operating systems, application software, local and wide area networking, programming, and Internet development. Fundamental computer practices are integrated as well as advanced specialization and preparation for professional certification exams.

Emphasis is placed on training for industry critical skills. Networking studies involve network analysis, planning and implementation, including design installation maintenance and management of network systems. Establishment and maintenance of information technology infrastructure is critical. Programming studies involve the design, development, implementation and maintenance of computer systems and software, and require knowledge of operating systems, programming languages, and software development for the business environment. Internet Development emphasizes maintenance, troubleshooting and security in an Internet, Intranet, and Extranet or eCommerce infrastructure. Students will also develop Web related applications. Many courses in Information Technology prepare students for industry professional certifications.

The proposed program will prepare students for professional industry certification exams such as CompTIA A+, Network+, Server+, Linux+, I-Net+; Cisco Certified Network Associate; Microsoft Certified Professional, Systems Administrator; Certified Novell Engineer, Administrator; Certified Internet Webmaster Master Administrator, Professional, Site Designer; Oracle Certified Professional, IC³.

Courses are taught by faculty with extensive industry and technical experience in Information Technology. Courses provide students with the most current knowledge in a field that is known to be dynamic. Graduates of this program are prepared for immediate employment in the computer industry or businesses that rely on high-tech skills. Although students will not be able to complete the entire degree at every regional college, they will be able to complete components of the degree and then finish the program at another UCAT campus. A matrix outlining the availability of the AAT Degree and associated courses at each UCAT regional can be found in Appendix A.

A summary of requirements for completion of the Associate of Applied Technology Degree follows. Thirty clock hours equates to one semester credit equivalent. The complete curriculum for the proposed program, including course descriptions, is included in Appendix B.

No sample class schedule is provided. Because all UCAT regional colleges operate on an open-entry/open-exit model, it is difficult to outline a proposed semester schedule. Instead, students are encouraged to take courses, which total six classroom hours per day (for full-time), transitioning from one

course to the next as competencies are mastered, until such time as they have met the degree requirements.

General Education Requirement - 13 Semester Credits/390 Clock Hours

General education courses are consistent with those required for the Associate of Applied Science degree at other USHE institutions. Courses were selected to maximize ease of transferability to other USHE colleges and universities. The general education component, when delivered in a traditional format, will total 13 semester credits. Using a conversion factor of 30 clock hours to one semester credit, this equates to 390 clock hours.

Technical Core Courses – 660 Clock Hours/22 Semester Credit Equivalents

The technical core courses for the AAT Degree in Information Technology provide a sound foundation for IT students. All students who wish to receive the AAT in Information Technology must complete the core course work.

IT Specialization Areas and Related Electives - 840 Clock Hours/28 Semester Credit Equivalents

After completion of the required core course work, students will select courses totaling 540 clock hours from the following IT Specialization Areas: Networking, Programming, Internet Development, or Microcomputer Technologies. In addition, students will select 300 hours of electives in any specialization area, or from other related courses that have been identified in the curriculum.

The proposed degree requires a total of 1890 clock hours, or 63 semester credit equivalents.

Purpose of Degree - The Utah College of Applied Technology is directed, by statute (53B-2a-104), to develop competency-based associate of applied technology degrees to be offered by the regional applied technology colleges. During the process of determining which certificate programs at the regional colleges would provide the best foundation for these AAT degrees, UCAT officials considered several factors including the following: (1) supply and demand, (2) programs that must address national standards; (3) the strength of the current curriculum, (4) wage/career path, and (5) the feasibility of creating the foundation for a future Bachelor of Applied Technology Degree in the area. The proposed AAT Degree in Information Technology meets these criteria.

In keeping with Utah's emphasis on technology, the proposed Information Technology Program is perfectly aligned to encourage growth in the high-tech industry. The program will help provide a highly trained workforce that will be an incentive for the development of new companies. It will also help to maintain the well being of existing companies that rely on IT in the state. In addition, the Industry Engineering Initiative that passed during the 2001 Session of the State Legislature is expected to significantly increase the number of engineering and computer science graduates. Within five years the proposed degree will support this important initiative.

The proposed degree provides students who are working toward a certificate with the opportunity to pursue the level of training and education that is appropriate for them. The program has been developed with recognition of the importance of multiple entry and re-entry points for students who wish to

return and build upon previously attained competencies. Certificates for the completion of segments of the curriculum will be available to students in the degree program. And, although students may not be able to complete the degree in its entirety at each UCAT campus, they will be able to complete parts of the curriculum and apply that course work at other campuses for completion of the degree. The proposed degree not only gives students the appropriate credentials for the competencies that they have achieved, but also provides them with an appropriate pathway to further training, education, and degrees at one of the other Utah System of Higher Education Institutions.

Admission Requirements - There are no special admission requirements for this program. Admission is consistent with general UCAT admission procedures and guidelines.

Student Advisement - One of the strengths of the Utah College of Applied Technology is the individualized advising that students receive. Qualified career guidance technicians and career counselors are available to students and College applicants who are interested in career exploration and career decision-making, including training options. Occupational interests, transferable skills, and other factors that contribute to developing informed training and employment goals can be reviewed with career guidance staff in Student Services. Office counselors are available to review progress and program issues and to make training modifications as needed during the training process. Students are also encouraged to meet with Information Technology faculty for advising needs.

Justification for Number of Hours - The proposed AAT Degree requires 1890 clock hours. This is equivalent to 63 semester credit hours, which is within the standard hours for an Associate of Applied Science Degree.

External Review and Accreditation - All current Utah College of Applied Technology programs maintain active employer advisory committees. These committees meet regularly to advise Regional College faculty and management on program, curriculum, and instructional issues. Additionally, at some regional colleges, the committee annually completes and submits a written report on the program.

Projected Enrollment - Projected headcount enrollment for the first five years of the program follows. Based on preliminary surveys of high school and adult students, the figures represent a conservative estimate of the number of students at the ten regional colleges who are expected to pursue the AAT Degree.

	FY 02	FY 03	FY 04	FY 05	FY 06	FY07
UCAT (TOTAL)						
Projected Degree Enrollments	182	187	202	215	228	230

Expansion of Existing Program - The proposed AAT Degree in Information builds upon the foundation of an existing program and, with the addition of a general education component, provides an additional option for students. Students currently enrolled at the UCAT regional colleges have different goals. Some students may desire a certificate of completion; others may be enrolled in short-term employment upgrade options. For this reason, current enrollment figures are not necessarily relevant to the proposed degree, and are not included here.

Faculty - A certificate program already exists with faculty in place. No additional faculty are required for the program. In keeping with the UCAT's emphasis upon preparing students to meet current

workforce needs, faculty have extensive experience in industry along with the necessary educational credentials to provide students with the most current knowledge in this ever-changing and advancing field. This particular field is dramatically impacted by the rapidly advancing technology and both students and faculty are forced to “keep-up” with technology. A list of existing faculty who will support the proposed program can be found in Appendix C.

Staff - The Utah College of Applied Technology and its member regional colleges will administer the Information Technology A.A.T. program. As this is an existing certificate based program at the regional colleges, no additional administrative or secretarial/clerical staff will be required.

Library and Learning Resources - The Regional Colleges, (formerly applied technology centers), have not historically had centralized libraries. Instead, appropriate resources (manuals, textbooks, and industry documents) are available in the individual program areas. The current Information Technology materials are adequate and the projected operating expenses for the program are sufficient to ensure the necessary replacement and supplemental materials purchases. The creation of UCAT, for which accreditation will be sought through the Northwest Commission on Colleges, requires expanded library resources. These resources will be provided through UCAT membership in the Utah Academic Library Consortium (UALC). UALC membership provides students with access to all existing Utah academic libraries through resource sharing agreements. Students also have electronic access to on-line collections through the Pioneer Library.

Learning Resources - Sufficient financial resources are available on an annual basis to provide program and on-campus space, time, materials, equipment, and media access to maximize potential for all students. The library/media support provides print, non-print, and electronic materials, which directly support school goals and curriculum reflecting a diversity of learning styles, levels of skill, and cultural differences. Electronic resources are available to provide technical access in proportion to the number of students being simultaneously served.

SECTION III

Need

Program Necessity - The proposed degree responds to a current and estimated future demand for highly trained individuals to meet the needs of local business and industry. Information Technology specialization varies geographically, depending on the needs of local industry — UCAT has designed this degree to accommodate regional needs. As Utah continues to expand in highly technical industries as a means of promoting economic development, having highly-trained and appropriately qualified employees to meet the demand is essential. The presence of a highly trained workforce throughout the various regions of the state will attract the attention of potential high-tech, start-up companies, which in turn, will add significant value to the state’s efforts in economic development.

Information technology specialists integrate the design, development, support and management of hardware, software and Internet systems in the dynamic and entrepreneurial working environment of business. In keeping with UCAT’s mission, the emphasis of the proposed program is on hands-on, open-entry/open-exit, competency-based training. Classroom and laboratory activities are intertwined to provide students with the technical skills necessary to be successful in their respective industries, and properly

prepared for continuing their education at one of the other Utah System of Higher Education institutions if they so choose.

Labor Market Demand - Because of advances in technology, career opportunities are growing within this rapidly evolving industry. Utah has been ranked 6th overall among the nation's 50 states for its ability to adapt well in the high-tech "new economy." According to *The Metropolitan New Economy Index* released by the Progressive Policy Institute, a Washington D.C. based organization, Utah ranked in the top five in workforce education, "gazelle" jobs (companies with an annual sales revenue that has grown 20 percent or more for four straight years), online population, commercial Internet domain names, and technology in schools. In the same study, Salt Lake City was ranked 9th among the nations largest metropolitan areas for its readiness in the "new-economy." (*Progressive Policy Institute*, April 2001) Utah was also ranked among the top states in the nation for new information technology start-up companies in 1999. In a study conducted by Dun & Bradstreet, Utah's IT start-ups totaled 9.4 percent of the state's 1,244 new businesses in 1999. Nationally, IT start-ups accounted for 7.1 percent of new businesses. In addition, Utah ranked second for new IT jobs in 1999; with 1,535 or 16.2 percent; of the states total 9,449 new jobs. (*Western Blue Chip Economic Forecast*, December 21, 2000)

Utah has also been named one of the top 20 states for venture capital activity by *Red Herring* magazine in its (October 30, 2000 edition, and Salt Lake City was named one of the 46 "hot spots" that matter most in the new global high-tech network by *Wired* magazine in July, 2000).

The Information Technology Association of America reports that U.S. employers will have " . . . 900,000 IT jobs to fill immediately, with hiring managers projecting opportunities to grow over the next three to five years." (*When Can You Start: Building Better Information Technology Skills and Careers*, Information Technology Association of America, April 2001)

Over 186,000 jobs in Networking Systems are projected immediately; 31,000 in IT companies and 156,000 in IT-reliant companies. Over 420,000 jobs in Information Support and Services are projected immediately; 111,000 in IT companies and 309,000 in IT-reliant companies. Over 135,000 jobs in Programming and Software Development are projected immediately; 63,000 in IT companies and 72,000 in IT reliant companies. (*When Can You Start: Building Better Information Technology Skills and Careers*, Information Technology Association of America, April 2001)

Economy.com, a West Chester, PA., forecasting firm, predicts employment in Utah and seven other states will grow at four times the national average this year and significantly faster than almost every other part of the country due to the low cost of living, emerging technology sectors, and an alluring lifestyle. (*The Wall Street Journal*, June 6, 2001).

According to the American Electronics Association, Utah's high technology industry employment reached more than 48,000 workers in 2000. The number of technology workers continues to be a strong sector of Utah's high-tech community over the last three years. The proposed degree will create a highly trained, qualified workforce, which is essential to the continued and improved economic viability of Utah.

The Utah Department of Workforce Services (DWS) projects average annual openings in Utah for computer support specialists to be 580 through the year 2005. This occupation is also listed by DWS as one of the top 50 fastest growing occupations in Utah for 2000-2005; and is listed as one of the Top 50 occupations with new jobs in Utah 2000-2005.

Earnings for IT workers in Utah are considerably above the average private sector wage. "According to Utah Information Technology Association, the average Utah technology wage was \$45,228 in 1999, or 71 percent more than the average private sector wage for the state . . ." (Economic Development Corporation of Utah in the *Utah Information Technology Association 2002 Industry Guide*).

Student Demand - Because this degree has varying specialties and competencies, there is a high student demand for this subject matter. Preliminary student surveys indicate that over half of currently enrolled students are interested in pursuing the AAT Degree. After completing the requirements for an AAT Degree in Information Technology, graduates may immediately enter the workforce in entry-level or intermediate positions in Information Technology. Within just a few years of practical on-the-job experience, appropriately degreed Information Technology graduates quickly advance to become senior engineers, designers, or supervisors. In addition, many graduates will pursue continuing education in fields of Information Technology and Management in Information Technology, either immediately upon completion of their A.A.T. degree or while employed.

Each year for the past several years enrollment has been more than sufficient to justify continued operation of the program. In light of the Labor Market Demand and based on discussions with the Employer Advisory Team, UCAT officials believe that the program will continue to show strong student demand.

Similar Programs - Although there are programs at other USHE institutions with some overlapping content at both the associate and bachelor's level, the proposed Associate of Applied Technology Degree is a new degree which has never before been offered in the State of Utah. It is important to remember that an Information Technology Certificate Program has existed at many of the regional colleges for many years. The proposed degree builds upon that program, and offers an alternative delivery format (open-entry/open-exit) and an alternative way in which students can progress through their program of study and demonstrate mastery of the material (a competency-based approach). This alternative approach is expected to appeal to some students and not to others. The student's choice will depend upon his/her goals and the type of educational experience that he/she desires. What is most important is that the Utah System of Higher Education will, with the addition of the AAT Degree, provide an additional opportunity for students to complete their training and education goals.

Collaboration with Other USHE Institutions - The creation of the Utah College of Applied Technology has brought about new relationships between the former ATCs and the other USHE institutions. Because the UCAT cannot offer general education course work for credit, representatives from the regional colleges are currently coordinating with the other USHE institutions in their regions for the delivery of the general education component of the AAT Degree. UCAT students will be encouraged to pursue educational opportunities beyond the regional college level, and it is hoped that many of them will go on to earn bachelors and advanced degrees. Weber State University and Utah Valley State College have developed Bachelors of Applied Technology (BAT) Degrees which are also being submitted for Regents' approval. These degrees have been developed cooperatively with regional ATC partners and will provide a clear path for some students to move from the AAT degree to a Bachelor's degree in their chosen field of study. In addition, nearly all regional applied technology colleges have already negotiated regional articulation agreements with their USHE partners. Those ATCs that do not have these agreements, will seek them as part of the development of AAT degree programs and the creation of general education courses.

Benefits - By providing training that meets the needs of industry, and provides an alternative instructional delivery format and assessment process for students, the UCAT and the USHE are able to show the taxpayers a demonstrable return on their investment. The proposed degree is particularly well suited as it provides a path to employability in a relatively high-demand field.

It is anticipated that the AAT Degree will appeal to students who have not previously viewed themselves as “college bound”. Their training experience at a UCAT regional college will provide the student with a foundation for success if they choose to enroll in other USHE programs to continue their education. USHE institutions will benefit from students who are motivated, self-starters, and take responsibility for their education.

Consistency with Institutional Mission - The Utah College of Applied of Technology was created for the purpose of providing open-entry/open-exit, competency-based short-term, certificate and degree programs that prepare students to enter the job market. Clearly, the proposed Associate of Applied Technology Degree program is market-driven and provides technical training to individuals seeking employment and upgrade training.

SECTION IV

Program and Student Assessment

Program Goals – Goals for the proposed program and Utah College of Applied Technology measurements of success follow. The program goals will be evaluated yearly to determine that the program is meeting the needs of business and industry as well as the needs of students. Industry standards for successful employment will guide goal setters. Enrollment, completers, and employment will be evaluated to determine if the program is performing as required with an employment goal of 80 percent or better.

Outcome Goal	Evaluation Method
70% of students who are formally admitted to the program will graduate.	Graduation data provided by regional colleges
80% of graduates who are seeking employment are placed in jobs.	Placement data provided by regional colleges
80% of students who attempt professional exams will pass.	Data from professional examination records.
Program graduates will meet industry standards established by regional college program advisory committees comprised of representatives from at least three technology firms.	Monitoring and verification by regional colleges

Expected Standards of Performance - The Utah College of Applied Technology will use professional industry certification exam criteria. These criteria include the competencies identified by the Information Technology Industry as essential skills for students in information technology. The local program advisory committees for the regional ATC will verify and modify, if needed, the competencies for the various regions

across the state. These competencies, which must be mastered for completion of the program, are included in Appendix D.

Student Assessment - Hands-on competency assessments will test each student's competency as well as the ability to pass industry-recognized professional examinations, where applicable. These tests will be correlated with business and industry standards as established by advisory committees. Students will demonstrate competency in each curriculum requirement individually. In addition, cumulative written examinations may be administered and the combination of competency testing and written examinations will be used to determine student status.

Industry recognized professional examinations will be used to demonstrate knowledge and technical capability. Many exams include simulations in which students are required to configure or troubleshoot a problem by following product-specific steps. Exams can be taken in hardware (A+); networking (Cisco, Microsoft, Novell, CompTIA); Internetworking (I-Net+, Certified Internet Webmaster); and database administration (Microsoft, Oracle).

Continued Quality Improvement - Ongoing program quality improvement will be achieved through feedback from the Program Advisory Committee, composed of active, concerned members who work cooperatively with the instructors, administrators, and governing board to improve the quality of the applied technology education program. The main responsibility of the Advisory Committee is to review current program content and operations. School personnel, in turn, have the responsibility of implementing changes, if appropriate, and reporting to the committee.

The purpose of the Advisory Committees at the local level is to assure continuing relevance of applied technology programs. The attainment of high-quality technical training would not be possible without the close involvement of knowledgeable persons from the business and industry community. The nature of technical change requires that training institutions be kept informed of the current and anticipated needs of business and industry. Advisory Committees act as a link between the education system and the business community through deliberations focusing on common needs and goals.

A list of Program Advisory Committee chairs for each regional college that offers the Information Technology degree follows. A complete list of committee members is included in Appendix E.

Ed Ball - Bridgerland ATC
Brett Wangrud, Kforce – Davis ATC
Chris Morey, Aviation Materials Management – Ogden-Weber ATC
Jerry Ropelato, iAccess – Salt Lake/Tooele ATC
Cheree Brotherson, McKeachie/Allred – Uintah Basin ATC
Craig Curtis - Central ATC

SECTION V

Finance

Budget - The projected budget for the first five years of the proposed program follows. It is important to note that these budget figures are based upon the current operating budget for the existing

certificate programs at each regional college that will be offering the entire AAT Degree. Budget figures include support for high school and adult students, certificate candidates, upgrade training, apprenticeship students (where appropriate) and the proposed AAT Degree. No additional funds are required; this operating budget is currently in place.

Additionally, the funds identified under capital equipment are those deemed necessary to continue the program at its present level of performance.

	FY02	FY03	FY04	FY05	FY06
UCAT Total					
Salaries	927,950	927,950	946,509	965,439	984,748
Benefits	327,782	327,782	344,171	361,380	379,449
Current Expense	199,060	199,560	199,560	199,560	199,560
Capital	196,395	196,395	196,395	196,395	196,395
Total	1,651,187	1,651,687	1,686,635	1,722,774	1,760,152

Funding Sources - The Information Technology Program is already established at the College and, therefore, has sufficient funds to continue operation. The addition of an Associate of Applied Technology Degree does not require any resources that are not already allocated.

Impact on Existing Budgets - Because this degree is an extension of an existing program, no impact on existing budgets is anticipated.

Appendix A

Availability of the AAT Degree and Related Course Work by UCAT Regional College

AAT Degree in Information Technology										
	BATC	CATC	DATC	DXATC	MATC	OWATC	SLATC	SEATC	SWATC	UBATC
Core Courses	x	x	x			x	x		x	x
Networking Spec.	x	x	x		x		x		x	
Programming Spec.	x	x	x			*	x			
Internet Dev. Spec.	x	*	x			x				
Microcomp.Tech. Spec.	x									
* Anticipated for next year										

Appendix B

UCAT Information Technology Associate of Applied Technology Degree

Curriculum

General Education Requirement

General education courses are consistent with those required for the Associate of Applied Science degree at other USHE institutions. Courses were selected to maximize ease of transferability to other USHE colleges and universities. The general education component, when delivered in a traditional format, will total 13 semester credits. Using a conversion factor of 30 clock hours to one semester credit, this equates to 390 clock hours.

Technical Core Courses

The technical core courses for the AAT Degree in Information Technology provide a sound foundation for IT students. All students who wish to receive the AAT in Information Technology must complete the core course work.

IT Specialization Areas and Related Electives

After completion of the required core course work, students will select courses totaling 540 clock hours from the following IT Specialization Areas: Networking, Programming, Internet Development, or Microcomputer Technologies. In addition, students will select additional 300 hours of electives in any specialization area, or from other related courses that have been identified in the curriculum.

The proposed degree requires a total of 1890 clock hours, or 63 semester credit equivalents.

GENERAL EDUCATION REQUIREMENTS	Hours	Semester Credits
Composition		
English 1010 – Introduction to Writing	90	3
Math		
Math 1050 – College Algebra	120	4
Human Relations	90	3
Electives	90	3
Total General Education	390	13
Core Courses	Hours	Credit Equivaler
Computer Literacy	90	3
Introduction to Information Technology	90	3
Introduction to Programming	90	3
Internet Essentials	90	3
Networking Essentials	120	4

Computer Hardware	90	3
Operating Systems Technology	90	3
Total Core Courses	660	22

Specialization Areas: Choose 18 credit equivalents from one specialization area (Prerequisite: Complete Core Courses)		
Networking	Hours	Credit Equivalents
Administering Windows Professional	90	3
Administering Windows Server	90	3
Managing a Windows Network Environment	90	3
Administering a Windows Network Infrastructure	90	3
Administering SQL Server	120	4
Foundations of Novell Networking	90	3
Novell Network Management	90	3
Advanced Novell Network Management	90	3
Novell eDirectory Design and Implementation	90	3
Managing Workstations in a Novell Environment	90	3
Fundamentals of Linux	90	3
Fundamentals of UNIX	120	4
Networking, Routing and Switching I	120	4
Networking, Routing and Switching II	120	4
Telecommunications	90	3
Internet Server Administration	90	3
Internet Professional	90	3
Security Professional	90	3
Advanced Server Administration	90	3
Programming	Hours	Credit Equivalent
Introduction to Visual Basic	120	4
Advanced Visual Basic	90	3
Introduction to C++	120	4
Advanced C++	90	3
Introduction to Java	120	4
Oracle Internet Academy I	180	6
Oracle Internet Academy II	180	6
Administering SQL Server	120	4
Scripting Languages I	120	4
Scripting Languages II	90	3
Internet Development	Hours	Credit Equivalents
Internet Site Designer I	120	4

Internet Site Designer II	120	4
Scripting Languages I	120	4
Scripting Languages II	90	3
eCommerce Developer	90	3
Internet Server Administrator	90	3
Internet Professional	90	3
Security Professional	90	3
Principles of Graphic Design	120	4
Microcomputer Technologies	Hours	Credit Equivalents
Electronics Fundamentals	120	4
Digital Fundamentals	90	3
Microcontroller/Microprocessor Programming	120	4
Programmable Logic Devices	60	2
Programmable Logic Controllers	60	2
Telecommunications	90	3
Active Semiconductor Devices	90	3
Analog Instrumentation Devices	90	3
Electronic CAD	60	2
AC/DC	60	2
Total Courses from Specialization Areas:	540	18

ELECTIVES: Choose 10 Credit Equivalents from any IT Specialization Area or the following.		
Database Applications	90	3
Help Desk Technology	90	3
Internship/Externship	45-180	1-4
Total Electives	300	10

General Education	390	13
IT Core	660	22
IT Specialization Areas	540	18
IT Electives	300	10

UCAT Information Technology AAT Degree
Associate of Applied Technology Degree Requirement Course Descriptions

Core Competencies

Computer Literacy

3 Credits Equivalent (90 Hours)

This course provides a fundamental understanding of computing including knowledge and use of computer hardware, software, and operating systems. The course will cover basic use and common features of applications (word processing, spreadsheet, and database) including internet use and e-mail. Prerequisite recommended: keyboarding 25 wpm.

Competencies:

- Identify computing fundamentals such as computer hardware, software, and operating systems
- Learn to navigate the windows environment
- Gain knowledge of primary applications such as common program, word processing, spreadsheet and database functions
- Learn to use online computing including Internet and electronic mail

Introduction to Information Technology

3 Credit Equivalent (90 Hours)

This course is an overview of using computers. Students will gain an understanding of computers including their history, hardware, operating systems, program languages, software, networking, data storage, and system security. Students should recognize why computers are essential to the business community and to apply various technologies that are available to make them more effective. Prerequisite: Computer Literacy.

Competencies:

- Identify the major components of a computer and understand their function.
- Evaluate the advantages and disadvantages of various operating systems.
- Discriminate between basic computing, data storage, database management, common programming languages, multimedia technology and security risks.
- Recognize the personal computer's position as the backbone of business, the computer industry and its use as a stand-alone or networked device.

Introduction to Programming

3 Credit Equivalent (90 Hours)

This course introduces the student to computer programming and the different languages available. Course includes program flowcharts, getting to know computers, introducing basic and more advanced languages, designing a program, use of structure, and managing controls. Prerequisites: Computer Literacy, Introduction to Information Technology.

Competencies:

- Understand the design of computer programs.
- Learn the application of computer programming.
- Get experience with basic and more advanced languages.

Internet Essentials

3 Credit Equivalent (90 Hours)

Include basic Internet technologies, web authoring, and networking. Students learn how to use key Internet technologies, such as email, newsgroups, FTP, Telnet, and search engines. Students will gain experience configuring browsers to access rich multimedia. Students will use a variety of Web-based search engines to conduct advanced searches and learn the basics of electronic commerce and security issues. Students will gain experience developing Web pages in a text editor and a GUI interface. Students will also learn how to use Cascading Style Sheets (CSS) and study the basics of XHTML, JavaScript, DHTML, and DOM. Finally, students learn about network architecture and standards, networking protocols, TCP/IP, Internet servers, server side scripting, database connectivity, and network security. Prepares student for Internet exams such as the I-Net+ or Certified Internet Webmaster (CIW) Foundation exam. Prerequisites: Computer Literacy, Introduction to Information Technology.

Competencies:

- Understand internetworking fundamentals such as browsing the World Wide Web; FTP, newsgroups, and telnet; objects, plug-ins, and viewers, search engines, and eCommerce.
- Identify web page authoring fundamentals such as the introductory aspects of web page authoring; HTML; HTML coding, horizontal rules and graphical elements; hyperlinks; tables; image techniques; frames; HTML GUI editors and extensions.
- Understand networking fundamentals such as networking protocols; LANs and WANs; TCP/IP architecture and internet addressing; internetworking servers; server-side scripting and database connectivity; and network security essentials.

Networking Essentials

4 Credit Equivalent (120 Hours)

Networking Essentials includes terminology and networking concepts including design, topology, implementation, cabling, connecting network components, signal transmission, and network adapter cards. The OSI and 802 networking models within the network environment teach students how networks send data. Architectures will be included as well as administration, support, security, fault tolerant systems, wide area network and troubleshooting network problems. Prepares student for exams such as the Network+ certification exam and qualifies as one exam in the Microsoft Certified Systems Administrator (MCSA). Prerequisites: Computer Literacy, Introduction to Information Technology.

Competencies:

- Identify and understand how to implement, secure, and support the components used in networking.
- Recognize the primary network architectures, network standards, protocols, and access methods and identify their characteristics.
- Identify the primary functions of network operating systems and distinguish between a centralized computing environment and a client/server environment.
- Distinguish between LANs and wide-area networks (WANs) and identify the components used to expand a LAN into a WAN.
- Identify strategic LAN support tools and resources and determine how to use them in troubleshooting basic network problems.

Computer Hardware**3 Credit Equivalent (90 Hours)**

This class is designed to explore physical and functional characteristics of computer devices and components and trends in computer architecture. Emphasis will be placed on configuring a microcomputer, troubleshooting, interrupts, device and memory management, virtual memory and paging, file management, and performance analysis. Lab exercises include assembling a computer and troubleshooting problems. Prepares student for hardware exams such as the A+ hardware certification. Prerequisites: Computer Literacy, Introduction to Information Technology.

Competencies:

- Know the theory behind microcomputer hardware
- Learn how to build a computer.
- Know diagnostic and troubleshooting techniques, as well as preventative maintenance.
- Understand the function of the motherboard, processors, and memory.
- Install and configure hardware.

Operating Systems Technology**3 Credit Equivalent (90 Hours)**

This class is designed to teach common components and features in operating systems; command prompt use; installing, configuring, upgrading and troubleshooting common operating systems; and basic networking. Prepares student for operating systems exams such as the A+ operating systems certification. Prerequisites: Computer Literacy, Introduction to Information Technology, Computer Hardware.

Competencies:

- Understand operating systems fundamentals.
- Install, configure and upgrade common operating systems.
- Learn basic concepts of networking.
- Diagnose and troubleshoot operating systems.

Networking Specialization Area**Administering Windows Professional****3 Credit Equivalent (90 Hours)**

This course includes advanced administration of Windows Professional. It will include installation, configuration, troubleshooting, and maintenance of Workstations as well as hardware considerations and network configuration. Prepares student for exams such as Microsoft Certified Professional (MCP), which is one exam in the Microsoft Certified Systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) certifications.

Competencies:

- Install Windows Professional.
- Implement, manage, and troubleshoot network resources.
- Monitor and optimize system performance and reliability.
- Configure and troubleshoot the desktop environment.
- Implement, monitor, and troubleshoot security.

Administering Windows Server

3 Credit Equivalent (90 Hours)

Installation, configuration, and management of a Windows Server. Content includes choosing hardware, connecting the workstations, interface, managing access to the server, developing user profiles, accessing network resources, managing files and directories, printing over the network, managing network printing, managing your hardware, understanding security, understanding the registry, monitoring server performance, and advanced server concepts. Prepares student for exams such as the Microsoft Certified Professional (MCP) exam, which is one exam in the Microsoft Certified Systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) certifications. Recommended prerequisite: Administering Windows Professional.

Competencies:

- Install Windows Server.
- Configure and troubleshooting access to resources, hardware, and network connections.
- Manage, monitor, and optimize system performance, reliability, and availability.
- Manage, configure, and troubleshoot storage use.
- Implement, monitor, and troubleshoot security.

Managing a Windows Network Environment

3 Credit Equivalent (90 Hours)

Students will learn the basics of administering, supporting, and troubleshooting information systems that incorporate Windows. Prepares student for exams such as the Microsoft Certified Professional (MCP) exam, which is one exam in the Microsoft Certified Systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) certifications. Prerequisites: Administering Windows Server.

Competencies:

- Create, configure, manage, secure, and troubleshoot file, print, and web resources.
- Configure, administer, and troubleshoot the network infrastructure.
- Manage, secure, and troubleshoot servers and client computers.
- Configure, manage, secure, and troubleshoot active directory organizational units and group policy.
- Configure, secure, and troubleshoot remote access.

Administering a Windows Network Infrastructure

3 Credit Equivalent (90 Hours)

This course teaches how to install, manage, monitor, configure, and troubleshoot DNS (Domain Name Server), DHCP (Dynamic Host Configuration Protocol), Remote Access, Network Protocols, IP (Internet Protocol) Routing, and WINS (Windows Internet Naming Service) in a Windows network infrastructure in a hands-on lab experience. In addition, the student will be taught what is required to manage, monitor, and troubleshoot Network Address Translation and Certificate Services. Prepares student for exams such as the Microsoft Certified Professional (MCP) exam, which is one exam in the Microsoft Certified Systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) certifications. Prerequisites: Administering Windows Server.

Competencies:

- Install, configure, manage, monitor, and troubleshoot DNS, DHCP, remote access, network protocols, WINS, IP routing in a network infrastructure.
- Install, configure, manage, monitor, and troubleshoot network address translation (NAT).
- Install, configure, manage, monitor, and troubleshoot certificate services.

Administering SQL Server**4 Credit Equivalent (120 Hours)**

The course teaches students to install, configure, and troubleshoot a SQL Server. Classes teach students to develop a security strategy, capacity plan, and a data availability solution. Students also learn to develop a migration plan and to manage security, data, replication, and remote data availability. Automating administrative tasks and optimizing a database are also included. Prepares student for exams such as the Microsoft Certified Professional (MCP) exam, which is one exam in the Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Database Administrator (MCDBA) and Microsoft Certified Systems Engineer (MCSE) certifications. Prerequisites: Administering Windows Server, Database Applications.

Competencies:

- Understand SQL Server architecture.
- Install and configure SQL Server login security, database permissions, and manage files and databases.
- Automate administrative tasks using SQL Server Agent.
- Import, export, transform, and replicate data.
- Monitor and maintain SQL Server performance.

Foundations of Novell Networking**3 Credit Equivalent (90 Hours)**

This course teaches the fundamentals of network management on a NetWare network. This course is intended for students interested in becoming Network Administrators. The skills that will be covered will enable the students to support the NetWare environment and understand the role of NDS. The students will learn how to manage the network to support users, print services, file systems, security, and login scripts. Network applications such as Z.E.N. Works, ConsoleOne, NetWare Administrator and Novell Licensing Services will be introduced. Prepares student for exams such as the Certified Novell Administrator (CNA) certification.

Competencies:

- Introduction to Netware and Novell Directory Services.
- Setting up and managing network access, file system, login scripts, and security for users.
- Implementing Novell Distributed Print Services (NDPS).
- Managing workstations and applications.
- Managing resources in a multicontainer environment.

Novell Network Management**3 Credit Equivalent (90 Hours)**

This is a continuation course intended for the students to learn advanced administration skills in a networking environment. The course provides students with the knowledge and skills they need to configure and administer a complex NetWare network. Skills learned include upgrading from previous NetWare environments, migrating to NetWare Distributed Print Services, executing Java-based utilities; network backup and configuring NetWare for remote access. Prepares student for exams such as one of the Certified Novell Engineer exams. Prerequisites: Foundations of Novell Networking.

Competencies:

- Introduction to NetWare advanced administration
- Upgrading in a NetWare environment.
- Configure and administer a NetWare network.
- Migrating to distributed print services.

- Backup and configuration for remote access.

Advanced Novell Network Management**3 Credit Equivalent (90 Hours)**

This course focuses on the prevention, diagnosis, and resolution of hardware-related problems encountered when working with NetWare. The skills learned will have practical value to network administrators as they optimize and maintain systems while using many other Novell products. This course will build on previous skills and concepts taught and will include and introduction and configuring: DHCP, DNS, TCP/IP addressing and user management. Prepares student for Certified Novell Engineer exams. Prerequisites: Novell Network Management.

Competencies:

- Optimize and maintain systems with various Novell products.
- Introduction and configuration of DHCP, DNS, and TCP/IP
- User management.
- Troubleshooting hardware related problems.

Novell eDirectory Design and Implementation**3 Credit Equivalent (90 Hours)**

In this course the student will learn how to design and create a NetWare implementation plan for a case-study company. Interactive group activities will lead the student through the process by acting in project roles to assess the needs of the case company. Students will learn to use templates to complete a design strategy and implementation schedule. Prepares student for the Certified Novell Engineer exams. Prerequisites: Advanced Novell Network Management.

Competencies:

- Use templates to create a design strategy and implementation schedule.
- Learn to design and create a NetWare implementation for a case study company.
- Learn to assess the needs of a company in determining the best networking solution.

Managing Workstations in a Novell Environment**3 Credit Equivalent (90 Hours)**

This course examines balancing the need to control user and IT staff efficiencies, resources, and management costs with the need to confidently extend and personalize business processes to employees, customers and partners. Students will learn how Directory-enabled and policy-based solutions provide the highest levels of automation, personalization, security and control for an end-to-end management solution. Students will learn how to install, configure and support workstation management solutions. Prepares student for the Certified Novell Engineer exams. Prerequisites: Foundations of Novell Networking.

Competencies:

- Learn to control user and IT staff efficiencies, resources, and management costs.
- Understand the importance of customer service in implementing networking solutions.
- Make use of the highest levels of automation, personalization and security as a management solution.
- Install, configure and troubleshoot workstation management solutions.
- Understand administrative products.

Fundamentals of Linux**3 Credit Equivalent (90 Hours)**

Initial concepts, installation, commands and concepts, systems management, file systems and devices, upgrades and compiles, other administrative tasks, editors, text tools, graphics, and printing, the x-window

system, windows compatibility and samba, intro to programming languages, TCP/IP and PPP, and the WWW and electronic mail. Prepares student for exams such as the Linux+ exam.

Competencies:

- Learn a basic history of Unix and GNU/Linux.
- Plan and install a Linux system, learning to use the desktop manager.
- Understand how to maintain a Linux machine.
- Identify user tools such as file systems and kernel.
- Learn basic Command Line Interface.

Fundamentals of UNIX

4 Credit Equivalent (120 Hours)

Fundamentals of UNIX teach how to use the UNIX operating system and introduce the Common Desktop Environment (CDE). This class is for new users of the UNIX environment and CDE. The student will learn fundamental command-line features of the UNIX environment including file system navigation, file permissions, the vi text editor, command shells, and basic network use. CDE features include Applications Manager, Text Editor, printing, and mail

Competencies:

- Learn basic use of the UNIX operating system.
- Understand the Common Desktop Environment.
- Learn fundamental command-line features of the UNIX environment.
- Identify file system navigation, file permission, command shells and basic network use.

Networking, Routing and Switching I

4 Credit Equivalent (120 Hours)

This course is the first in a two-course series designed to prepare students to pass the examinations for Cisco Certified Network Associate (CCNA). This course presents network concepts, including hardware, software, topologies, network management and problem diagnosis. Additional topics include stratified load forecasting and the critical evaluation of the effectiveness of alternative network topologies. Students will learn PC hardware & software; making cables; structured wiring installations; building and troubleshooting simple LANs, networking; layered communications, OSI model, internetworking devices, IP addressing, LAN media & topologies, and electronics. Students also learn about router and network configuration; building and troubleshooting LANs, the first three layers of the OSI model, router components and configuration, TCP/IP, routing theory and components, router setup, startup, and configuration, IP addressing and routing protocols. This course, along with Networking, Routing, and Switching II, prepares students for the Cisco Certified Network Associate exam.

Competencies:

- Understand bridging and switching.
- Know the OSI reference model and layered communications.
- Describe the classes and function of the TCP/IP protocol and configure and verify IP addresses.
- Define flow control and describe the three basic methods used in networking.
- Add the RIP and IGRP routing protocols.

Networking, Routing and Switching II

4 Credit Equivalent (120 Hours)

This course builds on concepts and skills acquired after completing Networking, Routing, and Switching I. Students will have extensive hands-on training and will be introduced to such networking skill sets as: advanced router configuration, LAN switching theory and VLANs; advanced LAN and LAN switched

design, TCP/IP, IPX, routing theory and components, threaded case studies, WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, network troubleshooting and national SCANS skills. This course, along with Networking, Routing, and Switching I, prepares students for exams such as the Cisco Certified Network Associate (CCNA) exam. Prerequisite: Networking, Routing and Switching I.

Competencies:

- Recognize key Frame Relay terms and features and list commands to configure and monitor Frame Relay operation in the router.
- Identify ISDN and PPP protocols.
- Configure standard and extended access lists to filter IP traffic. Monitor and verify selected access list operations on the router.
- Understand Cisco, IOS, and network basics such as examining router elements; managing configuration files; controlling router passwords; identifying the main software commands for router startup.
- Log into a router in user and privilege modes and use commands to assist in administration of the router.
- Troubleshoot router configuration problems.

Telecommunications

3 Credit Equivalent (90 Hours)

An overview of telecommunications, electronics for telecommunications, transmission media, wireless communications, voice communications, data communications, WAN and Broadband technologies, converged data/voice networks, telecommunication policy, and business aspects of telecommunication. Prerequisites: Networking, Routing and Switching I and II.

Competencies:

- Understand transmission lines.
- Understand various types of communication methods.
- Learn WAN and Broadband technologies.
- Learn convergence of data/voice networks and telecommunication policies.

Internet Server Administrator

3 Credit Equivalent (90 Hours)

Students learn fundamental Internet services, user management concepts in various operating systems, and use of Domain Name System (DNS), WINS, Samba, Telnet, and FTP. Students learn about choosing appropriate Internet system platforms and receive training on how to calculate throughput, choose appropriate Internet connections and configuration. Students install and configure Web, Newsgroup, e-mail and proxy servers; receive in-depth understanding of how to connect eCommerce databases to Web servers. Students also learn about backup and load balancing issues, and receive fundamental knowledge concerning Internet security. Prepares student for exams such as the Certified Internet Webmaster (CIW) Server Administrator exam to become a Certified Internet Webmaster Professional and combined with other courses, to become a Certified Internet Webmaster (CIW) Master Administrator.

Competencies:

- Develop skills to provide essential TCP/IP services for any business interested in establishing an effective eCommerce presence.
- Implement real-world solutions for company intranets or ISPs that provide Internet Web services.
- Manage and tune corporate Internet and intranet infrastructure.

- Monitor Web server systems, FTP, news and mail servers.
- Configure and deploy e-business solutions servers.

Internet Professional

3 Credit Equivalent (90 Hours)

This course is designed to teach key Transmission Control Protocol/Internet Protocol (TCP/IP) concepts and protocols so network professionals can effectively plan, deploy and manage a TCP/IP enterprise network. Students will build an enterprise network and analyze application and protocol information. Course emphasizes routing, network troubleshooting, network management, and next generation Internet protocol technologies. Prepares student for exams such as the Certified Internet Webmaster (CIW) Internetworking Professional exam to become a Certified Internet Webmaster Professional and combined with other courses, to become a Certified Internet Webmaster (CIW) Master Administrator.

Competencies:

- Define network architecture.
- Identify infrastructure components.
- Monitor and analyze network performance.
- Design, manage and troubleshoot enterprise TCP/IP networks.

Security Professional

3 Credit Equivalent (90 Hours)

Students will learn how to secure networks from unauthorized activity. Students will learn about establishing an effective security policy, different types of hacker activities, the hacker's mind-set, and preventing and managing hacker penetration. Students will also learn about authentication procedures, encryption standards and implementations, ports and protocols that hackers manipulate, and how to engage in proactive detection and response/reporting methods. This course teaches students how to perform different phases of a security audit, including discovery and penetration and how to defeat unauthorized users from controlling company networks. Students also learn the latest security industry recommendations and how to properly protect various servers. Students will learn how to generate effective audit reports that can help organizations improve their security and become current with industry security standards. Prepares student for exams such as the Security+ and Certified Internet Webmaster (CIW) Security Professional exam to become a Certified Internet Webmaster Professional and combined with other courses, to become a Certified Internet Webmaster (CIW) Master Administrator.

Competencies:

- Implement e-business solutions security policies.
- Identify security threats and develop countermeasures using firewall systems and attack-recognition technologies.
- Manage the deployment of security solutions.

Advanced Server Administration

3 Credit Equivalent (90 Hours)

Advanced Server Administration deals with multiple platform Industry Standard Server Architecture (ISSA) issues, such as RAID, SCSI, multiple CPUs, SANs, server types, system bus architectures, disaster recovery, upgrading, and security concepts. This course is vendor neutral and prepares students for exams such as the Server+ exam.

Competencies:

- Perform server planning, installation, configuration, and upgrade basics.
- Implement proactive maintenance.

- Recognizing basic server environments.
- Perform troubleshooting.
- Understand and disaster recovery.

Programming Specialization Area

Introduction to Visual Basic

4 Credit Equivalent (120 Hours)

An Introduction to the Visual Basic programming language with properties and controls, programming building blocks, the mouse, menus, dialog boxes, graphic controls and methods, the grid control, displaying and printing, interfacing with windows, the keyboard, systems controls. File access, data control, multiple document interface, dynamic data exchange, installing your application, dynamic linked libraries, multimedia, and advanced programming.

Competencies:

- Understand the application of the Visual Basic programming language.
- Know how to create and interact with system controls.
- Be able to access files, control data, and interface with multiple documents.
- Exchange data dynamically.
- Understand dynamic linked libraries.

Advanced Visual Basic

3 Credit Equivalent (90 Hours)

This course emphasizes two main topical areas: component development and deployment in Visual Basic, and connecting client applications to databases. Students will learn to create Visual Basic programs that both use existing components and create new ones. Win32 API programming and object-oriented programming concepts are presented to ground the student in Windows programming principles. Students will create components that can be deployed directly to the client's machine and shared by multiple client programs using in-process and out-of-process COM servers, including implementation of COM server multi-threading and the creation of DLL's. Students may also learn how to use Visual Basic's WebClasses library to create Internet components that allow connection to data sources from interactive web applications. Prerequisite: Introduction to Visual Basic.

Competencies:

- Windows API programming.
- Review Object Oriented programming.
- Write data reports and stored procedure programming.
- Create ActiveX controls and documents.
- Use database design tools.

Introduction to C++

4 Credit Equivalent (120 Hours)

An introduction to the C++ language. Topics will include data types, control structures, functions, pointers, arrays, I/O streams, classes, objects, encapsulation, overloading, inheritance and use of these concepts in problem solving. This course introduces the student to procedural programming concepts such as: declaring and using variables, Screen Input and Output, if statement and other decision structures, loops, functions, strings and arrays, pointers, structures, and linked lists. The student is also introduced to object-oriented programming techniques.

Competencies:

- Learn how to use structured programming techniques.
- Become proficient with the C++ Editor and Compiler.
- Understand Object Oriented Programming (OOP).
- Write C++ Programs that can be used in a business.

Advanced C++

3 Credit Equivalent (90 Hours)

This course will increase student skill levels in C++ to include files, templates, container classes, introduction to the MFC hierarchical class structure, exception handling and object embedding and linking. This course is designed to further develop a student's understanding of C++ and the principles of OOP (object-oriented programming). Prerequisite: Introduction to C++.

Competencies:

- Apply advanced programming skills that can be used in business.
- Understand the development, compilation, and debugging of complete programs.
- Understand scalar types, aggregate types, pointers, and reference types.
- Be able to use statements, expressions, functions, and libraries.

Introduction to Java

4 Credit Equivalent (120 Hours)

This is an introduction to Java with object-oriented programming. It includes Java basics, working with objects, arrays, conditions, and loops, creating classes and applications, methods and applets, graphics, fonts, and color, animation, images, threads, and sound, managing events and interactivity, creating user interfaces, advanced user interfaces, networking, advanced API, modifiers, packages, interfaces, and inner classes, exceptions, and multithreading. Advanced commands, Java streams and I/O, using native methods and libraries will also be taught.

Competencies:

- Learn how to use Structured Programming Techniques.
- Learn how to build Java Applets made for World Wide Web Servers.
- Write Java Programs that can be used in business.
- Use a variety of Textbooks and Reference Material in order to solve programming problems.

Oracle Internet Academy I

6 Credit Equivalent (180 Hours)

This course has two components. The first portion is an introduction to the data modeling and introduction to Structured Query Language. The course will develop a student's ability to evaluate data and organize it into entity relationship diagrams. Prepares student for exams such as the Introduction to Oracle SQL exam, which is one of two exams required to become an Oracle Certified Associate. Prerequisites: Database Applications.

Competencies:

- Develop an understanding and read an Entity relationship diagram.
- Learn how to develop Entity Relationships Diagrams that represent business data.
- Introduce Structured Query Language (SQL).
- Learn how to edit manage and create tables using SQL.
-

Oracle Internet Academy II

6 Credit Equivalent (180 Hours)

This is the second component to the Oracle Internet Academy I course. In this course, students will learn the skills needed to develop java applets. The skills to manage and maintain an oracle server will be developed. Prepares student for exams such as the Oracle Database Administrator Fundamentals exam, which is the second exam required to become an Oracle Certified Associate. Prerequisite: Oracle Internet Academy I.

Competencies:

- Learn to understand the Oracle Architecture.
- Learn to create a database.
- Develop the skills needed to manage a database.
- Learn to develop java server applications for oracle database servers.

Administering SQL Server

4 Credit Equivalent (120 Hours)

The course teaches students to install, configure, and troubleshoot a SQL Server. Classes teach students to develop a security strategy, capacity plan, and a data availability solution. Students also learn to develop a migration plan and to manage security, data, replication, and remote data availability. Automating administrative tasks and optimizing a database are also included. Prepares student for exams such as the Microsoft Certified Professional (MCP) exam, which is one exam in the Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Database Administrator (MCDBA) and Microsoft Certified Systems Engineer (MCSE) certifications. (Prerequisites: Administering Windows Professional, Administering Windows Server, Database Applications.)

Competencies:

- Understand SQL Server architecture.
- Install and configure SQL Server login security, database permissions, and manage files and databases.
- Automate administrative tasks using SQL Server Agent.
- Import, export, transform, and replicate data.
- Monitor and maintain SQL Server performance.

Scripting Languages I

4 Credit Equivalent (120 Hours)

This is an introductory class to the theory and programming techniques necessary to add scripting, animation, or programming enhancements to Web sites. Students will get hands on experience using applications such as JavaScript, Perl, Visual Basic Script, HTML, DHTML, XML, GIF, Flash or Quicktime. Students will learn to design, test, revise, and maintain web sites.

Competencies:

- Demonstrates understanding of scripting functions and applicability in Web Site development.
- Demonstrates applications of fundamental scripting techniques in a variety of formats.
- Demonstrates skill in application of specific scripting types in WebSite development.
- Demonstrates ability to distinguish which scripting types best fulfill specific needs in a WebSite.

Scripting Languages II

3 Credit Equivalent (90 Hours)

This class teaches advanced programming techniques necessary to add scripting, animation, or programming enhancements to Web sites. Students will get experience using applications such as JavaScript, Perl, Visual Basic Script, HTML, DHTML, XML, GIF, Flash or Quicktime. Students will learn to design, test, revise, and maintain web sites.

Competencies:

- Demonstrate advanced understanding of scripting functions and applicability in Web Site development.
- Know the applications of fundamental scripting techniques in a variety of formats.
- Demonstrate skill in application of specific scripting types in WebSite development.

Internet Development Specialization Area**Internet Site Designer I****4 Credit Equivalent (120 Hours)**

Site Designer teaches students how to create and manage Web sites with tools such as Macromedia Dreamweaver, Flash, FrontPage, Director, Dynamic HTML, and various multimedia and CSS standards. Students will also implement the latest strategies to develop third-generation Web sites, evaluate design tools, discuss future technology standards, and explore the incompatibility issues surrounding current browsers. The course focuses on theory, design and Web construction, along with information architecture concepts. Prepares student for exams such as the Certified Internet Webmaster (CIW) Site Designer exam to become a Certified Internet Webmaster Professional and combined with another course, to become a Certified Internet Webmaster (CIW) Master Designer.

Competencies:

- Implement and maintain hypertext-based Web sites using authoring and scripting languages.
- Create Web content.
- Use Web management tools and digital media tools.
- Apply human factor principles to design.

Internet Site Designer II**4 Credit Equivalent (120 Hours)**

Flash 5 is the standard for dynamic multimedia on the web and the ActionScript language is a required Flash competency. This 120-hour course is designed to familiarize beginning programmers with the Flash ActionScript scripting environment. By the end of the course, students will be able to create task-driven programs using sequence selection, and repetition structures, as well as knowledge on how to use dot notation. Students gain knowledge on where and how to find resources for help.

Competencies:

- Create task-driven programs using sequence selection, repetition and structures.
- Know how to use dot notation.
- Gain knowledge on where and how to find resources for help.

Scripting Languages I**4 Credit Equivalent (120 Hours)**

This is an introductory class to the theory and programming techniques necessary to add scripting, animation, or programming enhancements to Web sites. Students will get hands on experience using applications such as JavaScript, Perl, Visual Basic Script, HTML, DHTML, XML, GIF, Flash or Quicktime. Students will learn to design, test, revise, and maintain web sites.

Competencies:

- Demonstrates understanding of scripting functions and applicability in Web Site development.
- Demonstrates applications of fundamental scripting techniques in a variety of formats.

- Demonstrates skill in application of specific scripting types in WebSite development.
- Demonstrates ability to distinguish which scripting types best fulfill specific needs in a WebSite.

Scripting Languages II

3 Credit Equivalent (90 Hours)

This class teaches advanced programming techniques necessary to add scripting, animation, or programming enhancements to Web sites. Students will get experience using applications such as JavaScript, Perl, Visual Basic Script, HTML, DHTML, XML, GIF, Flash or Quicktime. Students will learn to design, test, revise, and maintain web sites.

Competencies:

- Demonstrate advanced understanding of scripting functions and applicability in Web Site development.
- Know the applications of fundamental scripting techniques in a variety of formats.
- Demonstrate skill in application of specific scripting types in WebSite development.

eCommerce Developer

3 Credit Equivalent (90 Hours)

This course focuses on standards, technologies and practices for both business-to-business and business-to-consumer eCommerce models. This individual understands and facilitates relationships among marketing, promotion, customer service, user interaction, purchasing methods, and secure transactions by using SSL and SET, payment gateways, inventory control, shipping and order information and site performance testing and evaluation. Prepares student for exams such as the Certified Internet Webmaster (CIW) eCommerce Designer exam to become a Certified Internet Webmaster Professional and combined with another course, to become a Certified Internet Webmaster (CIW) Master Designer.

Competencies:

- Design and implement commerce-driven Web sites.
- Identify customer needs.
- Monitor customer usage patterns.
- Determine order processes and service after sales.
- Consider how e-business solutions can increase sales.

Internet Server Administrator

3 Credit Equivalent (90 Hours)

Students learn fundamental Internet services, user management concepts in various operating systems, and use of Domain Name System (DNS), WINS, Samba, Telnet, and FTP. Students learn about choosing appropriate Internet system platforms and receive training on how to calculate throughput, choose appropriate Internet connections and configuration using TCP/IP. Students install and configure Web, Newsgroup, e-mail and proxy servers; understanding of how to connect eCommerce databases to Web servers; and learn how to enable CGI. Students also learn about backup and load balancing issues, and receive foundational knowledge concerning Internet security. Prepares student for exams such as the Certified Internet Webmaster (CIW) Server Administrator exam to become a Certified Internet Webmaster Professional and combined with other courses, to become a Certified Internet Webmaster (CIW) Master Administrator.

Competencies:

- Develop skills to provide essential TCP/IP services for any business interested in establishing an effective eCommerce presence.

- Implement real-world solutions for company intranets or ISPs that provide Internet Web services.
- Manage and tune corporate Internet and intranet infrastructure.
- Monitor Web server systems, FTP, news and mail servers.
- Configure and deploy e-business solutions servers.

Internet Professional

3 Credit Equivalent (90 Hours)

This course is designed to teach key Transmission Control Protocol/Internet Protocol (TCP/IP) concepts and protocols so network professionals can effectively plan, deploy and manage a TCP/IP enterprise network. Students will learn to build an enterprise network and analyze TCP/IP application and protocol information. Course emphasizes routing, network troubleshooting, network management, and next generation Internet protocol technologies. It guides students through the concepts and protocols used in Internet routing and troubleshooting TCP/IP networks using a packet sniffer and TCP/IP utilities. Students will configure the Simple Network Management Protocol (SNMP) to effectively manage a network, and implement a functional Internet Protocol. Prepares student for exams such as the Certified Internet Webmaster (CIW) Internetworking Professional exam to become a Certified Internet Webmaster Professional and combined with other courses, to become a Certified Internet Webmaster (CIW) Master Administrator.

Competencies:

- Define network architecture.
- Identify infrastructure components.
- Monitor and analyze network performance.
- Design, manage and trouble shoot enterprise TCP/IP networks.

Security Professional

3 Credit Equivalent (90 Hours)

Students learn how to secure networks from unauthorized activity and establish effective security policy, different types of hacker activities, the hacker's mind-set, and preventing and managing hacker penetration; authentication procedures, encryption standards and implementations, ports and protocols that hackers manipulate, and how to engage in proactive detection/response/reporting methods; how to perform different phases of a security audit, including discovery and penetration and how to defeat unauthorized users from controlling company networks; latest security industry recommendations and how to properly protect various servers. Prepares student for exams such as the Security+ and Certified Internet Webmaster (CIW) Security Professional exam to become a Certified Internet Webmaster Professional and combined with other courses, to become a Certified Internet Webmaster (CIW) Master Administrator.

Competencies:

- Implement e-business solutions security policies.
- Identify security threats and develop countermeasures using firewall systems and attack-recognition technologies.
- Manage the deployment of security solutions.

Principles of Graphic Design

4 Credit Equivalent (120 Hours)

Students will be introduced to the basic principles and elements of design including line, shape, format, etc. Students will complete assignments designed to apply the concepts introduced in each section. Students will be introduced to the color wheel and color harmony and various forms of type and how they can be

used to communicate ideas effectively. Students will understand the design process and apply it to creative solutions.

Competencies:

- Understand the basic principles and elements of design.
- Knowledge of basic color theory.
- Knowledge of the basic elements of typography.
- Be able to follow the “design process,” i.e., thumbnails, roughs and comps.
- Understand how to critique work.

Microcomputer Technologies Specialization Area

Electronics Fundamentals

4 Credit Equivalent (120 Hours)

Introduction to the concepts and fundamentals of electronic devices, systems, and circuits. Topics include direct current electricity, alternating current electricity, transistors and integrated circuits, transmitters and receivers, oscillators and amplifiers, electronic memory, digital logic circuits, and microcomputers. Prerequisite: Math 1010 or equivalent.

Competencies:

- Basics of DC/AC circuits.
- Basics of semiconductor/analog circuit.
- Basics of digital gates, circuits and systems.
- Basics of microcomputers.
- Learn to use meters, oscilloscopes and other measuring equipment.

Digital Fundamentals

3 Credit Equivalent (90 Hours)

Introduction to the basic theory of digital circuits and programmable logic controllers (PLCs). Binary, octal, and hexadecimal number systems, truth tables, logic gates, flip-flops, counter, shift registers, interfacing techniques, microprocessors and assembly language. Advanced topic including counter, sequential logic circuits, shift registers, memory systems, digital busses, A/D and D/A conversions will be covered. Prerequisite: Math 1010 or equivalent.

Competencies:

- Basic digital electronics concepts.
- Understand the difference between the analog and digital electronics circuits.
- Digital concepts relating to microprocessors.
- Interfacing to real-world inputs and outputs.

Microcontroller/Microprocessor Programming

4 Credit Equivalent (120 Hours)

This course is a series of presentations/study in number systems and codes, microprocessor/microcontroller architecture, computer arithmetic, machine and assembler language programming and microprocessor interfacing. Emphasis is placed on laboratory experiments dealing with machine/assembler language program execution and interfacing. Prerequisite: Digital Fundamentals.

Competencies:

- Understand microprocessor architecture.
- Learn assembly code.

- Apply peripheral interfacing in software and hardware.
- Learn interrupt control.
- Learn software development tools.

Programmable Logic Devices

2 Credit Equivalent (60 Hours)

This course introduces design alternatives for modern electronic systems; identifying and classifying alternative system solutions, and evaluating when particular design solutions are optimal. These alternatives include microprocessors, microcontrollers, off-the-shelf digital ICs, programmable logic ICs (FPGAs and CPLDs), and various forms of Application Specific Integrated Circuit (ASIC) designs. Prerequisite: Digital Fundamentals.

Competencies:

- Understand field programmable logic IC architectures.
- Learn underlying algorithms used by design software.
- Learn VHDL behavioral synthesis.
- Learn programmable logic design.
- Learn applications in computing environments.

Programmable Logic Controllers

2 Credit Equivalent (60 Hours)

Learn ladder logic and programming techniques of PLC's with hands-on experience. Covers different makes of PLC's, integration with sensors, switches, and various outputs, various input and output modules, relay and ladder logic diagrams, various software packages for ladder logic design, simulation, and programming; and hands-on labs with real components attached for testing. Prerequisites: Digital Fundamentals.

Competencies:

- Learn the basics of PLC's
- Learn hardware and software principles.
- Learn PLC operations, program construction and manipulation.

Telecommunications

3 Credit Equivalent (90 Hours)

An overview of telecommunications, electronics for telecommunications, transmission media, wireless communications, voice communications, data communications, WAN and Broadband technologies, converged data/voice networks, telecommunication policy, and business aspects of telecommunication. Prerequisites: Networking, Routing and Switching I & II.

Competencies:

- Understand transmission lines.
- Understand various types of communication methods.
- Learn WAN and Broadband technologies.
- Learn convergence of data/voice networks and telecommunication policies.

Active Semiconductor Devices

3 Credit Equivalent (90 Hours)

A study of diodes, transistor principles including semiconductor theory, bipolar and field effect device characteristics and modern thyristor devices. Prerequisite: Electronics Fundamentals.

Competencies:

- Learn diode applications.
- Learn transistor bias circuits.
- Use small-signal, power, and FET amplifiers.
- Learn amplifier frequency response and voltage regulators.
- Learn use of thyristors and other devices.

Analog Instrumentation Devices

3 Credit Equivalent (90 Hours)

This is a study of differential amplifiers, operational amplifiers, regulators, instrumentation amplifiers, active filters and timers. Emphasis is placed on laboratory experiments on various op amp performances leading to design and interfacing between the analog and digital world.

Competencies:

- Understand analog op amps circuitry and combine software simulation with lab hardware experimentation.
- Understand the difference between ideal and real op amp circuits.
- Learn the design of gain, input resistance and output resistance specifications.
- Learn the different compensations for op amp bias, offset, drift, bandwidth, slew rate, and noise.
- Design the interface between analog and digital in the microprocessor/microcomputer world.

Electronic CAD

2 Credit Equivalent (60 Hours)

This course is the study of electronic drafting practices. Students are exposed to various areas of electronic drafting fabrication. Prerequisite: Electronics Fundamentals.

Competencies:

- Components identification.
- Learn schematic capture.
- Learn printed circuit board layout.
- Use acceptable drafting practices.
- Learn methods of board manufacture.

AC/DC

2 Credit Equivalent (60 Hours)

A study of AC/DC principles beyond that taught in Electronics Fundamentals. This includes network theorems, capacitance, inductance, impedance, reactance, resonance, power factor and transformers. Prerequisite: Electronics Fundamentals.

Competencies:

- Apply network theorems to solve circuit problems.
- Learn to troubleshoot capacitive circuits.
- Learn to troubleshoot inductive circuits.
- Design filter circuits.

Electives

Database Applications

3 Credit Equivalent (90 Hours)

This course addresses design and development of small database systems for business applications with emphasis on database design, development, and basic administration. Projects with software applications

will provide students the opportunity to apply database concepts and skills to develop useful, well structured, and robust database systems.

Competencies:

- Develop basic database applications using database software with well-structured data, integrity, usable forms, reports and navigation.
- Be familiar with database physical design.
- Be familiar with the organizational issues involved in data and database administration.
- Understand client server, distributed and web based database management systems design and issues.
- Apply the use of tables, queries, forms, subforms, and reports.

Help Desk Technology

3 Credit Equivalent (90 Hours)

Prepares student with the techniques and processes of supporting needs of end users in a networked environment, emphasizing customer service principles and software tools that facilitate the servicing of end users. Students should know and understand the help desk setting and operations, including mission statement, characteristics, processes and procedures, performance measures, and job categories; identify and describe help desk tools, technology and techniques found in the industry such as call management, system management, and reporting software; telephone-based technology; and knowledge management; develop the right mix of principle help desk support skills with business, technical, soft, and self-management skills; and understand the physical work environment, its effect on employees, and how to optimize it for productivity.

Competencies:

- Know and understand the help desk setting and operations, including mission statement, characteristics, processes and procedures, performance measures, and job categories.
- Identify and describe help desk tools, technology and techniques found in the industry such as call management, system management, and reporting software; telephone-based technology; and knowledge management.
- Develop the right mix of principle help desk support skills with business, technical, soft, and self-management skills.
- Understand the physical work environment, its effect on employees, and how to optimize it for productivity.

Internship/Externship

1-4 Credit Equivalent (30-120 Hours)

Prepares student for the Information Technology industry by providing professional exposure to the technologies they have learned in the program. This course is intended to be taken at the end of training and can be repeated up to four times.

Competencies:

- Student will gain broad, practical, experience directly relating to the coursework they have completed at the college.

Appendix C

Faculty

Bridgerland Applied Technology College

Edward G. Ball, Department Head/Instructor

Qualifications:

Master of Engineering, Electrical Engineering. Utah State University

Bachelor of Science, Electrical Engineering. Utah State University

Professional Educator License, State of Utah

Cisco Certified Networking Associate

Teaching Experience: Ten years

Member: Institute of Electrical and Electronics Engineers

Member: Utah State University ITE in Engineering Advisory Committee

Lee Tansock, Instructor

Qualifications:

Master of Science, Business Information Systems; Education. Utah State University

Bachelor of Science, Information Systems Management. Weber State University

Professional Educator License, State of Utah

CompTIA A+ certified

Teaching Experience: Two years

Member: Utah Business and Computer Education Association

Gordon A. Anderson, Instructor

Qualifications:

Master of Education, Career Guidance and Counseling. Northern Montana College

Bachelor of Science, Industrial Teacher Education. Utah State University

Professional Educator License, State of Utah

Certified Instructor for IPC-A-610 and J-STD-001 industry standards for professional soldering, assembly and quality control. (IPC Association Connecting Electronics Industries)

CompTIA A+ certified

Industry Experience: Five years (U.S. Air Force Precision Measuring Equipment

Specialist, Retired Captain U.S. Air Force)

Teaching Experience: Four years

Member: Information Technology Faculty Association

Jan Jardine, Instructor

Qualifications:

Bachelor of Science, English. Utah State University

(Minor in Business Information Systems and Education)

Professional Educator License, State of Utah

Certified Novell Administrator
Teaching Experience: Five years
Member: Utah Business and Computer Education Association

Rex Nethercott, Instructor

Qualifications:

Bachelor of Science, Electronics Engineering Technology. Brigham Young University
Professional Experience: Eight years

Rik Stallings, Part time Instructor

Qualifications:

Bachelor of Science, Electrical Engineering
Microsoft Certified Systems Engineer
CSE
Certified Novell Engineer
Cisco Certified Network Associate
CompTIA A+ certified

Wayne Moore, Part time Instructor

Qualifications:

Bachelor of Science, Microbiology
Master of Education, Curriculum and Instruction. University of Nebraska Lincoln
Custom Fit and I.T. Departments
Emphasis in Instructional Technology
Teaching Experience: 22 years teaching experience (11 at BATC in Multimedia and Information Technology)

Ben Marchant, Part time Instructor

Qualifications:

Professional Programmer in Java and C++

Scott Murphy, Part time Instructor

Qualifications:

Professional Programmer in Visual Basic

Ward Belliston PhD, Part time Instructor

Qualifications:

USU Industrial Technology and Education Department
Professor Computer/Electronics Technology

Central Applied Technology College

Troy Young, Instructor

Qualifications:

Bachelor of Arts
Microsoft Certified Systems Engineer
Certified Internet Webmaster

CompTIA A+ certified
CompTIA Network+ certified
Cisco Certified Network Associate
Cisco Certified Associate Instructor

Terry Ahlquist, Instructor

Qualifications:

Bachelor of Arts
Certified NetWare Administrator

Davis Applied Technology College

Steve Allen, Instructor

Qualifications:

Bachelor of Science, Business Administration. Weber State University
Bachelor of Science, Computer Information Systems. Weber State University
Professional Educator License, State of Utah
Endorsements: Business Information Technology, Certified Network Administrator,
Occupational Computer Programming
Certified Novell Engineer
Novell Academic Instructor
Microsoft Certified Professional
CompTIA Network + Certified
Industry Experience: Ten years
Teaching Experience: 17 years
Member/Advisor: Vocational Industrial Clubs of America

Jeff Clark, Instructor

Qualifications:

Bachelor of Science, Business Management. Brigham Young University
Professional Educator License, State of Utah
Endorsements: Business Management
Industry Experience: 25 years
Teaching Experience: Ten years
Member: Utah Business and Computer Education Association

Joe Esquivel, Instructor

Qualifications:

Bachelors of Science, Aviation Management, Southern Illinois University
Associates, Aircraft Electrical Systems, Community College of the Air Force
Professional Educator License, State of Utah
Endorsements: Aircraft Mechanics, Electronics Technician, Industrial Maintenance
Technician
Cisco Certified Network Associate
Microsoft Certified Professional
CompTIA Net+ certified
CompTIA A+ certified
Industry Experience: 21 years

Teaching Experience: 18 years

Steve Halbern, Instructor

Qualifications:

M.S., Industrial Technology Education. Utah State University
Bachelor of Arts, Music and Biological Science, University of Alaska
A.A. Emphasis in Electronics
Professional Educator License, State of Utah
NASA and DoD certified instructor, High Reliability Soldering and Fabrication
Cisco Systems Instructor
Industry experience: 20 years
Teaching experience: Nine years
Member: Electronics Manufacturing Association
Member: Electronic Industries Association

Thomas J. Miller, Jr., Instructor

Qualifications:

Provisional Education License
Microsoft Certified Systems Engineer
Industry Experience: Eight years
Teaching Experience: Two years
Member: Vocational Industrial Clubs of America

Kim Ziebarth, Instructor

Qualifications:

Bachelor of Science, Boise State University
Professional Educator License, State of Utah
Microsoft Certified Systems Engineer
Certified Internet Webmaster, Professional
CompTIA i-Net+, Network+ certified
Industry Experience: Six years
Teaching Experience: Three years
Member: Utah Information Technology Association
Member: Vocational Industrial Clubs of America

Ogden/Weber Applied Technology College

Judi Elmer, Instructor

Qualifications:

Professional Educator License, State of Utah
Microsoft Certified Systems Engineer
Microsoft Certified Professional
Microsoft Certified Professional + Internet
CompTIA A+ certified
CompTIA Certified Technical Trainer (CTT+)
EDNET Faculty Training License
Industry Experience: 11 years

Teaching Experience: 4 years

Hugh Hadley, Instructor

Qualifications:

Bachelor of Science, Business Management, Data Processing Minor, Weber State College

Teaching Certificate, Idaho State University

Professional Educator License, State of Utah

Assistant Professor at Oregon Technical Institute

Industry Experience: 30 years

Teaching Experience: 18 years

Keith Luke, Instructor

Qualifications:

Bachelor of Science, Weber State College

MS Geology, Brigham Young University

Professional Educator License, State of Utah

Microsoft Certified Professional

Industry Experience: 20 years

Teaching Experience: Six years

Salt Lake/Tooele Applied Technology College

Todd Borandi, Instructor

Qualifications:

Masters of Business Administration, University of Advanced Research

Bachelor of Science, Speech Language Pathology and Audiology, University of Utah

Professional Educator License, State of Utah

Certified Internet Securities Systems Provider

GSEC

Microsoft Certified Systems Engineer +I

Microsoft Certified Database Administrator

CTT

Industry Experience: 6 years

Teaching Experience: 7 years

Daren Child, Instructor

Qualifications:

Bachelor of Applied Science, Electronics Engineering, ITT Technical Institute

Professional Educator License, State of Utah

Microsoft Certified Professional

CompTIA A+ Certified

Oracle Certified Instructor

Industry Experience: 7 years

Teaching Experience: 5 years

Tony Hart, Instructor**Qualifications:**

Professional Educator License, State of Utah
Microsoft Certified Systems Engineer
CompTIA A+ certified
Certified NetWare Administrator
Microsoft Certified Systems Engineer
Cisco Certified Network Associate

Matt Henderson, Instructor**Qualifications:**

Bachelor of University Studies, Eastern New Mexico University
Master of Business Administration, Eastern New Mexico University
Professional Educator License, State of Utah
Cisco Certified Network Associate
Certified Novell Administrator: Netware 3, IntraNetware, Netware 5, Groupwise 5
Certified Novell Engineer: Netware 3,5
Microsoft Certified Professional
CompTIA A+ Certified
Industry Experience: 15 years
Teaching Experience: 3 years

Ben Neiswender, Instructor**Qualifications:**

Bachelor of Science, Technology Education, BYU
Professional Educator License, State of Utah
Oracle Certified Instructor
Industry Experience: 2 years
Teaching Experience: 1 year

Lily Yang, Instructor**Qualifications:**

Masters Degree in Computational Linguistics
Professional Educator License, State of Utah
Certiport, IC3
A+
Network +
CompTIA iNet +
Novell Certified Network Administrator
Microsoft Certified Systems Engineer, Microsoft Certified Professional, MCP +1
Microsoft Certified Trainer
Industry Experience: 13 years
Teaching Experience: 8 years

Kristy Yeschick, Instructor

Qualifications:

Bachelor of Science, Business Information Systems and Education, Utah State University

Master of Arts, Instructional Technology, Western Governors University

Professional Educator License, State of Utah, Business Education, Marketing Education, Computer Literacy, and Multimedia

Industry Experience: 3 years

Teaching Experience: 6 years

Appendix D

Competencies for the AAT Degree in Information Technology

Focus Statement

Information Technology careers involve the design, development, support and management of hardware, software, Internet, multimedia and systems integration services. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society. IT impacts every sector of the economy—from Financial Services to Medical Services, Business to Engineering and Environmental Services. The following duties are expected of employees in entry-level information technology jobs.

Core Duties

Skills/Knowledge

- A. Computer Literacy
 - 1. Understand of file structure
 - 2. Save, retrieve, and delete files
 - 3. Log on and off of a computer
 - 4. Transport documents
 - 5. Connect to a network printer
 - 6. Use Web browser
 - 7. Use electronic mail
 - 8. Transfer electronic files
 - 9. Understand “netiquette”
- B. Information Technology
 - 1. Identify hardware
 - 2. Evaluate operating systems
 - 3. Understand the application of software
 - 4. Understand local and wide area networking
 - 5. Understand the business relevance of a database
 - 6. Discriminate between programming languages
 - 7. Understand information security risks
 - 8. Apply technology in the business setting
- C. Basic Programming
 - 1. Understand use of flowcharts
 - 2. Design a basic program
 - 3. Use structure in programming
 - 4. Understand the design of computer programs
 - 5. Identify different applications used in programming
- D. Internet
 - 1. Perform Internet research with search engines

2. Configure browsers
3. Be able to use FTP
4. Access rich multimedia
5. Understand basic electronic commerce
6. Understand basic security issues
7. Develop web pages with a text editor
8. Develop web pages with a GUI interface
9. Understand network architecture
10. Understand use of Internet servers

E. Networking

1. Recognize the use of different topologies
2. Understand network media
3. Design a basic network
4. Install basic network hardware
5. Configure a network
6. Understand network architecture
7. Understand and configure major network protocols
8. Understand signal transmission
9. Understand the OSI and 802 network models
10. Understand the difference between fault tolerant systems
11. Support network components
12. Troubleshoot network problems

F. Hardware

1. Understand computer architecture
2. Build a computer
3. Understand the function of hardware
4. Configure a computer
5. Configure interrupts
6. Memory management
7. Conduct preventative maintenance
8. Perform performance analysis
9. Understand diagnostic and troubleshooting techniques

G. Operating Systems

1. Installation
2. Configuration
3. Understand command prompt commands
4. Upgrade an operating system
5. Understand operating system architecture
6. Perform system maintenance
7. Optimize a system
8. Implement security
9. Troubleshooting
- 10.

H. Technical Support

1. Provide technical assistance
2. Answer technical questions
3. Apply technical information
4. Professional customer service
5. Application Integration
6. Perform word processing
7. Use spreadsheet
8. Develop business solutions

Knowledge and Skills

Application Software
 Communication (verbal, written, technical)
 Computer Hardware
 Computer Literacy
 Design
 Internet
 Listening
 Local Area Networking
 Network Architecture

Network Design
 Operating Systems
 Problem Solving
 Programming
 System Security
 Theory of Computers
 Time Management
 Troubleshooting
 Wide Area Networking

Traits and Attitudes

Accountable
 Confident
 Creative
 Professional

Reliable
 Respectful
 Responsible
 Self-Motivated

Tools and Equipment

Business Application Software
 Electronic Mail
 External Hardware Components
 Hub
 Internal Hardware Components
 Internet
 Network Cabling

Network Interface Card
 Operating Systems
 Printer
 Programming Software
 Server
 Workstation

Networking Duties

Students will be able to perform advanced network analysis, planning and implementation; including design, installation, maintenance and management of network systems; and be able to demonstrate successful establishment and maintenance of an information technology infrastructure and integration in a business environment.

Programming Duties

Students will design, develop, implement, and maintain computer systems and software using their knowledge of operating systems, programming languages and software development to produce business appropriate applications.

Internet Development Duties

Students will have advanced knowledge and ability in designing, creating, maintaining and implementing security in an Internetworking environment. This will include Internet programming, eCommerce development, graphics and administration.

Appendix E

Advisory Committees

Bridgerland Applied Technology College

Ed Ball (Chairperson)
Paul Anderson, PC/ER Personal Computing
Robert Ashby, Icon Health and Fitness
Ward Belliston, Utah State University, Industrial Technology
Rex Davis, Thiokol
Tom A. Hansen, Wescor
Tracy Mikesell, Space Dynamics Lab
Larry Shirk, Inovar, Inc.
Rik Stallings, Logan School District

Central Applied Technology College

Craig Curtis, Snow College South (Chairperson)
Jim Holm, Advanced Technology Center
Rob Ricks, Ikano
Dr. Charles Knutson, Brigham Young University
Gary Stokes, Novell
Jeff Sirrine, Snow College South

Davis Applied Technology College

Brett Wangrud, Kforce (Chairperson)
Keith Duncan, Prime Systems
Joey Eccleston, Senior Java Engineer
Steve Green, Weber State University
Jeff Haddon, University of Utah
Neil Hancey, Davis School District
Adam Jerome, Novell
Bruce Johnson, Cisco
Frank Newton, Linux Networx
Alison Osborn, Maxim Group
Shaun Steel, Accuwest Technology
Jay Williams, 3Com
Norm Wismer, Oracle

Mountainland Applied Technology College

Nevin Anderson, Manager, Information Technology, Mity-Lite, Inc.
John F. Fralick, Vice President, Information Technology, Nu Skin Enterprises, Inc.
Eric Rasmuson, Information Technology Manager, NextPage, Inc.

Ogden/Weber Applied Technology College

Chris Morey, Aviation Materials Management (Chairperson)
Ted McGrath, Weber State University
Ressa Scherer, McKay Dee Hospital
Janet Southwick, Internal Revenue Service

Salt Lake/Tooele Applied Technology College

Jerry Ropelato, iAccess (Chairperson)
Kenneth Barton, 3M Health Information Systems
Pieter Bowman, University of Utah
Tami Ione Elsner, University of Utah
David Green, Oracle
Bill A. Maasberg, Software Development Resource
Mike McCue, Evans & Sutherland
Marty Newey, Allen Communications/Div. Of Mentergy
John Rose, American Express
Matt Royal, Microsoft
Wayne Wride, Kennecott Copper Company

Southwest Applied Technology College

Hyrum Short, Iron County School Dist
Richard Bezansen, Southern Utah University
Yuri Borisova, Metalcraft Technology Inc.
Glen Sanders, Mountain West Office Supplies
Scott Prisbey, Assial Telemarketing & Skyview Technologies
Clint Enman, Genpack Corporation

Uintah Basin Applied Technology College

Cheree Brotherson, Mckeachie/Allred (Chairperson)
Nancy Aycock, SOS Staffing
Susan Chapoose, Ute Tribe Education
Paul Nielsen, UBET
Kirk Seeley, Seeley & Hales
Lynn Snow, Century 21

SECTION I

The Request

The Utah College of Applied Technology (UCAT) officials request approval to offer an Associate of Applied Technology (AA.) Degree in Medical Assisting effective fall, 2002. The institutional Board of Trustees approved this program on May 1, 2002.

SECTION II

Program Description

Complete Program Description - The proposed program provides students an opportunity to master the skills required for this dynamic healthcare profession. The program utilizes an open-entry/open-exit, competency based method of instruction, which prepares students to perform administrative and clinical duties in medical offices, clinics, and health maintenance organizations.

The training is based upon nationally recognized standards established by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Curriculum Review Board of the American Association of Medical Assistant's Endowment. The program is based upon an existing certificate program that has established partnerships with healthcare facilities and providers throughout the state. All students will complete externships in a working medical office or clinic under the supervision of a licensed physician. This collaboration allows the student the opportunity to demonstrate clinical and administrative skills in an industry environment.

Faculty members with extensive industry and education experience teach courses. In addition, local Program Advisory Committees provide support in assuring that the training is current and meets the demands of the community. The program is designed to prepare students for immediate employment upon graduation. Although students may not be able to complete the entire degree at every regional college, they will be able to complete components of the degree and then finish the program at another campus. A matrix outlining the availability of the AAT Degree and associated courses at each UCAT regional can be found in Appendix A.

A summary of requirements for completion of the Associate of Applied Technology Degree follows. Thirty clock hours equates to one semester credit equivalent. The complete curriculum for the proposed program, including course descriptions, is included in Appendix B.

No sample class schedule is provided. Because all UCAT regional colleges operate on an open-entry/open-exit model, it is difficult to outline a proposed semester schedule. Instead, students are encouraged to take courses, which total six classroom hours per day (for full-time), transitioning from one course to the next as competencies are mastered, until such time as they have met the degree requirements.

General Education Requirement - 13 Semester Credits/390 Clock Hours

General education courses are consistent with those required for the Associate of Applied Science degree at other USHE institutions. Courses were selected to maximize ease of transferability to other USHE colleges and universities. The general education component, when delivered in a traditional format, will total 13 semester credits. Using a conversion factor of 30 clock hours to one semester credit, this equates to 390 clock hours.

Technical Core Courses – 1440 Clock Hours/48 Semester Credit Equivalents

The technical core courses for the AAT Degree in Medical Assisting provide a sound foundation for IT students. All students who wish to receive the AAT in Information Technology must complete the core course work.

Electives – 60 Clock Hours/2 Semester Credit Equivalents

Students will select a minimum of 60 clock hours in specified elective courses.

The proposed degree requires a total of 1890 clock hours, or 63 semester credit equivalents.

Purpose of Degree – The Utah College of Applied Technology is directed, by statute (53B-2a-104), to develop competency-based associate of applied technology degrees to be offered by the regional applied technology colleges. During the process of determining which certificate programs at the regional colleges would provide the best foundation for these AAT degrees, UCAT officials considered several factors including the following: (1) supply and demand, (2) programs that must address national standards; (3) the strength of the current curriculum, (4) wage/career path, and (5) the feasibility of creating the foundation for a future Bachelor of Applied Technology Degree in the area. The proposed AAT Degree in Medical Assisting meets these criteria.

In addition, the proposed degree provides students who are working toward a certificate with the opportunity to pursue the level of training and education that is appropriate for them. The program has been developed with recognition of the importance of multiple entry and re-entry points for students who wish to return and build upon previously attained competencies. Certificates for the completion of segments of the curriculum will be available to students in the degree program. And, although students will not be able to complete the degree in its entirety at each UCAT campus, they will be able to complete parts of the curriculum and apply that course work at other campuses for completion of the degree. The proposed degree not only gives students the appropriate credentials for the competencies that they have achieved, but also provides them with an appropriate pathway to further training, education, and degrees at one of the other Utah System of Higher Education Institutions.

Medical assisting has evolved from the days where the primary source of training was on-the-job. The knowledge and technical skills required of the profession demand detailed formal training. The growth of the ambulatory health care sector in Utah relies upon the availability of entry-level medical assistants with superior technical skills. Because medical assistants work under the license of a physician, the established standard for employment dictates formal training.

The expected outcomes of this program are highly trained professionals who provide the health care community an established standard for safe and effective medical assistant practice.

Admission Requirements - Admission to the program is consistent with general admission procedures and guidelines of the individual UCAT regional colleges. Students are admitted after demonstrating a reasonable ability to benefit from the program and in the profession. Assessments in areas such as math, reading, language, and communication are administered to validate the student's ability to benefit from this training. This process is consistent with admission guidelines established by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Student Advisement - One of the strengths of the Utah College of Applied Technology is the individualized advising that students receive. Qualified career guidance technicians and career counselors are available to students and College applicants who are interested in career exploration and career decision-making, including training options. Occupational interests, transferable skills, and other factors that contribute to developing informed training and employment goals can be reviewed with career guidance staff in Student Services. Office counselors are available to review progress and program issues and to make training modifications as needed during the training process.

Counselors are also available to review progress, assist with program issues and make modifications as needed during the training process. Students are also encouraged to meet with Medical Assistant faculty for advising needs.

Justification for Number of Hours - The proposed AAT Degree requires 1890 clock hours. This is equivalent to 63 semester credit hours, which is within the standard hours for an Associate of Applied Science Degree.

External Review and Accreditation - This degree is based upon nationally recognized standards for medical assistant training. Course content and competencies are derived from the *Standards and Guidelines for an Accredited Educational Program for the Medical Assistant* established by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Curriculum Review Board of The American Association of Medical Assistant's Endowment (AAMAE). Commencing in 1993, medical assistant training based upon CAAHEP and AAMAE standards was provided by the applied technology centers, the antecedents of the UCAT regional colleges. Formal accreditation by CAAHEP of individual programs occurred in 1997 and 1998.

In addition, all current Utah College of Applied Technology programs maintain active Program Advisory Committees. Program Advisory Committees are comprised of physicians, medical office managers, medical assistants, other healthcare professionals and community members.

These committees meet regularly to advise Regional College faculty and administration on programmatic, curriculum, and instructional issues. The input of the committee assures that medical assistant training is current and responds to the needs of the community it serves.

Projected Enrollment - Projected headcount enrollment for the first five years of the program follows. Based on student surveys, the figures represent a conservative estimate of the number of students at the ten regional colleges who are expected to pursue the AAT Degree.

	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07
Utah College of Applied Technology Total						
Projected Degree Enrollment	71	76	81	84	87	90

Expansion of Existing Program - The proposed Medical Assisting AAT Degree builds upon the foundation of established medical assistant programs that have been in operation beginning in 1993 and, with the addition of a general education component, provides an additional option for students. Students currently enrolled at the UCAT regional colleges have different goals. Some students may desire a certificate of completion; others may be enrolled in short-term employment upgrade options. For this reason, current enrollment figures are not necessarily relevant to the proposed degree, and are not included here.

Faculty - A certificate program already exists with faculty in place. No additional faculty are required for the program. In keeping with the UCAT's emphasis upon preparing students to meet current workforce needs, faculty have extensive experience in industry along with the necessary educational credentials to provide students with the most current knowledge in this ever-changing and advancing field. This particular field is dramatically impacted by the rapidly advancing technology and both students and faculty are forced to "keep-up" with technology. A list of existing faculty who will support the proposed program can be found in Appendix C

Staff - The Utah College of Applied Technology and its member regional colleges will administer the Medical Assisting AAT Degree Program. As this is an existing certificate-based program at the regional colleges, no additional administrative or secretarial/ clerical staff will be required.

Library and Learning Resources - The Regional Colleges, (formerly applied technology centers), have not historically had centralized libraries. Instead, appropriate resources (manuals, textbooks, and industry documents) are available in the individual program areas. The current Medical Assisting materials are adequate and the projected operating expenses for the program are sufficient to ensure the necessary replacement and supplemental materials purchases. Existing programs also provide students with access to clinical and administrative labs in which skills can be demonstrated, practiced and mastered.

The creation of UCAT, for which accreditation will be sought through the Northwest Commission on Colleges, requires expanded library resources. These resources will be provided through UCAT membership in the Utah Academic Library Consortium (UALC). UALC membership provides students with access to all existing Utah academic libraries through resource sharing agreements. Students also have electronic access to on-line collections through the Pioneer Library.

SECTION III

Need

Program Necessity - The delivery of healthcare has a significant impact on the quality of our lives both physically and financially. Health services continue to be the second fastest growing industry in the nation. The demand for quality, affordable health services is a primary concern for individuals, businesses and government. Advances in medical technology have decreased mortality and morbidity rates and reduced the number of in-patient hospitalization days.

Healthcare continues to transition from in-patient to ambulatory services. An informed public, coupled with an effort to emphasize health prevention and promotion, has fueled the growth of ambulatory clinics and medical offices. In an ambulatory setting, the medical assistant provides the most economical and efficient delivery of allied health services. As a multi-skilled occupation, medical assisting provides offices, clinics and health maintenance organizations individuals with substantial administrative and clinical skills.

Many healthcare facilities that employ medical assistants use the Certified Medical Assistant (CMA) credential as the benchmark for entry-level employment. In order to obtain the CMA credential, the medical assistant must first graduate from a CAAHEP accredited medical assistant program. This will allow the medical assistant to sit for the CMA exam offered by the American Association of Medical Assistants (AAMA). The UCAT Medical Assistant Program is based upon the standards established for CAAHEP accreditation. This provides medical assistant programs that are not currently CAAHEP accredited the foundation for a successful accreditation process. It also provides the community and healthcare sector documentation of professionally trained medical assistants.

In keeping with UCAT's mission, the emphasis of the proposed AAT Degree Program provides hands-on, open-entry/open-exit, competency-based training. Classroom and laboratory activities are intertwined to provide students with the technical skills necessary to be successful in the health care industry, and properly prepared for continuing their education at one of the other Utah System of Higher Education institutions if they so choose.

Labor Market Demand – Medical assisting is listed as one of the fastest growing professions both nationally and in Utah, as indicated below:

Utah Department of Workforce Services, *Utah Job Outlook in Brief*, June 2000

- Medical Assistants listed as one of the Top 50 Fastest Growing Occupations in Utah for 2000 – 2005 with a 31% increase.
- Medical Assistants listed as one of the Top 50 occupations with New Jobs in Utah 2000 – 2005.
- Utah Average Annual Medical Assistant Openings 2000 – 2005 is 220 positions.

U.S. Department of Labor, Bureau of Labor Statistics, 2000 – 2010 *Economic and Employment Projections*

- Health Services are third among industries with the fastest wage and salary employment growth.
- Medical Assistants are in the Top 10 fastest growing occupations representing an increase of 57%.
- BLS Data, Utah Average Annual Medical Assistant Openings is 220 positions.

In addition, the Medical Assistant Program Advisory Team continues to report continued demand for medical assistants throughout the State. Medical assistants with formal training have a distinct advantage in meeting the demands of this multi-skilled profession; medical assistants are also employed as phlebotomists, laboratory assistants, billing clerks, receptionists, medical records clerks, medical transcriptionists and medical coding specialists.

Student Demand - The demand by students for medical assistant training mirrors the continued growth in the healthcare sector. Since medical assistant programs have been in operation for a number of years, UCAT regional colleges can corroborate that enrollment has been more than sufficient to justify continued operation. Preliminary student surveys indicate that over half of currently enrolled students are interested in pursuing the AAT Degree. Based upon Labor Market Demands and supported by discussions with the Program Advisory Team, there is every reason to believe that the program will continue to show strong student demand.

Similar Programs - Salt Lake Community College offers a CAAHEP accredited, one-year certificate based, medical assistant program. The proposed Associate of Applied Technology Degree is a new degree which has never before been offered in the State of Utah. It is important to remember that a Medical Assisting Certificate Program has existed at many of the regional colleges for many years. The proposed degree builds upon that program, and offers an alternative delivery format (open-entry/open-exit) and an alternative way in which students can progress through their program of study and demonstrate mastery of the material (a competency-based approach). This alternative approach is expected to appeal to some students and not to others. The student's choice will depend upon his/her goals and the type of educational experience that he/she desires. What is most important is that the Utah System of Higher Education will, with the addition of the AAT Degree, provide an additional opportunity for students to complete their training and education goals.

Collaboration with and Impact on Other USHE Institutions – Applied technology centers, as the predecessors to the UCAT regional colleges, began offering CAAHEP accredited medical assistant programs in 1993. The implementation of these programs helped meet the demand for medical assistant training across Utah without impacting existing USHE programs.

The creation of the Utah College of Applied Technology has brought about new relationships between the former ATCs and the other USHE institutions. Because the UCAT cannot offer general education course work for credit, representatives from the regional colleges are currently coordinating with the other USHE institutions in their regions for the delivery of the general education component of the AAT

Degree. UCAT students will be encouraged to pursue educational opportunities beyond the regional college level, and it is hoped that many of them will go on to earn bachelors and advanced degrees. Weber State University and Utah Valley State College have developed Bachelors of Applied Technology (BAT) Degrees which are also being submitted for Regents' approval. These degrees have been developed cooperatively with regional ATC partners and will provide a clear path for some students to move from the AAT degree to a Bachelor's degree in their chosen field of study.

In addition, nearly all regional applied technology colleges have already negotiated regional articulation agreements with their USHE partners. Those ATCs that do not have these agreements will seek them as part of the development of AAT degree programs and the creation of general education courses.

Benefits - By providing training that meets the needs of industry, and provides an alternative instructional delivery format and assessment process for students, the UCAT and the USHE are able to show the taxpayers a demonstrable return on their investment. The proposed degree is particularly well suited as it provides a path to employability in a relatively high-demand field.

It is anticipated that the AAT Degree will appeal to students who have not previously viewed themselves as "college bound". Their training experience at a UCAT regional college will provide the student with a foundation for success if they choose to enroll in other USHE programs to continue their education. USHE institutions will benefit from students who are motivated, self-starters, and take responsibility for their education.

Consistency with Institutional Mission - The Utah College of Applied of Technology was created for the purpose of providing open-entry/open-exit, competency-based short-term, certificate and degree programs that prepare students to enter the job market. Clearly, the proposed Associate of Applied Technology Degree program is market-driven and provides technical training to individuals seeking employment and upgrade training.

SECTION IV

Program and Student Assessment

Program Assessment - Goals for the proposed program and Utah College of Applied Technology measurements of success follow. The program goals will be evaluated yearly to determine that the program is meeting the needs of business and industry as well as the needs of students. Industry standards for successful employment will guide goal setters. Enrollment, completers, and employment will be evaluated to determine if the program is performing as required with an employment goal of 90 percent or better.

Outcome Goal	Evaluation Method
80% of students who are formally admitted to the program will graduate.	Graduation data provided by Regional Colleges
90% of graduates who are seeking employment are placed in jobs.	Placement data provided by Regional Colleges
80% of graduates who sit for the Certified Medical Assistant (CMA) exam will pass on their first attempt.	Regional Colleges, American Association of Medical Assistants (AAMA) Certifying Board
The average scores of students who sit for the CMA exam will exceed the National Average Standard Score.	Regional Colleges, AAMA Certifying Board
80% of students who take USOE Benchmark exams will receive the Utah Board of Education Medical Assistant Endorsement.	Regional Colleges, Utah State Office of Education (USOE)

Expected Standards of Performance - The UCAT Medical Assistant AAT Degree is based upon requirements for CAAHEP accredited medical assistant educational programs.

These standards were derived from the American Association of Medical Assistant's 1999 Developing a Curriculum (DACUM). A list of competencies, which were established after an extensive occupational analysis of the medical assisting profession was completed by the AAMA, and which must be achieved by graduation, can be found in Appendix D

Student Assessment - The proposed AAT Degree in Medical Assisting will be delivered in a competency-based format. This is consistent with UCAT's mission and the CAAHEP guidelines requiring that curriculum must be developed in a competency-based structure. A competency-based format of instruction provides positive student assessment at every point in their training. Students are provided with the specific task to be mastered; the conditions under which they are expected to perform the task; and the standard of performance for the task. Students are judged competent when they can successfully demonstrate the task and are given the training and support necessary to practice the task until they can demonstrate competency.

This formative process is constructive, consistent, and immediate. It provides the student an environment in which the value of each component of their training can be reinforced. This type of assessment not only produces a better student, but it helps create a professional medical assistant.

This process produces a graduate who has demonstrated competency in all entry-level skills outlined in the DACUM and who is ready for immediate employment. The ability to provide safe and effective care is vital for any healthcare professional. Competency-based instruction helps assure that graduates can demonstrate the skills necessary to provide that safe and effective care.

Students are also assessed during their externship. In this non-paid training experience the student spends a minimum of 180 hours working in a medical office or clinic under the supervision of a licensed physician. This gives the student the opportunity to exercise their clinical and administrative skill in a working environment. The student is evaluated throughout the externship as well as at the conclusion of this experience.

Continued Quality Improvement – The Utah College of Applied Technology is committed to providing the highest caliber of medical assistant training. The results of programmatic and student evaluations will be used to implement positive changes in the delivery of UCAT Medical Assistant programs. The dimensions of change may include faculty development, teaching methods, facilities, institutional organization, budget, personnel policies and equipment.

The process of improvement is fostered by a partnership between the training institution, students, and employers. Student evaluations of courses and faculty as well as employer evaluation of graduates will be added to the assessment processes already defined. This will provide sufficient data to ensure continued quality improvement.

Ongoing program quality improvement is achieved through feedback from the Program Advisory Committee. The purpose of the Advisory Committees at the local level is to assure continuing relevance of applied technology programs. The attainment of high-quality technical training would not be possible without the close involvement of knowledgeable persons from the business and industry community. The nature of technical change requires that training institutions be kept informed of the current and anticipated needs of business and industry. Advisory Committees act as a link between the education system and the business community through deliberations focusing on common needs and goals.

A list of Program Advisory Committee chairs for each regional college offering the Medical Assisting AAT degree follows. A complete list of committee members is included in Appendix E.

Jane Binns, RN, Director of Health Science - Bridgerland ATC
Kitty Helton, CMA, Tanner Clinic-Kaysville – Davis ATC
Rett Hansen, Manager, Health Clinics of Utah – Ogden-Weber ATC
JoAnn Fenn, University of Utah; Glenn Thompson, Tooele Valley Spine Center – SLT ATC
Rose Miller, Social Services – Uintah Basin ATC.

SECTION V

Finance

Budget - The projected budget for the first five years of the proposed program follows. It is important to note that these budget figures are based upon the current operating budget for the existing certificate programs at each regional college that will be offering the entire AAT Degree. Budget figures include support for high school and adult students, certificate candidates, upgrade training, apprenticeship students (where appropriate) and the proposed AAT Degree. No additional funds are required; this operating budget is currently in place.

Additionally, the funds identified under capital equipment are those deemed necessary to continue the program at its present level of performance.

UCAT Total					
Salaries	\$316,750	\$316,750	\$323,085	\$329,547	\$336,138
Benefits	\$106,150	\$106,150	\$111,458	\$117,030	\$122,882
Current Expense	\$39,580	\$39,580	\$39,580	\$39,580	\$39,580
Capital	\$14,500	\$14,500	\$14,500	\$14,500	\$14,500
Total	\$476,980	\$476,980	\$488,623	\$500,657	\$513,100

Funding Sources - The medical assistant training offered by UCAT Regional Colleges is already established and therefore, has sufficient funds to continue operation. The addition of an Associate of Applied Technology Degree does not require any resources that are not already allocated.

Impact on Existing Budgets - Because this degree is an extension of an existing program, no impact on existing budget is anticipated.

Appendix A

Availability of the AAT Degree and Related Course Work by UCAT Regional College

AAT Degree in Medical Assisting										
	BATC	CATC	DATC	DXATC	MATC	OWATC	SLATC	SEATC	SWATC	UBATC
Core Courses	x	x	x		x	x	x			x
Electives	x	x	x		x	x	x		x	x

Appendix B

UCAT Medical Assisting Associate of Applied Technology Degree Curriculum

General Education Requirement

General education courses are consistent with those required for the Associate of Applied Science degree at other USHE institutions. Courses were selected to maximize ease of transferability to other USHE colleges and universities. The general education component, when delivered in a traditional format, will total 13 semester credits. Using a conversion factor of 30 clock hours to one semester credit, this equates to 390 clock hours.

Technical Core Courses

The technical core courses for the AAT Degree in Medical Assisting provide a sound foundation for IT students. All students who wish to receive the AAT in Information Technology must complete the core course work.

Electives

Students will select a minimum of 60 clock hours in specified elective courses.

The proposed degree requires a total of 1890 clock hours, or 63 semester credit equivalents.

GENERAL EDUCATION REQUIREMENTS	Hours	Semester Credits
Composition	90	3
English 1010 – Introduction to Writing		
Math		
Math 1010 – Intermediate Algebra	120	4
Human Relations	90	3
Electives (related to the degree)	90	3
Total General Education Courses	390	13
CORE COURSES	Hours	Credit Equivalen
Medical Terminology	90	3
Medical Law & Ethics	60	2
Anatomy & Physiology for the Medical Assistant	150	5
Pharmacology for the Medical Assistant	120	4
Psychology for the Medical Assistant	90	3
Computer Literacy	90	3
Medical Office Administrative Procedures I	120	4
Medical Office Administrative Procedures II	90	3
Medical Office Administrative Procedures III	120	4
Medical Assistant Clinical Procedures I	30	1

Medical Assistant Clinical Procedures II	150	5
Medical Assistant Clinical Procedures III	150	5
Medical Assistant Externship I	180	6
Total Core Courses	1440	48
ELECTIVE COURSES 60 hours minimum required		
Applied Communications/Job Search	30	1
Internet	30	1
Intravenous Therapy	30	1
Keyboarding	30	1
Medical Assistant Externship II	60	2
Medical Assistant Externship III	60	2
Medical Math	60	2
Resume, Interview and Employment Skills	30	1
Written and Oral Communications	60	2
Total Elective Courses	60	2
Core Courses	1440	48
Elective Courses	60	2
General Education	390	13
TOTAL	1890	63

UCAT Medical Assistant AAT Degree
Associate of Applied Technology Degree Requirement Course Descriptions

Core Competencies

Anatomy & Physiology for the Medical Assistant

5 Credits Equivalent (150 Hours)

Anatomy and physiology is the study of the structure and function of the human body. This course includes a review of all organ systems including disease processes and diagnostic treatment modalities.

Competencies:

- Understand the anatomy and physiology of all body systems
- Identify common pathology/diseases
- Understand diagnostic/treatment modalities

Medical Assistant Clinical Procedures I

1 Credit Equivalent (30 Hours)

This course will provide the student an overview of the medical assistant profession and its role in the healthcare environment.

Competencies:

- Understand the role of the medical assistant
- Categorize medical practice specialties
- Identify allied health professions and credentialing
- Describe the personal attributes of a professional medical assistant
- Outline workplace dynamics in a healthcare setting

Medical Assistant Clinical Procedures II

5 Credits Equivalent (150 Hours)

Course content includes the study of disease transmission and prevention, emergency patient care, patient assessment including vital signs, and assisting the physician.

Competencies:

- Perform hand washing
- Wrap items for autoclaving
- Perform sterilization techniques
- Dispose of biohazardous materials
- Practice universal precautions
- Perform telephone and in-person screening
- Obtain vital signs
- Obtain and record patient history
- Provide patient instruction
- Obtain CPR certification and first aid training

Medical Assistant Clinical Procedures III

5 Credits Equivalent (150 Hours)

This course will provide the student the skills necessary to perform diagnostic testing, minor surgery procedures, laboratory safety procedures, and the collections and testing of laboratory specimens.

Competencies:

- Perform venipuncture
- Perform capillary puncture
- Obtain throat specimen for microbiological testing
- Perform wound collection procedure for microbiological testing
- Instruct patients in the collection of a clean-catch mid-stream urine specimen
- Instruct patients in the collection of fecal specimens
- Use and methods of quality control
- Perform urinalysis
- Perform hematology testing
- Perform chemistry testing
- Perform immunology testing
- Perform microbiology testing
- Screen and follow-up test results
- Perform electrocardiograms
- Perform respiratory testing
- Prepare and maintain examination and treatment areas
- Prepare patient for and assist with routine and specialty examinations
- Prepare patient for and assist with procedures, treatments, and minor office surgery

Medical Assistant Externship I

6 Credits Equivalent (180 Hours)

This course allows the medical assistant student the opportunity to demonstrate their administrative and clinical skills in healthcare setting. This non-paid externship takes place in a working medical office or clinic under the supervision of a licensed physician.

Competencies:

- Perform administrative procedures
- Perform clinical procedures
- Demonstrate the attributes of a professional medical assistant

Medical Law & Ethics

2 Credits Equivalent (60 Hours)

This course provides the student exposure to the legal and ethical issues that impact the medical office.

Competencies:

- Identify legal guidelines/requirements for healthcare
- Apply medical ethics and related issues
- Apply risk management processes

Medical Office Administrative Procedures I

4 Credits Equivalent (120 Hours)

This course is designed to teach the basic skills needed to perform clerical functions efficiently in a medical office setting.

Competencies:

- Schedule and manage appointments
- Schedule inpatient and outpatient admissions and procedures
- Demonstrate telephone techniques

- Perform medical transcription
- Organize a patient's medical record
- File medical records

Medical Office Administrative Procedures II

3 Credits Equivalent (90 Hours)

This course is designed to instruct the medical assistant student in the basic skills necessary to perform bookkeeping and financial functions in a medical setting.

Competencies:

- Prepare a bank deposit
- Reconcile a bank statement
- Post entries on a daysheet
- Perform accounts receivable procedures
- Perform accounts payable procedures
- Perform billing and collection procedures
- Prepare a check
- Establish and maintain a petty cash fund
- Post adjustments
- Process credit balance
- Process refunds
- Post NSF checks
- Post collection agency payments

Medical Office Administrative Procedures III

4 Credits Equivalent (120 Hours)

This course is designed to instruct the medical assistant student in the basic skills necessary to perform proper insurance, coding and billing procedures.

Competencies:

- Process insurance claims
- Apply managed care policies and procedures
- Apply third party guidelines
- Obtain managed care referrals and pre-certifications
- Perform procedural coding
- Perform diagnostic coding
- Complete insurance claim forms
- Use a physician's fee schedule

Medical Terminology

3 Credits Equivalent (90 Hours)

This course provides the student with the skills necessary to interpret and understand medical terminology, in order to be successful in the pursuit of health occupation careers. This is accomplished by utilizing a method of study that not only instructs the students on how to build medical terms, but also gives the student immediate application of how the medical term is utilized.

Competencies:

- Identify basic structure of medical words

- Apply word building and definitions
- Use medical abbreviations
- Applications of medical terminology

Computer Literacy

3 Credits Equivalent (90 Hours)

This course provides a fundamental understanding of computing including knowledge and use of computer hardware, software, and operating systems. The course will cover basic use and common features of applications (word processing, spreadsheet, and database) including internet use and e-mail. Recommended prerequisite: keyboarding 25 wpm.

Competencies:

- Identify computing fundamentals such as computer hardware, software, and operating systems
- Learn to navigate the windows environment
- Gain knowledge of primary applications such as common program, word processing, spreadsheet, and database functions
- Learn to use online computing including Internet and electronic mail

Pharmacology for the Medical Assistant

4 Credits Equivalent (120 Hours)

This course discusses the classification of drugs, their actions, their uses, and common side effects. The student learns how to perform dosage calculations, document and maintain medical administration records, and prepare and administer oral and parenteral medications.

Competencies:

- Perform dosage calculation
- Identify drug classifications
- Apply pharmacology principles to prepare and administer oral and parenteral medications
- Maintain medication and immunization records

Psychology for the Medical Assistant

3 Credits Equivalent (90 Hours)

This course will provide the student with basic principles of psychology required in a healthcare environment.

Competencies:

- Identify developmental stages of the life cycle
- Describe hereditary, cultural and environmental influences on behavior
- Outline issues of mental health and applied psychology

Elective Courses

Applied Communications/Job Search

1 Credit Equivalent (30 Hours)

This self-paced class features writing, listening, telephone skills, ethics, interviewing skills and teamwork. The goal of this class is to help students realize the importance of communication on the job. Students become aware of the elements involved in listening and learn to effectively listen for instructions from

employers and requests from customers. This class also contains discussion on interview questions; interview techniques and students are required to participate in a mock interview. Student requirements include a willingness to learn essential skills needed in preparing for training related employment.

Competencies:

- Assist students in preparing a current resume
- Provide interviewing skills

- Demonstrate the practical application of essential job related communications
- Demonstrate the importance of public relations when dealing with customers on the phone

Internet

1 Credit Equivalent (30 Hours)

This course is designed to help the student develop the skills necessary to navigate the Web. The student will learn the most important topics of using the Internet, getting connected, basic e-mail and basic browsing.

Competencies:

- Demonstrate that you can use a search engine to locate information on the Web
- List some of the most popular Internet resources
- Describe how Web servers, URLs, HTML, HTTP, and browsers contribute to the Internet resource known as the Web
- Explain how e-mail system works

Intravenous Therapy

1 Credit Equivalent (30 Hours)

This course is designed to teach medical assistants how to insert and maintain an IV HepCap device preparatory to licensed personnel starting IV therapy. It includes the theory and instruction of the skill itself as well as an overview of limitations associated with the medical assistant scope of practice.

Competencies:

- Understand the purpose and legal implications of IV therapy
- Identify the extent and limitation of IV access for medical assistants
- Define terms associated with IV therapy
- Understand basic anatomy associated with IV therapy
- Prepare equipment for use in IV therapy
- Choose and prepare appropriate IV site
- Insert and stabilize IV device
- Document procedure
- Monitor patient
- Discontinue HepCap device
- Prevent and treat complications

Keyboarding

1 Credit Equivalent (30 Hours)

This course is designed for students to learn or increase their keyboarding ability. Students will learn basic keyboarding techniques and will work towards improving accuracy and or keyboarding speed.

Competencies:

- Achieve 30 words per minute on a three-minute timed test
- Demonstrate proper keyboarding techniques and finger placement

Medical Assistant Externship II

2 Credits Equivalent (60 Hours)

This is a continuation of the Medical Assistant Externship I. This course allows the medical assistant student additional opportunity to demonstrate and improve their administrative and clinical skills. All

medical assistant externships are non-paid experiences in a working medical office or clinic under the supervision of a licensed physician.

Competencies:

- Perform administrative procedures
- Perform clinical procedures
- Demonstrate the attributes of a professional medical assistant

Medical Assistant Externship III

2 Credits Equivalent (60 Hours)

This is a continuation of the Medical Assistant Externship II. This course allows the medical assistant student additional opportunity to demonstrate and improve their administrative and clinical skills. All medical assistant externships are non-paid experiences in a working medical office or clinic under the supervision of a licensed physician.

Competencies:

- Perform administrative procedures
- Perform clinical procedures
- Demonstrate the attributes of a professional medical assistant

Medical Math

2 Credits Equivalent (60 Hours)

This course gives the student the practical math skills to perform dosage calculations. Course content includes use of fractions, ratios, proportions, the metric system, as well as household and apothecary measurements and conversions.

Competencies:

- Express a ratio as a quotient, as a fraction, and as a decimal
- Name the fundamental units of the metric system
- Name the metric equivalents that are most frequently used in the medical field
- Using proportional and decimal method convert from one metric unit to another
- Calculate dosage according to kilograms of body weight
- Use the proportional method to convert household and apothecary measurements
- Solve dosage problems using the basic calculation method
- Solve dosage problems using the ratio and proportional method
- Calculate adult dosages by the proportional or formula method
- Calculate safe dosages for infants and children

Resume, Interview and Employment Skills

1 Credit Equivalent (30 Hours)

This course provides the student with the necessary skills for achieving employment and the professional attributes needed to keep a job. They will learn to write a resume and effectively interview for the job.

Competencies:

- Demonstrate professional attributes
- Demonstrate job readiness
- Describe workplace dynamics
- Develop a written resume

Written and Oral Communications**2 Credits Equivalent (60 Hours)**

This course provides the student with a review of rules for grammar, punctuation and parts of speech. The student will improve in spelling and proofreading skills and be able to compose various types of written communication. In addition to these skills, the student will learn to apply effective communication principles in a healthcare setting as well as describing roadblocks to the communication process.

Competencies:

- Describe the principles of verbal and nonverbal communication
- Recognize and respond to verbal and nonverbal communication
- Identify adaptations for individualized needs
- Demonstrate applications of electronic technology
- Demonstrate fundamental writing skills

Appendix C

Faculty

Bridgerland Applied Technology College:

Mindi Wright, Lead Instructor

Qualifications:

Faculty, Bridgerland Applied Technology College, 2000 – Present
Industry Experience: Registered Nurse, Clinic Manager, 7 years
Professional Educator License, Utah State Office of Education
Registered Nurse, Utah
Certificates: CPR/First Aid, Breath Alcohol Testing, Intravenous Therapy
A.S. Nursing, Weber State University/Utah State University, 1995
B.S. Fashion Merchandising, Minor: Business Administration, USU, 1993
A.S. Dixie College, 1989

Geraldine Kofoed, Instructor

Qualifications:

Faculty, Bridgerland Applied Technology College, 1996 – Present
Industry Experience: Registered Nurse, Director of Nursing, 28 years
Professional Educator License, Utah State Office of Education
Registered Nurse, Utah
A.S. Nursing, Weber State/Utah State University, 1974

Denise Wamsley, Administrative Office Procedures Instructor

Qualifications:

Faculty, Bridgerland Applied Technology College, 1997 - Present
Industry Experience: Accounting, Trainer, Executive Secretary, 28 years
Professional Educator License, Utah State Office of Education
Certificate, Medical Office Management, 1994
A.S. Business Administration, Utah State University, 1975

Kjerstin P. Schick, Laboratory Instructor

Qualifications:

Faculty, Bridgerland Applied Technology College, 1998 – Present
Industry Experience: Registered Medical Technologist (ASCP), 10 years
B.S. Medical Technology, Minor: Chemistry, Utah State University, 1989

Kerri Sales, Laboratory Instructor

Qualifications:

Faculty, Bridgerland Applied Technology College, 2001 – Present
Industry Experience: Registered Medical Technologist (ASCP), 16 years
B.S. Education, Utah State University, 2002
B.S. Medical Technology, East Central State University, Oklahoma, 1984

B.S. Chemistry and Biology, East Central State University, Oklahoma, 1983

Davis Applied Technology College:

Nancy Fahrenbach, Instructor/Program Coordinator

Qualifications:

Faculty, Davis Applied Technology College, 1995 – Present
Faculty, Ogden-Weber Applied Technology Center, 1994 - 1995
Industry Experience: Medical Assistant, 15 years
Professional Educator License, Level 2, Utah State Office of Education
Certified Medical Assistant, American Association of Medical Assistants
Certified CPR/First Aid Instructor, American Red Cross
B.S. Health Education, Americus University, 2002
Certificate, Emergency Care, Nicolet Technical College, 1978
Certificate, Respiratory Therapy, St. Mary's Hospital, Wisconsin, 1977

Ron Ewing, Instructor

Qualifications:

Faculty, Davis Applied Technology College, 2000 – Present
Adjunct Faculty, Ogden Weber Applied Technology Center, 1998 - 2000
Industry Experience: Medical Assistant, 5 years
Certified Medical Assistant, American Association of Medical Assistants
Certificate, Medical Assisting, Ogden-Weber Applied Technology Center, 1996

L. Joleen Parker, Medical Office/Business Administration Instructor

Qualifications:

Faculty, Davis Applied Technology College, 1999 – Present
Industry Experience: Office Administrator, Dental Assistant, 22 years
A.S. Dental Assisting, Modesto Junior College, 1980

Ogden-Weber Applied Technology College:

Emma Anderson, Instructor/Program Advisor

Qualifications:

Faculty, Ogden-Weber Applied Technology College, 1995 – Present
Industry Experience: Medical Assistant, 23 years
Professional Educator License, Level 2, Utah State Office of Education
Radiology Practical Technician License, Utah
Certified Medical Assistant, American Association of Medical Assistants
Certified CPR/First Aid Instructor, American Red Cross
B.S. Health Education, Americus University, 2002
Certificate, Clinical Laboratory Assistant, Weber State University, 2001
Certificate, Medical Assisting, Bryman School, 1973

Marilyn Everton, Instructor

Qualifications:

Faculty, Ogden-Weber Applied Technology College, 1997 – Present
Industry Experience: Medical Assistant, Personal Trainer, 8 years
Professional Educator License, Utah State Office of Education
Certified Medical Assistant, American Association of Medical Assistants
Certified CPR/First Aid Instructor, American Red Cross
Utah Endorsed Medical Office Administrative Assistant, USOE
Utah Endorsed Medical Assistant, USOE
B.S. Health Science, Americus University, 2002
Certificate, Medical Assisting, Ogden-Weber Applied Technology Center, 1996

Jim Taggart, Health Science Instructor**Qualifications:**

Faculty, Ogden-Weber Applied Technology College, 1994 – Present
Industry Experience: Registered Nurse, 10 years
Professional Educator License, Level 2, Utah State Office of Education
Registered Nurse, Utah
Certified Medical Assistant, American Association of Medical Assistants
B.S. Health Training and Promotion, Weber State University, 2000
A.S. Nursing, Weber State University, 1992

Marilyn Holley, Medical Office Administration Instructor**Qualifications:**

Faculty, Ogden-Weber Applied Technology College, 2001 – Present
Industry Experience: Medical Coder, 8 years
Registered Health Information Technician, AHIMA
Certified Professional Coder, American Academy of Professional Coders
A.S. Health Information Management, Weber State University, 1993

Uintah Basin Applied Technology College:**Richelle M. Gaiter, Instructor/Program Coordinator****Qualifications:**

Faculty, Uintah Basin Applied Technology College, 1998 – Present
Industry Experience: Medical Assistant, EMT, Health Instructor, 10 years
Professional Educator License, Utah State Office of Education
Certified Medical Assistant, American Association of Medical Assistants
Nationally Registered EMT, National Registry of Emergency Medical Technicians
Certified Basic Life Support Instructor, American Heart Association
TSgt, USAF Reserves, Non-Commissioned Office in Charge (NCOIC)
B.S. Health Education, Americus University, 2002

Sherri Uresk, Instructor Aide**Qualifications:**

Faculty, Uintah Basin Applied Technology College, 1993 - Present

Industry Experience: Office/Clerical, 9 years
Certificate, Secretary, Uintah Basin Applied Technology Center, 1993
Certificate, Clerk Typist, Uintah Basin Applied Technology Center, 1993

Wayne Dittmore, Adult Business Lab Instructor

Qualifications:

Faculty, Uintah Basin Applied Technology College, 1991 – Present
Professional Educator License, Level 2, Utah State Office of Education
Professional Education License, Level II, Washington
Certified Covey Leadership Facilitator
Certificate, Economics, University of California Santa Barbara, 1995
BA, Marketing and Business Education, Utah State University, 1991

Appendix D

Competencies for the AAT Degree in Medical Assisting

Administrative Competencies

- A. Perform Clerical Functions
 - 1. Schedule and manage appointments
 - 2. Schedule inpatient and outpatient admissions and procedures
 - 3. Perform medical transcription
 - 4. Organize a patient's medical record
 - 5. File medical records
- B. Perform Bookkeeping Procedures
 - 1. Prepare a bank deposit
 - 2. Reconcile a bank statement
 - 3. Post entries on a day sheet
 - 4. Perform accounts receivable procedures
 - 5. Perform accounts payable procedures
 - 6. Perform billing and collection procedures
 - 7. Prepare a check
 - 8. Establish and maintain a petty cash fund
- C. Prepare Special Accounting Entries
 - 1. Post adjustments
 - 2. Process credit balance
 - 3. Process refunds
 - 4. Post NSF checks
 - 5. Post collection agency payments
- D. Process Insurance Claims
 - 1. Apply managed care policies and procedures
 - 2. Apply third party guidelines
 - 3. Obtain managed care referrals and pre-certifications
 - 4. Perform procedural coding
 - 5. Perform diagnostic coding
 - 6. Complete insurance claim forms
 - 7. Use a physician's fee schedule

Clinical Competencies

- A. Fundamental Principles
 - 1. Perform hand washing
 - 2. Wrap items for autoclaving
 - 3. Perform sterilization techniques

4. Dispose of biohazardous materials
 5. Practice Standard (Universal) Precautions
- B. Specimen Collection
1. Perform venipuncture
 2. Perform capillary puncture
 3. Obtain throat specimen for microbiological testing
 4. Perform wound collection procedure for microbiological testing
 5. Instruct patients in the collection of a clean-catch mid-stream urine specimen
 6. Instruct patients in the collection of fecal specimens
- C. Diagnostic Testing
1. Use methods of quality control
 2. Perform urinalysis
 3. Perform hematology testing
 4. Perform chemistry testing
 5. Perform immunology testing
 6. Perform microbiology testing
 7. Screen and follow-up test results
 8. Perform electrocardiograms
 9. Perform respiratory testing
- D. Patient Care
1. Perform telephone and in-person screening
 2. Obtain vital signs
 3. Obtain and record patient history
 4. Prepare and maintain examination and treatment areas
 5. Prepare patient for and assist with routine and specialty examinations
 6. Prepare patient for and assist with procedures, treatments, and minor office surgery
 7. Apply pharmacology principles to prepare and administer oral and parenteral medications
 8. Maintain medication and immunization records
 9. Obtain CPR certification and first aid training

Transdisciplinary Competencies

- A. Communicate
1. Respond to and initiate written communications
 2. Recognize and respond to verbal communications
 3. Recognize and respond to nonverbal communications
 4. Demonstrate telephone techniques
- B. Legal Concepts
1. Identify and respond to issues of confidentiality
 2. Perform within legal and ethical boundaries

3. Establish and maintain the medical record
 4. Document appropriately
 5. Perform risk management procedures
- C. Patient Instruction
1. Explain general office policies
 2. Instruct individuals according to their needs
 3. Instruct and demonstrate the use and care of patient equipment
 4. Provide instruction for health maintenance and disease prevention
 5. Identify community resources
- D. Operational Functions
1. Perform an inventory of supplies and equipment
 2. Perform routine maintenance of administrative and clinical equipment
 3. Utilize computer software to maintain office systems

Appendix E

Program Advisory Teams

*Team Chair

** Medical Advisor

Bridgerland Applied Technology College:

*Jane Binns, RN, Director of Health Science, BATC
Lynn Bair, RN, BSN, MS, Business Director, IHC Budge Clinic
Monica Campbell, RN, Director of Nursing, Sunshine Terrace
David Harston, Logan City Fire Department
Leanna Watters, LPN, Staff Development Coordinator, Brigham City Nursing and Rehabilitation
Suzanne Stones, BS, MT, MSS, Student Advisor, Utah State University
Dal Coleman, RPH, Director of In-patient Pharmacy, Logan Regional Hospital
Konie Murray, RN, Assistant Director of Nursing, Sunshine Terrace
Rob Phelps, RN, BSN, Director of Nursing, Logan Nursing and Rehab Center

Davis Applied Technology College:

*Kitty Helton, CMA, Tanner Clinic-Kaysville
**Gary Lee, MD, Tanner Clinic-Kaysville
Henry Klein, MD, Bountiful
Lisa Pineda, CMA, Tanner Clinic-Kaysville
Marilyn Kiehl, Clinic Manager, IHC Bountiful Clinic
Nancy Boyce, CMA, Pharmaceutical Research-Layton
Margo Tolman, CMA, Tanner Clinic-Layton

Ogden Weber Applied Technology College:

*Rett Hansen, Manager, Health Clinics of Utah
**Brent Williams, MD, IHC South Ogden Health Center
Rhea Gregory, CMA, Brigham Medical Arts Clinic
Nancy Whitaker, CMA, Brigham Medical Clinic
Scott Hayes, RN, BSN, Outreach Coordinator, IHC McKay-Dee Hospital
Sherry Nelson, CMA, Bear Care Pediatrics
Sharon Child, LPN, Ogden Clinic
Linda Martin, LPN, RPT, IHC Herefordshire Health Center
Lisa Nichols, Manager, Midtown Community Health Center
John Jensen, Manager, IHC North and South Ogden Health Centers
LuAnn Hadley, RN, IHC North Ogden Health Center
Jody Taylor, CMA, IHC Internal Medicine
Cathy Kimber, Office Manager, Douglas Walker, DO, PC

Salt Lake-Tooele Applied Technology College”

Salt Lake Health Care Technology Advisory Committee

JoAnn Fenn, University of Utah, CHAIR
Randy Bushell, Rite Aid
James Christensen, ARUP Laboratories
Lisa Boman, Crossroads AHEC
John Heath, Walgreens
Leslie Jones, Intermountain Health Care
Juli Mabey, Intermountain Health Care
Paul Stark, Salt Lake Community College
Debra Zern, Intermountain Health Care
Goria Zuroff, St. Mark's Hospital

Tooele Health Care Technology Advisory Committee

Glenn Thompson, Tooele Valley Spine Center, CHAIR
Lanny DuClos, Optometrist
Gary Gowans, Veterinarian
Terry Green, Valley Mental Health
Charles Hold, Medical Doctor
Marilyn Nielson, Heritage Home Care Services
Doug Sagers, Tooele Valley Medical Center
Gail Willis, Tooele Valley Home Health

Uintah Basin Applied Technology College:

*Rose Miller, Social Services
**John Nolte, MD, Women's Health Center
Carlene Jensen, Uintah Basin Medical Center
Teri Rimmer, Uintah Care Center
Jeanie Luck, Tri County Health Department
Trish Delikat, Indian Health Services
Mark Holyoak, Chief Nursing Officer, Ashley Valley Medical Center
Tammy Jensen, Stewart's Cedar Crest
Cindy Bostick, Assistant Director, Uintah Basin Medical Center
Dr. Mark Dennis, Board Member, Uintah Basin Applied Technology College

MEMORANDUM

September 4, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: Draft Policy R401, Approval of New Programs, Program Additions or Program Changes

Issue

Policy R401, Approval of New Programs, Program Additions or Program Changes, has been rewritten by the Commissioner's staff, in consultation with the Chief Academic Officers, to improve the program approval process. The Regents' request to receive more specific information earlier in the program approval process provided the impetus for the Policy's review.

Background

Policy R401 has guided the proposal process since 1972, with revisions through 2000. Discussion by the Academic and Applied Technology Education Committee in 2002 revealed the Regents' discomfort with making judgments on proposed programs with the information presented to them and in the time frame in which it was received. Thus, the Regents added new conditions, such as the Program Development Matrices which informed them of programs tentatively planned by the institutions. In addition, the Regents were not comfortable with the lack of budgetary detail. These concerns prompted a complete review of the content and processes specified in Policy R401.

Major changes in Policy R401 include the following:

- (1) Early notification of program development
- (2) Letter of Intent
- (3) Establishment of the Program Review Committee
- (4) Specific and detailed budget information
- (5) Institutional program ranking process

A Program Review Committee (PRC), which includes four Regents, was named by the Chair of the Board to provide greater scrutiny of program proposals early in the Regents' approval process. In addition, more detailed budget information is needed to determine the actual costs to the institutions and the changes they may need to make in order to financially support a proposed program. Regents also requested a ranking process on program proposal submissions. This process will require more discussion among the PRC, the full Board, and the CAOs.

Commissioner's Recommendation

It is the recommendation of the Commissioner that the Board review the draft Policy R401, Approval of New Programs, Program Additions or Program Changes, make suggestions, and focus particularly on the issue of institutional program rankings. Once the Regents have reviewed the draft and made recommendations, the Policy R401 will be presented for final approval on the November agenda.

Cecelia H. Foxley, Commissioner

CHF/DDW
Attachment

OUTLINE OF R401

R401-1. Purpose

To provide guidelines and procedures for Board approval and notification of new programs and programmatic and administrative changes in academic and applied technology education programs. In addition, this policy includes program-related items that institutions shall provide to the Office of the Commissioner.

R401-2. References

- 2.1.** Utah Code §53B-16-102 (Changes in Curriculum)
- 2.2.** Policy and Procedures R220 , Delegation of Responsibilities to the President and Board of Trustees
- 2.3.** Policy and Procedures R315, Service Area Designations and Coordination of Off-Campus Courses and Programs
- 2.4.** Policy and Procedures R355, Planning, Funding, and Delivery of Courses and Programs via Statewide Telecommunications Networks
- 2.5.** Policy and Procedures R411, Review of Existing Programs
- 2.6.** Utah Code §53B-16-102 (Continuing Education and Community Service R430)
- 2.7.** Policy and Procedures R465, General Education
- 2.8.** Policy and Procedures R467, Lower Division Major Requirements

R401-3. Summary of Process. Institutions submitting program proposals for the Action Calendar shall adhere to the following process:

- 3.1. Letter of Intent** (link to)
- 3.2. Staff and Chief Academic Officers Review** (link to)
- 3.3. Submission to Program Review Committee** (link to)
- 3.4. Preparation of the Full Proposal** (link to)
- 3.5. Timetable for Submission** (link to)
- 3.6. Council of Chief Academic Officers** (link to)
- 3.7. Board of Regents Consideration** (link to)
- 3.8. Budgetary Consideration Separate from Approval** (link to)

R401-4. Programs Requiring Board Consideration. Programs inclusive of those in **R401-4** will have undergone institutional review and been approved by the institutional Board of Trustees prior to submission to the Office of the Commissioner. A definition follows each item.

- 4.1. Action Calendar.** Programs placed on the Action Calendar require Board approval upon recommendation of the Academic and Applied Technology Education Committee (See **R401-9.2.1.** for Template for program submission). The following programs require

action by the Board:

4.1.1. New Certificates of Completion and Diplomas. A coherent sequence of courses 30 credit hours or 900 clock hours or greater, with general education requirements, or at least 600 clock hours and eligible for financial aid. These certificates are designed for entry-level employment or subsequent completion of an associate degree. For certificates developed in rapid response to business and industry, refer to **Fast Track, R401-7.** (link to)

4.1.2. New Associate of Arts and Associate of Science Degrees. Programs of study primarily intended to encourage exploration of academic options, provide a strong general education component, and prepare students to initiate upper-division work in baccalaureate programs or prepare for employment. A minimum of 60 and a maximum of 63 credit hours, which include 30 to 39 credit hours of general education course work, and other requirements as established by USHE institutions, are required for completion of an associate degree. The Associate of Arts Degree may have a foreign language requirement. Based on compelling reasons, exceptions to the maximum credit hour requirement may be granted by the Board.

4.1.3. New Specialized Associate - Associate of Pre-Engineering (APE Degree). Programs of study which include extensive specialized course work intended to prepare students to initiate upper-division work in baccalaureate programs. A minimum of 60 and a maximum of 63 credit hours, which include a minimum of 28 credit hours of preparatory, specialized course work, general education requirements that are less extensive than in AA or AS Degrees, and other requirements as established by USHE institutions, are necessary for completion of the degree. Because students do not fully complete an institution's general education requirements while completing a specialized associate degree, they are expected to satisfy remaining general education requirements in addition to upper-division baccalaureate requirements at the receiving institution.

4.1.4. New Associate of Applied Science Degree. Programs of study intended to prepare students for entry-level careers. A minimum of 63 and a maximum of 69 credit hours are required. Additionally, general education requirements that are less extensive than in AA or AS Degrees and others, as established by USHE institutions, are required. Based on compelling reasons, exceptions to the maximum credit hour requirement may be granted by the Board.

4.1.5. New Associate of Applied Technology (AAT) Degree. Programs of study intended to prepare students for entry-level careers. The AAT Degree is competency-based and offered on an open-entry/open-exit basis. A mastery of a series of identified competencies, general education course work that is less extensive than in AA and AS Degrees, and other requirements as established by

the Utah College of Applied Technology, regional boards, and program advisory committees, are necessary for completion of the degree. The average time to completion of the AAT Degree should fall within a range of 1890 to 2070 clock hours; however, open-entry/open-exit, competency-based instructional delivery allows students to complete their course of study at their own pace. Like the AAS Degree, the AAT Degree is designed to prepare students for direct entry into the workforce; however, the AAT Degree may also transfer directly into Bachelor of Applied Technology (BAT) Degree programs.

4.1.6. New Bachelor of Arts, Bachelor of Science and Professional Bachelor Degrees. Programs of study including general education, major course work, and other requirements as established by USHE institutions and accreditation standards. Credit requirements include completion of a minimum of 120 and a maximum of 126 credit hours. *However, some* professional Bachelor Degrees, such as the Bachelor of Business Administration or Bachelor of Fine Arts, may have additional requirements. Other disciplines such as engineering and architecture may exceed the minimum of 120 credit hours in order to meet accreditation requirements. Based on compelling reasons, exceptions to the maximum credit hour requirement may be granted by the Board.

4.1.6.1. Major. A sequenced set of courses within a Bachelor's Degree program that comprises study in an academic discipline. The Major is listed on the graduate credential and signifies that the recipient possesses the knowledge and skills expected of graduates in the discipline.

4.1.7. New Master's Degree. Graduate-level programs of study requiring a minimum of 30 and maximum of 36 credit hours of course work beyond the bachelor's degree, and other requirements as established by USHE institutions and accreditation standards. Professional master's degrees such as the Master of Business Administration or Master's of Social Work may require additional course work or projects. Specialized professional master's degrees typically require additional course work. Based on compelling reasons, exceptions to the maximum credit hour requirement may be granted by the Board.

4.1.8. New Doctoral Degree. Graduate-level programs in an advanced, specialized field of study requiring competence in independent research and an understanding of related subjects.

4.1.9. New K-12 School Personnel Programs. Endorsement and licensure programs for teacher education, counselors, administrators, and other school personnel and which are within existing major degree programs previously approved by the institutional Board of Trustees and the Board. These programs adhere to a parallel approval process which requires the following steps: review by the Office of Academic Affairs, the Chief Academic Officers, appropriate

officials and faculty from USHE colleges and schools of education, and the Program Review Committee (PRC); review and approval by the Board; review and approval by the Educator Development Advisory Committee (EDAC); and review and approval by the State Board of Education. Institutionally-approved proposals may be submitted to the EDAC once they have been reviewed by the Office of Academic Affairs, CAOs, colleges and schools of education faculty and officials, and Program Review Committee. However, approval by the EDAC is contingent upon approval by the full Board of Regents and the State Board of Education.

4.2. Consent Calendar. Board Consent, which follows approval of the Academic and Applied Technology Education Committee, is required for significant program and administrative changes (See **R401-10.1.** for Template for program submission). The following items require consent of the Board:

4.2.1. Reinstatement of Previously Eliminated Administrative Units and Instructional Programs. Programs and administrative units once discontinued and later believed to be necessary and viable.

4.2.2. Off-campus Delivery of Approved Programs. Off-campus programs, which require substantive change notification to the regional accreditation organization, and are offered outside of the institution's designated service area,

4.2.3. Permanent Approval of Centers, Institutes, or Bureaus. Administrative entities which perform primarily research, instructional, or technology transfer functions, and are intended to provide services to students, the community, businesses, or other external audiences, or to obtain external funds.

4.2.3.1. Temporary Approval and Temporary Sources of Funding. Requests to establish centers, institutes, bureaus, or other administrative entities which perform a primarily research, instructional, or technology transfer function, and are intended to provide external services and/or obtain external funds.

4.2.3.2. Modest Effort/Consistent with Roles/Affiliation/Three Year Limit. Institutions may seek temporary approval from the Commissioner for a center, institute, or bureau which is being established on an experimental or pilot basis. The Commissioner will evaluate and approve requests for temporary approval on the basis of the following criteria and conditions:

4.2.3.3. Temporary Source of Funds. Funding support is from temporary, non-public resources or from temporary institutional reallocation within a limited time frame.

4.2.3.4. Relatively Modest Effort. The proposed change requires a modest effort in terms of staff and space needs, normally with no permanent staff or no permanent facility assignment.

4.2.3.5. Consistent with Role. The activities involved are consistent with established institutional mission and role assignments.

4.2.3.6. Affiliation with Existing Program or Department. The administrative entity involved has programmatic affiliation with an existing academic program or department.

4.2.3.7. Three Year Limit. Temporary approval of centers, institutes, etc., may be granted for a period no longer than three years, after which an institution must request approval of the Board.

4.2.4. Certificates of Completion in which Instruction is Provided by an Outside Vendor and Requires Accreditation Review. The institution offers Certificates of Completion, credit or non-credit, for instruction provided by an organization outside of the USHE.

4.3. Information Calendar. Program Additions or Changes Requiring Notification on the Boards's Information Calendar. Board notification is required for changes to programs and administrative units, elimination of programs, institutional program reviews, and programs under development.(See **Template -to be determined**).

4.3.1. Transfer, Restructuring, or Consolidation of Existing Programs or Administrative Units.

4.3.2. Elimination of Instructional Programs.

4.3.3. Name Changes of Existing Programs.

4.3.4. Institutional Program Review *Report*.

4.3.5. Programs under Development.

4.3.6. All Stand-alone Minors. A coherent collection of courses, related to one another, that is not part of a previously approved Major or degree program. (Submission: as they are approved or eliminated by institutional Board of Trustees.)

R401-5. Information to be Provided to the Office of the Commissioner, not for inclusion on Board Calendar. The USHE institutions shall submit to the Commissioner's Office the following items:

5.1. An annual list of scheduled program reviews, as defined in R411) including date of review. (Submission: September)

5.2. An annual list of credit and non-credit certificates not meeting the definition as defined in R401-4.1. (Submission: December)

R401-6. Procedure for Submitting New Program or Program Changes for Board Approval

6.1. New Program and Program Changes as specified in the Action Calendar, R401-4.1. The process for the approval of new programs includes the submission of a Letter of Intent and the subsequent submission of a formal proposal to the Board of Regents. To help insure quality, institutions may wish to enlist the assistance of external consultants in developing the proposed program. Typically, applied technology education programs relate directly to the requirements of business and industry. Thus, programs submitted in this area should have the benefit of consultation from a program advisory committee regarding: (1) curriculum, including specific outcome-based competencies; (2) desired level of faculty qualifications; and (3) equipment and laboratory requirements.

6.1.1. Letter of Intent. Institutional Chief Academic Officer will submit a Letter of Intent electronically for each new program proposal to initiate the Regents' program approval process. The template provided in **R401- 9.1** must be used for the Letter of Intent. (Fast track programs refer to **R401-7.**)

6.1.2. Staff and Chief Academic Officers (CAO) Review. USHE staff will review the Letter of Intent to assure that it is complete. Incomplete letters will be returned to the institution with suggestions. When Letters are determined to be complete, the Office of the Commissioner will advise the submitting institution to forward the Letter to the CAOs at all USHE institutions for review and comment. Within two weeks, the CAOs will identify issues related to the information provided in the Letter of Intent, including those that impact their *institutions* and/or programs, program quality, and other issues the CAOs believe to be pertinent. These comments will be sent electronically to the Commissioner's Office and to all USHE institutions.

6.1.3. Submission to Program Review Committee (PRC). Once the proposing institution addresses issues raised by the CAOs, the revised Letter of Intent and institutional issues that have and have not been resolved will be forwarded for review by the Program Review Committee (PRC), four Regents appointed by the Board chair. The role of the PRC is to assess the proposal based upon six elements (description, market/student demand, source of funding, mission fit, current availability of similar programs already offered in the USHE, and institutional ranking according to the priorities of the submitting institution. Confidential information may be submitted to the Commissioner under seal. (See Letter of Intent Template **R401-9.**) The PRC will review the Letter of Intent and

accompanying information, raise questions, and request additional information as appropriate. Sitting with the PRC will be an institutional representative (or representatives) appointed by the CAO, and Commissioner's staff. A member from the institution's Board of Trustees may be included.

6.1.4. Preparation of the Full Proposal. After the review process has been successfully completed, the proposing institution will develop a full proposal. The full proposal will follow the template in **R401-9.2.** and address issues raised by the CAOs and Reviewers.

6.2. Timetable for Submittal. Following the Letter of Intent review process, proposals must be submitted to the Commissioner's Office of Academic Affairs electronically, according to the annual schedule prepared by the Associate Commissioner for Academic Affairs, approximately two months before the date of the Regents' meeting when the proposal would be on the Regents' agenda for the first time. At the same time, the proposing institution's CAO will circulate the proposal to all USHE CAOs for review and evaluation. Once a proposal is evaluated by appropriate faculty at the other USHE institutions, comments and suggestions will be sent electronically to the Commissioner's Office and all CAOs at least one week prior to the CAO meeting where all proposals are discussed. The proposing institution will be responsible for addressing these concerns and any others in written communication electronically sent to the Commissioner's staff and all CAOs. If deemed necessary, the Office of Academic Affairs may request reviews from external evaluators.

6.3. Council of Chief Academic Officers (CAOs). The Council of Chief Academic Officers will meet prior to the Council of Presidents' and Regents' meetings. This meeting is for the purpose of discussing institutional proposals on the basis of comments submitted by other USHE institutions, any external reviews that have been conducted, initial evaluation from the Office of Academic Affairs, and comments from the PRC. This discussion will be reported to the Council of Presidents and considered by the Commissioner's staff in preparing materials and recommendations for the Board's agenda. The Commissioner's review for the Board will address not only the readiness of the institution to offer the program and the need for the program, but also the impact of the program on other USHE institutions.

6.4. Board of Regents Consideration. Program proposals that have been reviewed according to the procedures described in **R401-6** are placed on the Board agenda for consideration by the Regents. The Board's Academic and Applied Technology Education Committee reviews proposals for new programs or program changes and recommends action to the Board. The Board then takes action on the proposed program during the meeting of the Committee of the Whole.

6.5. Votes for Approval. All new certificates, diplomas, associate, and bachelor degree programs must be approved by a majority vote of the Board members in attendance. All

new master's and doctoral degree programs require at least a two-thirds majority of the members in attendance to be approved.

6.6. Budgetary Considerations Separate from Approval. Program approval by the Board consists only of authorization to offer a program. Budget requests necessary to fund the program shall be submitted separately through the regular budget process.

R401-7. Fast Track Programs.

7.1. Fast-track Approval of Applied Technology Education Certificates of Completion and Diplomas. Credit or non-credit applied technology training programs, leading to certificates of completion, that meet the criteria in **R401-4.1.1** and **R401-7.2**, may be approved according to the fast track approval procedure outlined in **R401-7.3**. The procedure is designed to accommodate the need for rapid action by institutions in providing opportunities for students to be trained to meet changing job requirements of business and industry.

7.2. Fast-Track Program Approval Procedure. If programs meet the requirements in **R401-4.1.1**, and the Commissioner has previously approved the institution's internal program development and approval process, the Commissioner may preliminarily approve the program for two program cycles, effective immediately. To request preliminary approval, the proposing institution must submit a Letter of Intent to the Commissioner's Academic Affairs staff. The Commissioner will respond within 15 working days. For the program to continue beyond the two cycles, it must undergo full Board review. If the program is to continue, the full program proposal must be placed on the **Action Calendar** of the Academic and Applied Technology Education Committee for final action by the Board. Fast-Track programs will not require institutional ranking.

R401-8. Programs Under Development/Consideration

8.1. Advance Information. Each institution shall submit to the Commissioner's Office of Academic Affairs an updated matrix of programs under development or consideration that may be brought to the Board for formal approval during the next thirty-six months. A compilation of this information will be included on the Information Calendar of each Board of Regents meeting. These planning documents will provide Regents with a continuously updated, system-wide view of the programs that may be brought to them for approval.

8.1.1. Two Time Periods. The information is presented in matrix format and includes two time periods: The first matrix provides information for a twelve-month period beginning with the month of the current Board agenda. The second matrix provides information for a subsequent 24-month period.

8.1.2. Information Updates. The information in each matrix is to be updated

whenever the status of a program changes or a new program is being considered. This provides the Board ongoing information, for a thirty-six month period, regarding the status of programs as they progress through the institutional review process. Updated matrices should be submitted to the Commissioner's Office of Academic Affairs on the submission schedule for each Board of Regents agenda. Once a program has been approved by the Board, or is no longer under consideration at an institution, it should no longer appear in the matrix.

8.2. Matrix. In accordance with the existing program review schedule set by the Commissioner's Office, institutions will provide updated information to the Academic Affairs Office for programs under development or consideration. Changes to the matrix can be submitted electronically. The matrix will appear in the Information Calendar on each Board agenda.

R401-9. Template for Submitting Program Proposals. The templates request information and provide the format to be used when submitting program proposals for review and Board action. Please use Ariel Narrow 12 point font.

9.1. Template for Submission of Letter of Intent

9.1.1. Program Description. Present a short description of the program.

9.1.2. Market and Student Demand. Provide specific data on market and student demand for the program, including how the program will function if market demand changes.

9.1.3. Budget. Provide specific budget information, including the source of funding, and specify if enrollment growth funding is to be used. If internal reallocation is to be made, state which programs will need to be adjusted in order to support the proposed program. Confidential information may be sent to the Commissioner under seal.

9.1.4. Institutional Mission - Describe how the proposed program fits within the institutional mission.

9.1.5. Similar Programs Already Offered in the USHE. Identify similar programs already approved and functioning in USHE institutions and justify why the proposed program is needed in light of existing programs. Include need and Utah employment data.

9.1.6. Rank Order of Program within the Proposing Institution. The proposing institution will determine the rank order of the program submitted by institutional priority. A ranking of one (1) means that the program submission is a

top priority. At the beginning of the academic year, each institution will be allotted two programs that reflect its top priority, three programs that might be ranked number two (2), and three programs that might be ranked number three (3). The rankings are made in accordance with program planning conducted by the institution and will be reported to the PRC. Institutions are not precluded from proposing a program that is not ranked number one (1). Justification for proposing the program should accompany the ranking. The ranking system assists the Regents and institutions in making choices regarding which programs to bring forward and the timing of the Board review.

9.1.7. Signature Page to Accompany Letter of Intent. The Letter of Intent will include the signatures of the Chief Academic Officer and the appropriate dean and department chair.

9.2. Template for submission of proposals for new programs following the successful review of the Commissioner's Staff, Reviewers, and CAOs. This template provides the formats and information to be used when submitting program proposals for review and Board action and approval. Please use Ariel Narrows 12 point font.

9.2.1. Template for submission of proposals for new Certificates of Completion and Diplomas, AA/AS Degrees, AAS Degrees, AAT Degrees, specialized associate degrees, Bachelor's Degrees, Master's Degrees, Doctoral Degrees, K-12 School Personnel Programs

SECTION I The Request

[**Name of Institution**] requests approval to offer [Name of Degree] effective [Semester and Year]. This program has been approved by the institutional Board of Trustees on [Date].

SECTION II Program Description

[**Complete Program Description** - Present the complete, formal program description.]

[**Purpose of Degree** - State why are you offering this degree, what are the expected outcomes.]

[**Admission Requirements** - List admission requirements specific to the proposed program.]

[**Student Advisement** - Describe the advising process for students in the proposed

program.]

[Justification for Number of Credits - Provide justification if number of credit or clock hours exceeds 63 for AA or AS, 69 for AAS, 2070 clock hours for AAT, 126 credit hours for BA or BS; and 36 beyond the baccalaureate for MS.]

[External Review and Accreditation - Indicate whether any external consultants were involved in the development of the proposed program, and describe the nature of that involvement. For an applied technology education program, list the members and describe the activities of the program advisory committee. Indicate any special professional accreditation which will be sought; project a future date for a possible accreditation review; indicate how close the institution is currently to achieving the requirements, and what the costs will be to achieve them.]

[Projected Enrollment - For credit programs, project both student FTE enrollments and the mean student FTE-to-faculty FTE ratio for each of the first five years of the program. For non-credit programs, project student headcount enrollments and mean student-to-faculty ratio for each of the first five years of the program. If accreditation requirements specify a specific student-to-faculty ratio, indicate the ratio(s).]

[Expansion of Existing Program - If the proposed program is an expansion or extension of an existing program, present enrollment trends by headcount and also by student credit hours (if appropriate) produced in the current program for each of the past five years for each area of emphasis or concentration.]

[Faculty - Identify the need for additional faculty required in each of the first five years of the program. Describe the faculty development processes that will support this program.]

[Staff - List all additional staff needed to support the program in each of the first five years; e.g., administrative, secretarial, clerical, laboratory aides/ instructors, *advisors*, teaching/graduate assistants.]

[Library - Describe library resources required to offer a superior program. Does the institution currently have the needed library resources?]

[Learning Resources - Describe other learning resources required to support the program.]

SECTION III

Need

[Program Necessity - Clearly indicate why such a program should be initiated.]

[Labor Market Demand - Include local, state, and national data, and job placement information, what types of jobs have graduates from similar programs obtained.]

[Student Demand - Describe evidence of student interest and demand that supports potential program enrollment.]

[Similar Programs - Are similar programs offered elsewhere in the state or Intermountain Region? If yes, cite justifications for why the Regents should approve another program. How does the proposed program differ from similar program(s)? Be specific.]

[Collaboration with and Impact on Other USHE Institutions - Describe discussions that may have occurred regarding your institution's intent to offer the proposed program with other USHE institutions that are already offering the program, and any collaborative efforts that may have been proposed. Analyze the impact that the new program would have on other USHE institutions.]

[Benefits - State how the institution and the USHE benefit by offering the proposed program.]

[Consistency with Institutional Mission - Explain how the program is consistent with and appropriate to the institution's board-approved mission, roles and goals.]

SECTION IV

Program and Student Assessment

[Program Assessment - State the goals for the program and the measures that will be used in the program assessment process to determine if goals are being met.]

[Expected Standards of Performance - List the standards and competencies that the student will have met and achieved at the time of graduation. How or why were these standards and competencies chosen]

[Student Assessment - Describe the formative and summative assessment measures you will use to determine student learning.]

[Continued Quality Improvement - Describe how program and student assessment data will be used to strengthen the program.]

SECTION V

Finance

[Budget - For each category below, present the projected budget for an ongoing, quality program for each of the first five years:

Salaries and Wages
Benefits
Current Expense
Library
Equipment
Travel
TOTAL]

[Funding Sources - Describe how the program will be funded, i.e. new state appropriation, reallocation, enrollment growth, grants etc.]

[Reallocation - If program is to be supported through internal reallocation, describe in specific terms the sources of the funds.]

[Impact on Existing Budgets - If program costs are to be absorbed within current base budgets, what other programs will be affected and to what extent? Provide detailed information. Confidential information may be sent to the Commissioner under seal.]

Appendix A

Program Curriculum.

[New Courses to be Added in the Next Five Years - List all new courses to be developed in the next five years by prefix, number, title, and credit hours. Use the following format:]

Course Number	Title	Credit Hours
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[All Program Courses - List all courses, including new courses, to be offered in the proposed program by prefix, number, title, credit hours, or credit equivalences. Use the following format: (please include all course descriptions in appendix.)]

Course Number	Title	Credit Hours
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General Education

Sub-Total

Core Courses

Sub-Total

Elective Courses

Sub-Total

Track/Options (if applicable)

Sub-Total

Total Number of Credits

Appendix B

[Program Schedule - For each level of program completion, present, by semester, a suggested class schedule --by prefix, number, title and semester hours]

Appendix C

[Faculty- List current faculty within the institution, with their qualifications, to be used in support of the program.]

R401.10. Template for Submission to the Consent Calendar of the Academic and Applied Technology Education Committee and Board action.

10.1. Template for Administrative Change Proposals and Proposals for Centers, Institutes, Bureaus.

SECTION I Request

[Request- Briefly describe the administrative change or new administrative unit being proposed. Indicate its primary activities, especially any instructional activities associated with the unit.]

SECTION II Need

[Need- Indicate why such an administrative change or new unit is justified. Reference need or demand studies if appropriate. Indicate the similarity of the proposed unit with similar units which exist elsewhere in the state or Intermountain region.]

SECTION III Institutional Impact

[Institutional Impact - Will the proposed administrative change or new unit affect enrollments in instructional programs of affiliated departments or programs? How will the proposed change or new unit affect existing administrative structures? If a new unit, where will it fit in the organizational structure of the institution? What changes in faculty and staff will be required? What new physical facilities or modification to existing facilities will be required? Describe the extent of the equipment

commitment necessary to initiate the administrative change.]

SECTION IV

Finances

[**Costs**- What costs or savings are anticipated from this administrative change or new unit? If new funds are required, describe expected sources of funds. Describe any budgetary impact on other programs or units within the institution.]

10.2. Template for Submission of Off-campus, Non-technologically Delivered Programs.

SECTION I

The Request

[**Request** - Briefly describe the program which is to be offered off-campus.]

[**Program Description** - Indicate the proposed location(s) for the program, and suggested class schedule for each semester of the program (by course, title, number, prefix and credit hours.)]

SECTION II

Need

[**Need** - Indicate the need or demand for the program. Include results of needs assessments or demand studies. Are similar on-campus programs offered by other USHE institutions in locations proposed by this request? If so, has there been consultation with these institutions? Who was consulted and what was the outcome of such consultation. Is the proposed program to be offered on a contract basis for a specific population only?]

SECTION III

Institutional Impact

[**Institutional Impact** - How will on-campus programs be affected by the off-campus offering? Can present faculty and staff offer both the on-campus and proposed off-campus programs? If additional faculty or staff will be needed, indicate how many, their anticipated roles, and required qualifications. Will new facilities, equipment, or library resources be needed? If so, describe. Will new facilities, equipment, or library resources be needed? If so, describe.]

SECTION IV

Program Assessment

[**Assessment** - How will the quality of the proposed off-campus program be assessed and maintained?]

SECTION V

Finances

[Costs- What costs are associated with this off-campus program? Identify the costs by category, e.g., personnel, facilities and equipment, etc. How are these costs to be covered by the institution? If new funds are required, describe the expected sources of funds.]

R401-11 Signature Page to Accompany Proposals Requiring Board Approval or Consent.

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: _____

College, School or Division in
Which Program Will Be Located: _____

Department(s) or Area(s) in
Which Program Will Be Located: _____

Program Title: _____

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

Area(s) of Emphasis or Academic
Specialty: (if appropriate) _____

Certificate, Diploma and/
or Degree(s) to be Awarded: _____

Proposed Beginning Date: _____

Institutional Signatures (as appropriate):

Department Chair

Dean or Division Chair

Applied Technology Director

Graduate School Dean

Chief Academic Officer

President

Date

MEMORANDUM

September 4, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: Consent Calendar, Academic and Applied Technology Education Committee

The following requests have been submitted by the designated institutions for consideration by the Regents on the Consent Calendar of the Academic and Applied Technology Education Committee.

1. University of Utah (U of U)

- a. Approval to consolidate two existing majors, (1) Consumer Studies and Family Economics, and (2) Environment and Behavior, into a single major entitled, Consumer and Community Studies.

University of Utah officials have indicated two reasons for requesting the consolidation. At the conceptual level there is an opportunity to blend the fields of Consumer Studies and Community Development in a way that provides a fresh perspective on a number of contemporary social issues. At a practical level, and in accordance with the Department's 2000 Graduate Council Report, the proposal allows the Family and Consumer Studies (FCS) Department to better manage its faculty resources to meet student needs.

Traditionally, both fields of Consumer Studies and Community Development have used interdisciplinary approaches to generate knowledge of practical value to citizens and policy makers. Whereas the field of Consumer Studies has tended to focus on national and international developments and has stressed the economic determinants of behavior, the field of Community Development has, by its nature, looked at local phenomena and relied primarily on social and psychological perspectives.

Recently, there has been a convergence between the fields of Consumer Studies and Community Development. The field of Consumer Studies is paying greater attention to the local impact of community-level institutions and initiatives. At the same time that the field of consumer studies is turning toward the community level, the field of Community Development is placing greater emphasis on the economic underpinnings of policies that are important to improving communities.

The fields of Consumer Studies and Community Development now share an interest in housing, transportation, and energy provision. Whereas Consumer Studies is most interested in how individuals can make wise choices in these domains, Community Studies emphasizes how providing these goods is related to

larger issues of what is beneficial for communities given patterns of community growth and decline, demographic change, and design preferences. FCS hopes to capitalize on the convergence of these two fields by offering a major that combines the most valuable elements of both and reflects a more general movement within higher education toward civically engaged teaching and scholarship.

Current FCS students are supportive of the combined major. Some majors in Consumer Studies and Family Economics liked the proposed name of the combined major, Consumer and Community Studies, feeling that the word “family” in the present name detracts from the practical, business and public policy oriented knowledge that they had acquired.

Job prospects for graduates of the combined major look promising. Government agencies at the national and local level seek people who can combine knowledge of consumer and community phenomena. There are also many job opportunities for our graduates in the for-profit and non-profit sectors. The consolidation of the two majors within the Department of Family and Consumer Studies strengthens the Department by combining two majors at or below critical mass into one well staffed major.

There will be no demand for new institutional funds as a result of the proposed consolidation. Indeed, the proposal is strongly motivated by the desire to achieve more with fixed resources. In some instances, the consolidated major may even save resources (e.g., through reduction in low-enrollment classes and consolidation of record-keeping and promotional materials).

2. Southern Utah University (SUU)

- a. Approval to consolidate the Economics BIS Degree and the Managerial Economics BA/BS Degree into one BA/BS Degree in Economics.

SUU recently completed an extensive reprioritization process. Five years of program data, workforce trends, and other assessments were used throughout the process at the departmental, college, and university levels. Recommendations for change were based on these sources of information. The two degrees, Economics BIS Degree and the Managerial Economics BA/BS Degree, were deemed duplicative. By combining the degrees into a more generic economics degree, the program will be more “conventional”, clearer for student advisement, and more flexible for students to pursue studies in economics.

The consolidation reduces the number of programs offered by one. The consolidation uses existing courses and improves faculty preparations. It will also simplify student advising. This change will free up limited faculty resources that will be directed to support other majors in the School of Business. There are no other cost impacts.

The Commissioner recommends that the Regents approve the institutional requests included on the Consent Calendar of the Academic and Applied Technology Education Committee.

Cecelia H. Foxley, Commissioner

CHF/GW

MEMORANDUM

September 4, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: Information Calendar, Academic and Applied Technology Education Committee

The following items have been submitted by the designated institutions for review by the Regents on the Information Calendar of the Academic and Applied Technology Education Committee. The items were previously approved by the institutional Board of Trustees. No action is required by the Regents.

1. University of Utah

a. Department of Music Name Change

Officials at the University of Utah have approved a name change from the Department of Music to the School of Music. Traditionally, the designation *Department of Music* is used to indicate small-sized music units that offer primarily undergraduate programs, have small faculty/staff numbers, and limited library holdings. The term *School of Music* is typically used to denote programs that offer undergraduate and graduate programs, have significant library holdings, contribute in a significant manner to the culture of the area, and are leading institutions in the region. The music schools with which the University of Utah competes for students and faculty are all either Schools or Colleges of Music. *School* carries a connotation of higher level/quality activity than does the word *department* within the academic music community. The external image of the department will be significantly enhanced by this change, and is expected to improve the school's position for attracting extramural funding.

2. Utah State University

a. Name Change of the Master's Degree in the Department of Industrial Technology and Education from "Industrial Technology" to "Technology and Industrial Education."

This change better reflects the nature and purpose of the offering department. The change was approved by the institutional Board of Trustees on May 17, 2002.

3. Weber State University

- a. Creative Writing Emphasis within the English Major in the English Department in the College of Arts & Humanities

This emphasis creates an identifiable and focused course of study that allows students to pursue their interest in creative writing, which will assist them in their personal development as well as with advancement in their professional careers. The emphasis will also better prepare interested students for graduate studies in the creative writing field (MFA, MA creative writing, Ph.D. creative writing). In the past few years, several WSU graduates have applied to MFA programs across the country; this proposed emphasis will make these students more competitive and better prepared.

- b. Recreation Minor

The 18-credit hour Recreation Minor will be housed within the Department of Health Promotion and Human Performance (HPPH) in the Jerry and Vickie Moyes College of Education. Prior to 1986, Recreation was offered as a minor at WSU. In 1986, the Minor was changed to an 18-credit hour emphasis in the Lifestyle Management Major and in the Bachelor of Integrated Studies Program. Recently, there has been increased interest in and demand for a Recreation Minor which would be available to students outside the Lifestyle Management Major or the Bachelor of Integrated Studies program. The implementation of a Recreation minor does not require any curriculum modification; there are sufficient Recreation courses offered within HPPH to support this minor. Additionally, the Recreation Minor does not have budget, faculty, facility or library implications.

4. Southern Utah University

- a. Program Deletions, Name Changes, Changes from Majors to Minors

Five years of program data, workforce trends, and other assessments were used, at the departmental, college, and university levels, throughout the prioritization process that was recently completed at SUU. Recommendations were based on these sources of information. The following, when prioritized, fell into the lowest institutional ranking. It was determined that students would be better served with other existing programs, or with changes to programs that provide greater flexibility.

- Deletion of the Accounting Minor
- Deletion of the Administrative Support Emphasis in the Business Education BA/BS Degree
- Deletion of the Apparel Design and Textiles Emphasis in the Family and Consumer Science BA/BS Degree
- Deletion of the Apparel Design and Textiles Minor
- Deletion of the Business Education Minor (retain Minor for Business Education licensure)
- Deletion of the Clerical Technology Certificate. Deletion of the Communication Education

BA/BS Degree

- Deletion of the Dance Education Emphasis in the Physical Education BA/BS Degree
- Deletion of the Earth Systems BA/BS Degree
- Deletion of the Family Education Minor
- Deletion of the Finance Minor
- Deletion of the General Management Emphasis in the Management BA/BS Degree
- Deletion of the Human Resources Emphasis in the Management BA/BS Degree
- Deletion of the International Business Minor
- Deletion of the International Management Emphasis in the Management BA/BS Degree
- Deletion of the Management Information Systems BA/BS (program is consolidated with Information Systems)
- Deletion of the Marketing Minor
- Deletion of the Office Management Technology AAS Degree
- Deletion of the Paralegal AAS Degree (to be replaced with minor – request will be submitted at a later date)
- Deletion of the Political Science Education BA/BS Degree (retain as minor)
- Deletion of the Psychology Education BA/BS Degree (retain as minor)
- Deletion of the Secretarial Technology AAS Degree
- Deletion of the Small Business Management Technology AAS Degree
- Deletion of the Sociology Education BA/BS Degree (retain as minor)
- Deletion of the Theatre Arts Education Composite BA/BAS
- Change nomenclature of Elementary Education areas of concentration to Elementary Education Minors and delete Business Education, Early Childhood Development, Languages, Music, PE Dance, Physical Science and Technology Education as Elementary Education Minors.

Faculty who are made available as a result of these changes will be utilized to support related majors and general education. No fiscal impacts are anticipated as a result of these changes.

b. Addition of Emphases

Five years of program data, workforce trends, and other assessments were used, at the departmental, college, and university levels, throughout the prioritization process that was recently completed at SUU. Recommendations were based on these sources of information. It was determined that students would be best served by adding the following emphases to existing degree programs:

- Addition of the emphasis in Computer Programming in the Information Systems BA/BS Degree
- Addition of the emphasis in Bioinformatics in the Mathematics BA/BS Degree
- Addition of the Emphasis in Actuarial Science in the Mathematics BA/BS Degree
- Addition of the emphasis in Pure Mathematics in the Mathematics BA/BS Degree
- Addition of the emphasis in Geographical Information Systems (GIS) in the Information Systems BA/BS Degree, the Engineering Technology BA/BS Degree, and the Computer

Science BA/BS Degree

Existing faculty and courses will support the added emphases. There is no fiscal impact associated with these changes.

Commissioner's Recommendation

It is the recommendation of the Commissioner that the Regents review the Information Calendar and raise any outstanding questions. No action is required by the Board.

Cecelia H. Foxley,
Commissioner

CHF/LF

MEMORANDUM

August 21, 2002

TO: State Board of Regents
FROM: Cecelia H. Foxley
SUBJECT: Utah State University - Master Plans

Attached is a letter from Vice President Fred R. Hunsaker requesting Board of Regents review and approval of the Utah State University Campus Master Plans. They were approved by the USU Board of Trustees on August 16, 2002. Public hearings were held on August 12 in Logan to review the Master Plan for the Logan campus. The Master Plans for the branch campuses have not changed.

USU representatives will be available at the meeting to answer questions the Board may have relating to the master plans.

Recommendation

It is the Commissioner's recommendation that the Board of Regents review Utah State University's master plans for the main campus and for the branch campuses, ask questions of Utah State University representatives at the meeting, and if satisfied, approve the University's Master Plans.

Cecelia H. Foxley, Commissioner

CHF/MHS/JV

Attachments

Utah State UNIVERSITY

OFFICE OF THE VICE PRESIDENT
FOR ADMINISTRATIVE SERVICES
1445 Old Main Hill
Logan UT 84322-1445
(435) 797-1146
FAX: (435) 797-0710

16 August 2002

Dr. Cecelia H. Foxley, Commissioner
Utah System of Higher Education
Board of Regents Building, The Gateway
60 South 400 West
Salt Lake City, UT 84101-1284

Dear Cece:

The Master Plans for Utah State University campuses have been reviewed through normal administrative channels and were approved by the USU Board of Trustees on 16 August 2002. Public hearings were held 12 August 2002 in Logan to review the Master Plan for the Logan campus. The Master Plan for the Branch Campuses has not changed.

Please place the Master Plans on the 12-13 September 2002 agenda for approval by the Board of Regents. Representative from Utah State University will attend the meeting to discuss the Master Plans.

Sincerely,



Fred R. Hunsaker
Vice President for
Administrative Services

c: Kermit L. Hall
Mark Spencer

MEMORANDUM

September 4, 2002

TO: Utah State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: USHE -- Long-term Enrollment Projections

Issue

Attached are long-term enrollment projections for nine USHE institutions individually and in total. These projections have been prepared to assist the Regents and other state-level policy-makers in mid- to long-range planning for the USHE. The projections are also used as input to the Regents' capital facilities prioritization process.

Background

The projections included here are intended to measure demand for enrollment in the USHE given the current policy climate and current Utah population projections. The underlying model that generates the projections utilizes the methods of the Governor's Office of Planning and Budget (GOPB) as well as those of the National Center for Higher Education Management Systems (NCHEMS). The Commissioner, USHE Presidents, and USHE 2002 Master Planning Task Force on Funding have reviewed the projections and consider them as appropriate input for ongoing, long-term planning processes of the USHE. However, the Regents should keep in mind a few caveats as they consider the projections:

- Projecting enrollment is as much art as science and should be viewed as informed estimations rather than certainties, particularly given the 20-year duration of the projections.
- The projections are only as good as the assumptions on which they are based. A principle assumption embedded in the USHE enrollment projections is that statewide population estimates promulgated by GOPB will prove to be relatively accurate. If they turn out to be significantly inaccurate, the USHE enrollment projections will be equally inaccurate. For example, given the input of data from Census 2000, GOPB has revised early population estimates, significantly increasing the rate of growth for the 18-29 year-old population over the past few years and somewhat into the future.
- Only those enrollments that have been systematically reported by the institutions in the past form the basis for future projected enrollments. At most institutions, non-credit

enrollments have not been systematically reported in past years. Consequently, no reliable database is available on which to project future enrollments of this type. For this reason, projections for the Utah College of Applied Technology are not being provided at this time. The Commissioner's Office will continue to work with UCAT and other USHE institutions to more systematically capture such enrollments and development a model so that projections for these types of enrollment can be provided in the future.

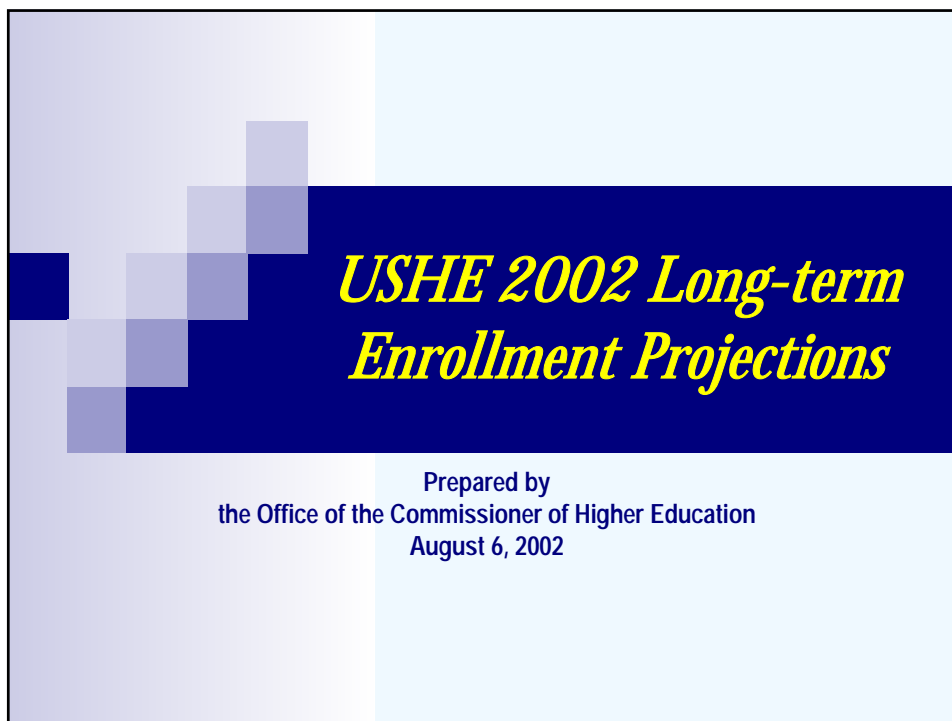
- Major shifts in policy, such as changes in institutional mission and role or changes to residency requirements such as HB 331, could have a measurable impact on enrollment projections. The precise impact for these types of changes is unknown.
- The projections will not be used for budget purposes, such as the determination of enrollment growth requests. USHE enrollment growth funding requests have been based for several years on actual enrollments rather than projected enrollments, and institutions receive growth funding a year after student growth has actually occurred.
- The projections are used as input to the Regents' facilities prioritization process known as the "Q&P." The five-year projection figures included here, along with traditional space-per-student standards, will generate estimated space needs for each institution. These estimated space needs are one of several elements weighed in the Q&P process. A full description of the Q&P process is included under Tab B of this agenda for the September 12 and 13 meetings of the Board.

Attachment 1 is a slide show presentation prepared for the Master Planning Task Force on Funding that describes some of the background methodology used in the enrollment projections, including additional detail on the input factors of population estimates and participation rates. Attachment 2 provides 10 tables with projections for the next 20 years in five-year intervals for 9 USHE institutions separately and in total.

Recommendation

It is the recommendation of the Commissioner that the Regents consider and adopt the attached USHE long-term enrollment projections.

Cecelia H. Foxley, Commissioner



Projecting Enrollments

- Informed estimates rather than certainties.
- Based on assumed population estimates and participation rates that could differ from future realities.
- Enrollment projections only reflect enrollments that have been systematically reported over time.
 - Therefore, many non-credit continuing education or vocational classes are excluded.
- UCAT is not included because there is not sufficient historical information to project for the future.
 - The percentage growth increase for UCAT is likely to be equal to or perhaps greater than the average percentage growth for the other 9 institutions.

Purpose of Enrollment Projections

- To inform USHE decision-makers for planning discussions, such as:
 - Long-range financial plans
 - Capital facility needs
 - Institutional missions and roles
- Projections are not used to determine enrollment growth requests.
 - Enrollment growth funding requests are based on actual enrollments rather than projected enrollments.
- Recent SBR projections have proven to be conservative over the short-run (related largely to population estimates).

Enrollment Projection Methodology

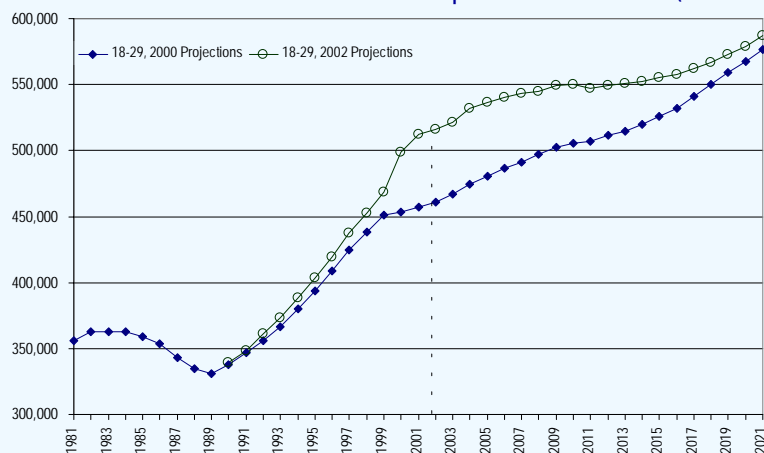
- Two driving inputs to develop 20-year projections:
 - Governor's Office of Planning and Budget population estimates
 - Institution specific assumptions about future participation rates arrived from 20-year historical participation rates for 4 cohorts of students:
 - 18-29 years from institution's 3 biggest draw counties
 - 30 years and up from institution's 3 biggest draw counties
 - 18-29 years from all other counties
 - 30 years and up from all other counties

Population Estimates

- GOPB 2002 baseline estimates are the first population estimates done since receiving data from 2000 Census.
- GOPB adjusted historical and future population estimates from those used in past enrollment projections
- Census data: much more rapid growth than projected for 18-29 population during last 5 years
- 2002 estimates: 18-29 population average annual growth:
 - 1995-2001 = 4.0%
 - 2002-2005 = 1.2%
 - 2006-2018 = 0.4%
 - 2019-2022 = 1.3%

Population Projections

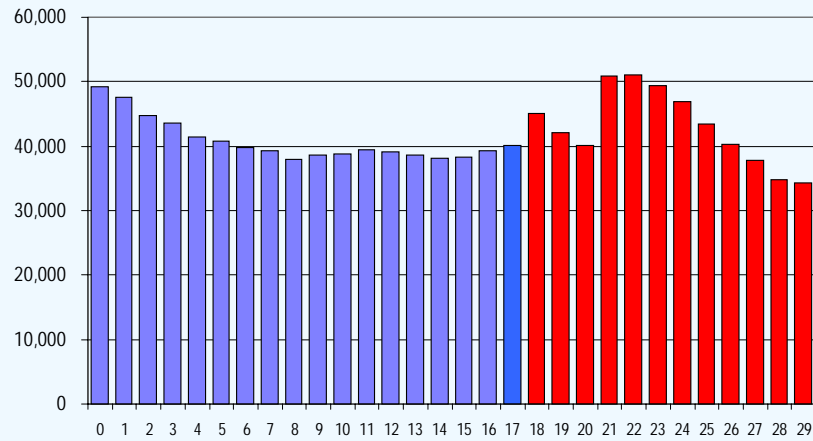
2000 and 2002 Utah 18-29 Year Old Population Estimates (all counties)



Source: Governor's Office of Planning and Budget

Population Projections

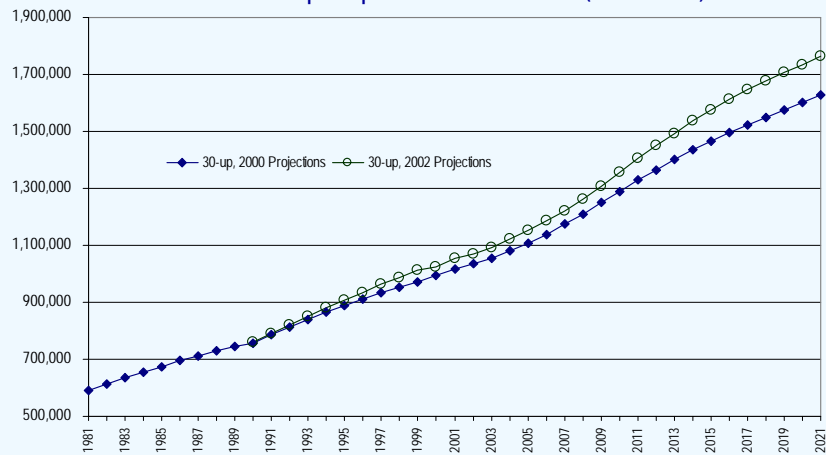
Utah 2002 Population by Age 0-29 (all counties)



Source: Governor's Office of Planning and Budget

Population Projections

2000 and 2002 Utah 30-up Population Estimates (all counties)



Source: Governor's Office of Planning and Budget

Participation Rates

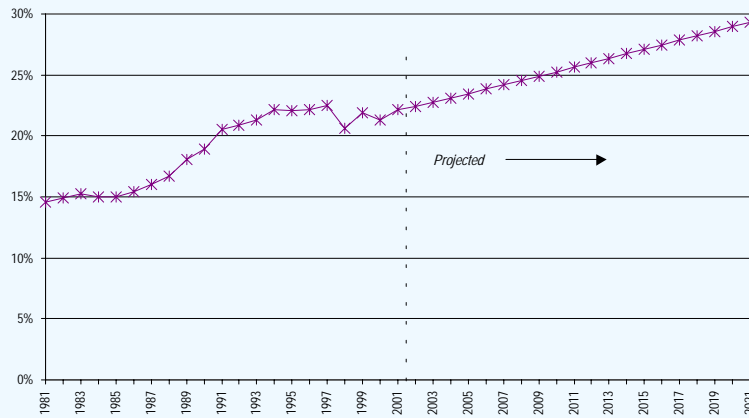
- Over the last 20 years, 18-29 year old participation rates have shown a solid increasing trend-line.
 - This trend is projected for the next 20 years.
- Participation rates for 30 year olds plus have been more cyclical, related to economic conditions.
 - An average participation rate, with a very slight increase, is projected for the next 20 years.

Participation Rates

- Factors with potential affects on participation rates over next 20 years:
 - Positive
 - Increased demand for education workforce and training
 - Increased accessibility to higher education through
 - technology (Internet courses)
 - new program offerings
 - new physical campuses, (WSU-Davis, UVSC-Wasatch, etc.)
 - Negative
 - HB 331 and potential changes to nonresident waivers

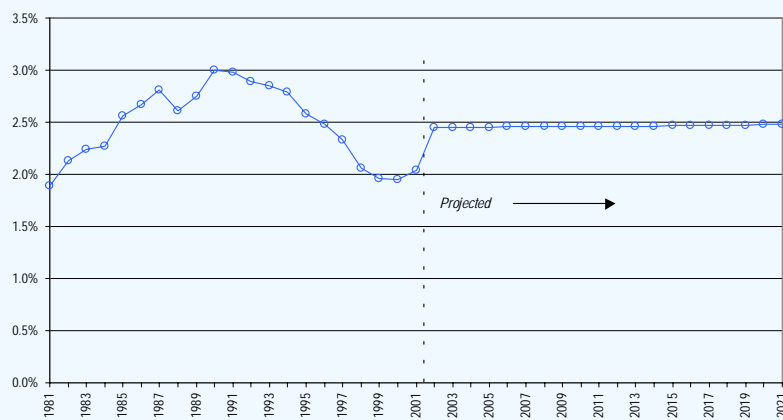
Participation Rates

USHE 18-29 year old participation rates (All-counties, 9 institutions)



Participation Rates

USHE 30 years and up participation rates (All-counties, 9 institutions)



Summary

- Through 2021-22, USHE enrollment is projected to grow 2.3% annually, or 58.8% total (64,278 annualized FTE).
- Fastest growth period is from 2002-03 to 2006-07:
2002-03 thru 2006-07: 3.2% per year 2007-08 thru 2011-12: 2.0% per year
2012-13 thru 2016-17: 2.0% per year 2017-18 thru 2021-22: 2.2% per year
- Institutional 20-year average annual growth rates:

UU = 1.4%	USU = 1.9%	WSU = 2.0%
SUU = 2.4%	Snow = 2.3%	DSC = 3.1%
CEU = 2.4%	UVSC = 3.3%	SLCC = 3.0%

UTAH SYSTEM OF HIGHER EDUCATION

System Total Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	67,062	53,418	55,350	n/a	n/a	02-03					
83-84	69,583	55,337	56,477	2.0%	2.0%	03-04					
84-85	69,216	54,474	55,666	-1.4%	0.6%	04-05					
85-86	70,989	54,132	55,500	-0.3%	0.3%	05-06					
86-87	73,088	55,355	56,972	2.7%	2.9%	06-07	157,912	109,950	128,050	3.2%	17.2%
87-88	74,929	56,298	57,634	1.2%	4.1%	07-08					
88-89	74,884	56,640	58,606	1.7%	5.9%	08-09					
89-90	80,430	60,028	62,368	6.4%	12.7%	09-10					
90-91	86,843	63,545	66,468	6.6%	20.1%	10-11					
91-92	94,923	69,651	73,009	9.8%	31.9%	11-12	174,980	120,500	141,530	2.0%	29.5%
92-93	99,163	73,224	76,957	5.4%	39.0%	12-13					
93-94	103,633	75,805	79,479	3.3%	43.6%	13-14					
94-95	110,594	79,364	81,978	3.1%	48.1%	14-15					
95-96	112,666	81,713	84,068	2.5%	51.9%	15-16					
96-97	116,047	83,375	87,383	3.9%	57.9%	16-17	193,321	131,610	155,930	2.0%	42.7%
97-98	121,053	87,077	91,103	4.3%	64.6%	17-18					
98-99	113,704	79,393	90,453	-0.7%	63.4%	18-19					
99-00	122,417	84,929	96,585	6.8%	74.5%	19-20					
00-01	126,377	88,002	101,307	4.9%	83.0%	20-21					
01-02	134,939	94,698	109,302	7.9%	97.5%	21-22	216,011	145,270	173,580	2.2%	58.8%
Average Annual Increases			2,840	3.7%		Average Annual Increases			3,214	2.3%	

Institution Projection Summary

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Institution	1982-83 Annualized FTE	2001-02 Annualized FTE	20-year Annualized FTE growth	Average Annual % change	Cummulative FTE % change	Institution	2021-22 Annualized FTE	20-year Annualized FTE growth	Average Annual. FTE Growth	Average Annual. FTE % change	Cummulative FTE % change
UU	19,855	26,260	6,405	1.5%	32.3%	UU	34,880	8,620	431	1.4%	32.8%
USU	10,553	19,049	8,496	3.2%	80.5%	USU	27,630	8,581	429	1.9%	45.0%
WSU	9,010	14,327	5,317	2.5%	59.0%	WSU	21,420	7,093	355	2.0%	49.5%
SUU	2,173	6,134	3,961	5.7%	182.3%	SUU	9,930	3,796	190	2.4%	61.9%
Snow	1,025	3,141	2,116	6.3%	206.4%	Snow	4,930	1,789	89	2.3%	57.0%
DSC	1,436	4,212	2,776	5.9%	193.3%	DSC	7,720	3,508	175	3.1%	83.3%
CEU	922	2,197	1,275	4.8%	138.3%	CEU	3,540	1,343	67	2.4%	61.1%
UVSC	5,035	17,097	12,062	6.8%	239.6%	UVSC	32,760	15,663	783	3.3%	91.6%
SLCC	5,341	16,885	11,544	6.4%	216.1%	SLCC	30,770	13,885	694	3.0%	82.2%
USHE	55,350	109,302	53,952	3.7%	97.5%	USHE	173,580	64,278	3,214	2.3%	58.8%

UNIVERSITY OF UTAH

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	24,365	19,296	19,855	n/a	n/a	02-03					
83-84	24,912	19,590	19,897	0.2%	0.2%	03-04					
84-85	24,888	19,504	19,841	-0.3%	-0.1%	04-05					
85-86	25,163	19,410	19,706	-0.7%	-0.8%	05-06					
86-87	25,167	19,129	19,439	-1.4%	-2.1%	06-07	31,490	25,310	30,270	2.9%	15.3%
87-88	24,616	19,186	19,467	0.1%	-2.0%	07-08					
88-89	24,052	18,806	19,216	-1.3%	-3.2%	08-09					
89-90	24,440	19,002	19,629	2.1%	-1.1%	09-10					
90-91	25,425	19,912	20,450	4.2%	3.0%	10-11					
91-92	26,639	20,575	21,351	4.4%	7.5%	11-12	32,570	26,260	31,700	0.9%	20.7%
92-93	26,801	20,971	21,583	1.1%	8.7%	12-13					
93-94	27,118	20,928	21,454	-0.6%	8.1%	13-14					
94-95	26,918	21,272	21,881	2.0%	10.2%	14-15					
95-96	27,143	21,540	22,055	0.8%	11.1%	15-16					
96-97	26,365	20,990	21,719	-1.5%	9.4%	16-17	33,620	27,190	33,130	0.9%	26.2%
97-98	26,191	21,193	22,057	1.6%	11.1%	17-18					
98-99	25,203	19,677	21,899	-0.7%	10.3%	18-19					
99-00	25,788	20,343	22,970	4.9%	15.7%	19-20					
00-01	26,180	20,778	24,339	6.0%	22.6%	20-21					
01-02	27,664	22,165	26,260	7.9%	32.3%	21-22	34,970	28,360	34,880	1.0%	32.8%
Average Annual Increases			337	1.5%		Average Annual Increases			431	1.4%	

UTAH STATE UNIVERSITY

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	11,805	10,057	10,553	n/a	n/a	02-03					
83-84	12,569	10,672	10,989	4.1%	4.1%	03-04					
84-85	12,225	10,154	10,663	-3.0%	1.0%	04-05					
85-86	12,572	9,745	10,306	-3.3%	-2.3%	05-06					
86-87	12,477	9,800	10,353	0.5%	-1.9%	06-07	26,280	19,190	21,760	2.7%	14.2%
87-88	12,718	9,813	10,397	0.4%	-1.5%	07-08					
88-89	13,114	10,086	10,631	2.3%	0.7%	08-09					
89-90	13,621	10,561	11,205	5.4%	6.2%	09-10					
90-91	14,785	11,513	12,226	9.1%	15.9%	10-11					
91-92	16,599	12,732	13,319	8.9%	26.2%	11-12	28,440	20,650	23,550	1.6%	23.6%
92-93	17,114	13,121	14,170	6.4%	34.3%	12-13					
93-94	18,380	14,083	14,840	4.7%	40.6%	13-14					
94-95	20,361	14,911	15,582	5.0%	47.7%	14-15					
95-96	19,852	15,159	15,942	2.3%	51.1%	15-16					
96-97	20,802	15,738	16,421	3.0%	55.6%	16-17	30,640	22,120	25,360	1.5%	33.1%
97-98	21,232	16,222	17,044	3.8%	61.5%	17-18					
98-99	19,323	14,554	16,356	-4.0%	55.0%	18-19					
99-00	20,865	15,274	17,091	4.5%	62.0%	19-20					
00-01	21,490	15,851	18,045	5.6%	71.0%	20-21					
01-02	23,001	16,889	19,049	5.6%	80.5%	21-22	33,390	23,970	27,630	1.7%	45.0%
Average Annual Increases			447	3.2%		Average Annual Increases			429	1.9%	

WEBER STATE UNIVERSITY

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	10,690	8,566	9,010	n/a	n/a	02-03					
83-84	10,872	8,569	8,822	-2.1%	-2.1%	03-04					
84-85	10,718	8,287	8,467	-4.0%	-6.0%	04-05					
85-86	11,490	8,298	8,579	1.3%	-4.8%	05-06					
86-87	11,777	8,553	9,027	5.2%	0.2%	06-07	19,830	13,890	16,580	3.0%	15.7%
87-88	12,549	8,847	9,279	2.8%	3.0%	07-08					
88-89	12,731	9,077	9,475	2.1%	5.2%	08-09					
89-90	13,651	9,569	10,034	5.9%	11.4%	09-10					
90-91	14,039	10,027	10,362	3.3%	15.0%	10-11					
91-92	14,433	10,566	11,209	8.2%	24.4%	11-12	21,420	14,950	18,020	1.7%	25.8%
92-93	14,994	11,128	11,672	4.1%	29.5%	12-13					
93-94	15,910	11,052	11,569	-0.9%	28.4%	13-14					
94-95	15,051	10,937	11,304	-2.3%	25.5%	14-15					
95-96	14,623	10,826	11,006	-2.6%	22.2%	15-16					
96-97	14,442	10,501	11,654	5.9%	29.3%	16-17	23,100	16,070	19,570	1.7%	36.6%
97-98	14,933	11,187	12,273	5.3%	36.2%	17-18					
98-99	14,136	10,144	11,922	-2.9%	32.3%	18-19					
99-00	15,444	10,858	12,805	7.4%	42.1%	19-20					
00-01	16,378	11,519	13,346	4.2%	48.1%	20-21					
01-02	17,258	12,127	14,327	7.4%	59.0%	21-22	25,120	17,420	21,420	1.8%	49.5%
Average Annual Increases			280	2.5%		Average Annual Increases			355	2.0%	

SOUTHERN UTAH UNIVERSITY

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	2,379	2,167	2,173	n/a	n/a	02-03					
83-84	2,543	2,296	2,315	6.5%	6.5%	03-04					
84-85	2,642	2,438	2,410	4.1%	10.9%	04-05					
85-86	2,585	2,348	2,361	-2.0%	8.7%	05-06					
86-87	2,866	2,571	2,685	13.7%	23.6%	06-07	7,200	6,080	7,310	3.6%	19.2%
87-88	2,914	2,685	2,779	3.5%	27.9%	07-08					
88-89	2,952	2,770	2,894	4.1%	33.2%	08-09					
89-90	3,502	2,893	3,034	4.8%	39.6%	09-10					
90-91	4,004	3,194	3,439	13.3%	58.3%	10-11					
91-92	4,293	3,515	3,754	9.2%	72.8%	11-12	7,870	6,620	8,070	2.0%	31.6%
92-93	4,433	3,736	3,938	4.9%	81.2%	12-13					
93-94	4,592	4,054	4,352	10.5%	100.3%	13-14					
94-95	5,025	4,269	4,583	5.3%	110.9%	14-15					
95-96	5,159	4,501	4,807	4.9%	121.2%	15-16					
96-97	5,639	4,741	5,153	7.2%	137.1%	16-17	8,590	7,200	8,900	2.0%	45.1%
97-98	6,007	5,079	5,646	9.6%	159.8%	17-18					
98-99	5,725	4,815	5,731	1.5%	163.7%	18-19					
99-00	6,025	5,024	5,896	2.9%	171.3%	19-20					
00-01	5,963	5,022	5,978	1.4%	175.1%	20-21					
01-02	6,095	5,172	6,134	2.6%	182.3%	21-22	9,510	7,930	9,930	2.2%	61.9%
Average Annual Increases			208	5.7%		Average Annual Increases			190	2.4%	

SNOW COLLEGE

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	1,411	1,143	1,025	n/a	n/a	02-03					
83-84	1,307	1,216	1,146	11.8%	11.8%	03-04					
84-85	1,319	1,229	1,130	-1.4%	10.2%	04-05					
85-86	1,258	1,194	1,142	1.1%	11.4%	05-06					
86-87	1,396	1,340	1,265	10.8%	23.4%	06-07	4,670	3,650	3,570	2.6%	13.7%
87-88	1,369	1,314	1,244	-1.7%	21.4%	07-08					
88-89	1,544	1,421	1,375	10.5%	34.1%	08-09					
89-90	1,734	1,621	1,616	17.5%	57.7%	09-10					
90-91	1,872	1,798	1,768	9.4%	72.5%	10-11					
91-92	2,553	2,198	2,089	18.2%	103.8%	11-12	5,180	4,010	3,940	2.0%	25.4%
92-93	2,819	2,452	2,363	13.1%	130.5%	12-13					
93-94	2,920	2,508	2,343	-0.8%	128.6%	13-14					
94-95	2,996	2,582	2,416	3.1%	135.7%	14-15					
95-96	3,027	2,668	2,461	1.9%	140.1%	15-16					
96-97	3,162	2,748	2,554	3.8%	149.2%	16-17	5,750	4,420	4,360	2.0%	38.8%
97-98	3,326	2,914	2,810	10.0%	174.1%	17-18					
98-99	3,318	2,735	2,720	-3.2%	165.4%	18-19					
99-00	4,081	3,109	3,119	14.7%	204.3%	19-20					
00-01	4,092	3,159	3,150	1.0%	207.3%	20-21					
01-02	4,096	3,224	3,141	-0.3%	206.4%	21-22	6,520	4,970	4,930	2.5%	57.0%
Average Annual Increases			111	6.3%		Average Annual Increases			89	2.3%	

DIXIE STATE COLLEGE

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	2,010	1,634	1,436	n/a	n/a	02-03					
83-84	1,865	1,582	1,449	0.9%	0.9%	03-04					
84-85	1,903	1,583	1,483	2.3%	3.3%	04-05					
85-86	2,232	1,737	1,646	11.0%	14.6%	05-06					
86-87	2,327	1,992	1,843	12.0%	28.3%	06-07	8,620	4,740	4,950	3.3%	17.5%
87-88	2,211	1,889	1,812	-1.7%	26.2%	07-08					
88-89	2,228	1,873	1,802	-0.6%	25.5%	08-09					
89-90	2,382	2,051	1,992	10.5%	38.7%	09-10					
90-91	2,529	2,158	2,156	8.2%	50.1%	10-11					
91-92	2,963	2,398	2,298	6.6%	60.0%	11-12	10,140	5,440	5,760	3.1%	36.8%
92-93	2,868	2,402	2,299	0.0%	60.1%	12-13					
93-94	3,041	2,550	2,438	6.0%	69.8%	13-14					
94-95	4,375	2,772	2,638	8.2%	83.7%	14-15					
95-96	4,921	3,120	2,964	12.4%	106.4%	15-16					
96-97	5,318	3,298	3,171	7.0%	120.8%	16-17	11,840	6,190	6,650	2.9%	57.9%
97-98	5,500	3,505	3,389	6.9%	136.0%	17-18					
98-99	5,454	3,454	3,607	6.4%	151.2%	18-19					
99-00	6,191	3,656	3,728	3.4%	159.6%	19-20					
00-01	6,515	3,831	3,990	7.0%	177.9%	20-21					
01-02	7,255	4,087	4,212	5.6%	193.3%	21-22	13,940	7,090	7,720	3.0%	83.3%
Average Annual Increases			146	5.9%		Average Annual Increases			175	3.1%	

COLLEGE OF EASTERN UTAH

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	1,296	874	922	n/a	n/a	02-03					
83-84	1,359	996	1,065	15.5%	15.5%	03-04					
84-85	1,412	1,121	1,162	9.1%	26.0%	04-05					
85-86	1,371	1,059	1,141	-1.8%	23.8%	05-06					
86-87	1,770	1,268	1,309	14.7%	42.0%	06-07	3,392	2,570	2,710	4.3%	23.4%
87-88	2,147	1,296	1,281	-2.1%	38.9%	07-08					
88-89	2,063	1,395	1,354	5.7%	46.9%	08-09					
89-90	2,339	1,525	1,420	4.9%	54.0%	09-10					
90-91	2,960	1,800	1,683	18.5%	82.5%	10-11					
91-92	2,694	1,833	1,693	0.6%	83.6%	11-12	3,880	2,940	3,090	2.7%	40.6%
92-93	2,745	1,875	1,772	4.7%	92.2%	12-13					
93-94	2,849	2,029	1,901	7.3%	106.2%	13-14					
94-95	3,135	2,145	1,939	2.0%	110.3%	14-15					
95-96	3,067	2,029	1,914	-1.3%	107.6%	15-16					
96-97	3,169	2,126	1,913	-0.1%	107.5%	16-17	4,181	3,160	3,320	1.4%	51.1%
97-98	3,563	2,140	1,978	3.4%	114.5%	17-18					
98-99	2,617	1,827	2,027	2.5%	119.8%	18-19					
99-00	2,688	1,957	2,087	3.0%	126.4%	19-20					
00-01	2,704	1,941	2,089	0.1%	126.6%	20-21					
01-02	2,746	2,082	2,197	5.2%	138.3%	20-21	4,471	3,380	3,540	1.3%	61.1%
Average Annual Increases			67	4.8%		Average Annual Increases			67	2.4%	

UTAH VALLEY STATE COLLEGE

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	5,593	4,768	5,035	n/a	n/a	02-03					
83-84	6,093	5,240	5,272	4.7%	4.7%	03-04					
84-85	5,818	4,841	4,947	-6.2%	-1.7%	04-05					
85-86	6,012	4,886	4,899	-1.0%	-2.7%	05-06					
86-87	6,492	5,148	5,206	6.3%	3.4%	06-07	27,560	18,200	20,690	3.9%	21.0%
87-88	6,969	5,420	5,302	1.8%	5.3%	07-08					
88-89	6,832	5,319	5,329	0.5%	5.8%	08-09					
89-90	7,758	5,987	5,854	9.9%	16.3%	09-10					
90-91	7,885	5,225	5,788	-1.1%	15.0%	10-11					
91-92	8,777	6,067	6,739	16.4%	33.8%	11-12	32,340	21,030	24,110	3.1%	41.0%
92-93	9,623	6,586	7,486	11.1%	48.7%	12-13					
93-94	10,512	7,194	8,038	7.4%	59.6%	13-14					
94-95	13,293	8,457	8,856	10.2%	75.9%	14-15					
95-96	14,040	9,125	9,609	8.5%	90.8%	15-16					
96-97	14,756	9,784	10,699	11.3%	112.5%	16-17	37,760	24,170	27,940	3.0%	63.4%
97-98	15,994	10,485	11,404	6.6%	126.5%	17-18					
98-99	18,174	11,668	12,438	9.1%	147.0%	18-19					
99-00	20,062	12,770	13,804	11.0%	174.2%	19-20					
00-01	20,946	13,503	15,058	9.1%	199.1%	20-21					
01-02	22,609	15,163	17,097	13.5%	239.6%	20-21	44,640	28,110	32,760	3.2%	91.6%
Average Annual Increases			635	6.8%		Average Annual Increases			783	3.3%	

SALT LAKE COMMUNITY COLLEGE

Total Institutional Projection

20-YEAR ACTUAL HISTORY						20-YEAR PROJECTION					
Year	Fall Headcount	Fall FTE	Annualized FTE	Annualized FTE % change	Cummulative FTE % change	Year	Fall Headcount	Fall FTE	Annualized FTE	Average Annual. FTE % change	Cummulative FTE % change
82-83	7,513	4,913	5,341	n/a	n/a	02-03					
83-84	8,063	5,176	5,522	3.4%	3.4%	03-04					
84-85	8,291	5,317	5,563	0.7%	4.2%	04-05					
85-86	8,306	5,455	5,720	2.8%	7.1%	05-06					
86-87	8,816	5,554	5,845	2.2%	9.4%	06-07	28,870	16,320	20,210	3.7%	19.7%
87-88	9,436	5,848	6,073	3.9%	13.7%	07-08					
88-89	9,368	5,893	6,530	7.5%	22.3%	08-09					
89-90	11,003	6,819	7,584	16.1%	42.0%	09-10					
90-91	13,344	7,918	8,596	13.3%	60.9%	10-11					
91-92	15,972	9,767	10,557	22.8%	97.7%	11-12	33,140	18,600	23,290	2.9%	37.9%
92-93	17,766	10,953	11,674	10.6%	118.6%	12-13					
93-94	18,311	11,407	12,544	7.5%	134.9%	13-14					
94-95	19,440	12,019	12,779	1.9%	139.3%	14-15					
95-96	20,834	12,745	13,310	4.2%	149.2%	15-16					
96-97	22,394	13,449	14,099	5.9%	164.0%	16-17	37,840	21,090	26,700	2.8%	58.1%
97-98	24,307	14,352	14,502	2.9%	171.5%	17-18					
98-99	19,754	10,519	13,753	-5.2%	157.5%	18-19					
99-00	21,273	11,938	15,085	9.7%	182.4%	19-20					
00-01	22,109	12,398	15,312	1.5%	186.7%	20-21					
01-02	24,215	13,789	16,885	10.3%	216.1%	21-22	43,450	24,040	30,770	2.9%	82.2%
Average Annual Increases			608	6.4%		Average Annual Increases			694	3.0%	

MEMORANDUM

September 4, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: University of Utah – 2002-2003 Budget for University Hospitals and Clinics and Neuropsychiatric Institute

Issue

Long-standing Legislative intent language instructs the Board of Regents to approve the operating budget of the University Hospital and Clinics and Neuropsychiatric Institute as a condition for the retention of patient fee revenues outside the appropriated budget. Summary materials of these budgets are attached. The complete budget documents are voluminous and are available for review upon request.

Recommendation

It is the recommendation of the Commissioner that Regents approve the 2002-2003 operating budget for the University Hospital and Clinics and the Neuropsychiatric Institute.

Cecelia H. Foxley, Commissioner

CHF/MHS
Attachments

MEMORANDUM

September 3, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

**SUBJECT: ACTION: UHEAA--Approving Resolution, SBR Student Loan
Revenue Bonds, Series 2002X**

Issue

At its meeting on August 23, 2002, the Student Finance Subcommittee voted unanimously to recommend Board of Regents adoption of the attached Approving Resolution for the Board's Student Loan Revenue Bonds, Series 2002X. Board of Regents adoption of the Resolution is necessary to provide authority for issuance and sale of the bonds.

Background

As directed by Policy R610, the UHEAA Board of Directors has designated persons from its membership to comprise the Student Finance Subcommittee. The Student Finance Subcommittee, in accordance with Policy R610, "shall be directly responsible, reporting directly to the Board of Regents through its Finance and Facilities Committee, for oversight and advice regarding bond issues and other financing arrangements for the Loan Purchase Program." The present members of the Student Finance Subcommittee are: Mr. John B. Goddard, Chair; Regent L. Brent Hoggan (Finance and Facilities Committee Chair); Regent David J. Grant; Regent Maria Sweeten; Ms. Elva M. Barnes; Mr. Edward T. Alter (State Treasurer); Dr. Stephen D. Nadauld; Mr. Walter P. Gnemi; Associate Commissioner Mark Spencer; and Associate Commissioner Chalmers Gail Norris. All Subcommittee members except Regent Grant were present in the March 1 meeting. Mr. Norris participated by telephone. Associate Commissioner Mark Spencer will be appointed to the Subcommittee officially at the next meeting of the UHEAA Board of Directors (replacing Norm Tarbox). Dr. Spencer participated in the August 23 Subcommittee meeting.

Pursuant to statutory authority, the Board of Regents operates its Loan Purchase Program (LPP) to assure liquidity in the local marketplace for guaranteed student loans under the Federal Family Education Loan Program (FFELP) and to maintain a high degree of control over servicing of the student loans guaranteed by the Utah Higher Education Assistance Authority (UHEAA) Student Loan Guarantee Program (LGP). By maintaining its Loan Purchase Program the Board is able to ensure availability of the lowest feasible costs of educational loans for Utah students and families through its array of borrower benefits for reduced origination fees and lower in-repayment interest rates.

State Board of Regents

Through its programs administered by UHEAA, the Board is quite unusual in providing: (1) significant cost saving opportunities on PLUS Loans (for parents) and Consolidation Loans; (2) more generous qualifying criteria for the saving opportunities; and (3) a guarantee (backed up by designated reserve funds) that the benefits will be available for loans currently being originated, regardless of how much time elapses before they enter repayment and are sold to the Board. (Most lenders and secondary markets guarantee eligibility for their current borrower benefits only for loans currently being purchased.)

The Board issues Student Loan Revenue Bonds as needed, and uses the proceeds to finance purchase of FFELP student and parent loans and origination of FFELP Consolidation Loans. The Board has established two different current bond series, one based on a 1988 General Indenture and one based on a 1993 General Indenture. The current Resolution will authorize a Tenth Supplemental Indenture to the 1993 General Indenture, providing for one additional series, 2002X. Most student loan revenue bond issuances by the Board include primarily new bonds, frequently blending both tax exempt and taxable series. Some of the issuances also include modest amounts of refunding or refinancing of previously issued bonds.

This issue is unusual in that it consists entirely of refunding bonds. The proceeds will refund the maturing November 1, 2002 maturities of the Board's Series 1992H and 1993B Bonds and also refinance the remaining Series 1992H Bonds maturing in later years (November 1 of 2003, 2004, 2005, 2006, and 2015). The advance refinancing of the remaining Series 1992H Bonds will provide the following net advantages: (a) preserve cap authority (by extending the maturity dates on previously-issued tax-exempt bonds); (b) allow the Board to continue earning a minimum asset return of 9.5% (on the amounts refinanced--new issues have lower net returns); (c) free up \$977,850 of restricted funds currently held as a reserve for debt service; (d) lower funding costs; and (e) provide additional cash flow with which to fund borrower benefit programs.

Tax Exempt Bonding Cap Authority

The amount of tax exempt bonds which the Board of Regents may issue each calendar year is subject to Federal legislation establishing capped amounts for covered purposes (e.g., public housing, guaranteed student loans, and economic development). Utah's total annual amount for these purposes is based on a floor amount for smaller population states, which had for many years been set at \$150 million. Under Utah law, 33% of the total is reserved initially for the Board's student loan revenue bonds, subject to application to and approval by the Utah Private Activity Bond Authority (Authority). Current state law also provides that as much as one half of any increase in the cap authority available for Utah may be allocated by the Authority for specially-defined economic development purposes ("quality growth areas"), with the remaining amount reserved in the same proportions as specified for the base of \$150 million.

In December 2000, Congress passed, and President Clinton subsequently signed, legislation which increased the formula for determining cap authority for each state. The effect, for Utah, was an increase from \$150 to \$187.5 million for calendar year 2001, and \$225 million for 2002 and subsequent years. The Authority did not reserve calendar year 2002 increase allocation for "quality growth areas," but approved the full 33% of total cap authority--\$74,250,000--for LPP for Calendar Year 2002. This amount was issued last Spring, in Series 2002V-1, 2002V-2, and 2002-W, as approved by the Board at its March 14, 2002 meeting.

Proposed Structure of the Bond Issue

The proposed structure recommended by the underwriting team and the Student Finance Subcommittee is as follows:

	<u>Proposed Sale Date:</u>		September 19, 2002		
	<u>Proposed Closing Date:</u>		September 24, 2002		
	<u>Expected Rating</u>	<u>Proposed Amount</u>	<u>Type</u>	<u>Maturity</u>	<u>Class</u>
Series 2002X	AAA	\$ 35,850,000	Variable, Tax Exempt	11/01/2009	II

The Resolution provides for a total new issue amount *not to exceed* \$38.850 million, to allow flexibility in final marketing and sale of the bonds. All of the tax-exempt revenue bonds will be subject to Federal Alternative Minimum Tax (AMT) provisions.

The variable rate bonds will be sold as Auction Rate Certificates–Book Entry Only. The mechanism for resetting rates on the bonds is Variable Rate Dutch Auction on 28 to 35-day cycles.

Proposed Not to Exceed Parameters

Proposed not-to-exceed parameters are as follows:

		<u>Not-to-Exceed Parameter</u>	<u>Resolution Reference</u>
◆	Total Principal Amount	\$ 35,850,000	Section 5
◆	Maximum Interest Rate of Tax Exempt Auction Rate Certificates	14.000%	Section 5
◆	Maximum Maturity Date	11/01/2009	Section 5
◆	Underwriter's Discount	0.85%	Section 7

Maximum interest rates as listed above provide flexibility for the variable rates to float upward in the event of a prolonged and large increase in short-term interest rates in the marketplace. If that eventuality should occur, it would be accompanied by a commensurate rise in the lender return (capped student loan interest plus a Federal Government special allowance, reset quarterly) on the student loans purchased or originated with the bond proceeds. Anticipated initial interest rates are in the range of 1.5% to 2.0% for the tax exempt auction rate certificates.

Basic Documents Requiring Approval

The Approving Resolution is in final draft form. Its approval by the Board will authorize the execution of a Tenth Supplemental Indenture to the 1993 General Indenture, a Bond Purchase Agreement, and a Preliminary Official Statement.

The Tenth Supplemental Indenture is a contract between the Board and Wells Fargo Bank Northwest, as trustee, for the Bank to serve as custodian of funds and as authorized representative of bondholders in order to ensure compliance by the Board with provisions of the Indenture.

The Official Statement is a disclosure document which describes in detail the security and financial information about the bond issue. The Official Statement is used by the Underwriters to market the bonds to potential investors.

The Bond Purchase Agreement is a contract between the Underwriters (UBS PaineWebber Incorporated, Solomon Smith Barney, Wells Fargo Brokerage Services, LLC and Zions First National Bank) and the Board, which sets forth the terms under which the Underwriters will purchase the bonds. This agreement will contain the selling price of the bonds, any premium or discount, the interest rates the bonds will bear, the conditions which must be met in order to close the sale of the bonds, and a description of any restrictions on the responsibilities of the Board or the Underwriters ("Co-Managers").

The Approving Resolution delegates authority to the Board Chair, Vice Chair and/or Chair of Finance and Facilities to approve final versions of the documents described above, consistent with parameters contained in the Approving Resolution, and, along with designated Officers of the Board, to execute other necessary implementing agreements. (See Resolution sections 8 through 12.)

Copies of the draft bond documents described above are being mailed under separate cover to members of the Finance and Facilities Committee. Copies are available upon request for other members of the Board, from Richard Davis at (801) 321-7285. Assistant Commissioner Richard Davis (UHEAA Chief Financial Officer) and representatives of the Attorney General's Office and Bond Counsel will be at the Board of Regents meeting on September 13 to answer questions.

Policy Implications

Timely sale of the Board's refunding Student Loan Revenue Bonds is projected to ensure uninterrupted access of Utah students and families to student loans at least through December 2002, in addition to providing the advantages described above. Additional bonds may be proposed for issuance either late in 2002 or early in 2003.

Options Considered

The Student Finance Subcommittee, Program Officers, Underwriters and Bond Counsel periodically review and consider a wide range of financing facilities and structures. The possible merits of locking in current low interest rates by issuing the refunding bonds as fixed rate bonds was discussed at length during the Subcommittee meeting. The current variable rate bonds, as recommended for the entire refunding issue, will more closely track the annual resetting of borrower interest rates and quarterly resetting of special allowances paid on the student and parent loans.

Recommendation

It is the recommendation of the Commissioner that the Board of Regents approve the attached Approving Resolution for the Board's Student Loan Revenue Bonds, Series 2002X.

Cecelia H. Foxley, Commissioner

Attachment
CHF/CGN/ROD/DS

APPROVING RESOLUTION

Attachment 1

STUDENT LOAN PROGRAM
SERIES 2002X

Logan, Utah
September 13, 2002

The State Board of Regents of the State of Utah met in regular session at Utah State University in Logan, Utah on September 13, 2002, commencing at 10:00 a.m. The following members were present:

Nolan E. Karras	Chair
Pamela J. Atkinson	Vice Chair
Jerry C. Atkin	Member
Linnea S. Barney	Member*
Daryl C. Barrett	Member
Kim R. Burningham	Member*
Khay Douangdara	Member
David J. Grant	Member
L. Brent Hoggan	Member
James S. Jardine	Member
Michael R. Jensen	Member
Charles E. Johnson	Member
David James Jordan	Member
E. George Mantes	Member
Jed H. Pitcher	Member
Sara V. Sinclair	Member
Marlon O. Snow	Member
Maria Sweeten	Member

Absent:

Also Present:

Cecelia H. Foxley	Commissioner of Higher Education
Joyce Cottrell, C.P.S.	Secretary
Chalmers Gail Norris	Associate Commissioner for Student Financial Aid
Richard O. Davis	Assistant Commissioner for Student Loan Finance

* Non-voting member from State Board of Education

After the meeting had been duly convened and called to order by the Chair, the roll had been called with the above result, the Chair announced that one of the purposes of the meeting was the consideration of various matters with respect to the issuance of student loan revenue bonds.

The following resolution was introduced in written form and after full discussion, pursuant to motion made by Regent _____ and seconded by Regent _____, was adopted by the following vote:

YEA:

NAY:

The resolution is as follows:

RESOLUTION

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 2002X IN THE AGGREGATE PRINCIPAL AMOUNT OF NOT TO EXCEED \$35,850,000; AUTHORIZING THE EXECUTION OF A TENTH 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.

WHEREAS, the State Board of Regents of the State of Utah (the "Board") is established and exists under and pursuant to Section 53B-1-103, Utah Code Annotated 1953, as amended; and

WHEREAS, pursuant to Chapter 13, Title 53B, Utah Code Annotated 1953, as amended (the "Act"), the Board is empowered to make or purchase student loan notes and other debt obligations reflecting loans to students under its Student Loan Program; and

WHEREAS, in order to provide funds for such purpose and to refund outstanding bonds of the Board, the Board is duly authorized to issue and sell bonds pursuant to the provisions of the Act; and

WHEREAS, the Board has previously issued various series of its Student Loan Revenue Bonds (collectively, the "Outstanding Bonds") pursuant to a General Indenture dated as of August 1, 1993 (the "General Indenture") between the Board and Wells Fargo Bank Northwest, National Association (the "Trustee") and the First through Ninth Supplemental Indentures between the Board and the Trustee; and

WHEREAS, the Board considers it desirable and necessary for the benefit of the residents of the State of Utah to issue additional student loan revenue bonds under the General Indenture by the execution and delivery of a Tenth Supplemental Indenture (the "Tenth Supplemental Indenture" and together with the General Indenture and the First through Ninth Supplemental Indentures described above, the "Indenture") to be entered into between the Board and the Trustee, which bonds will be designated as the State Board of Regents of the State of Utah Student Loan Revenue Bonds, Series 2002X (or such other or additional designation as appropriate officers of the Board may determine) (the "Series 2002X Bonds") in an aggregate principal amount of not to exceed \$35,850,000; and

WHEREAS, the Series 2002X Bonds shall be payable solely from the revenues and other moneys pledged therefor and shall not constitute nor give rise to a general obligation or liability of the Board or constitute a charge against its general credit; and

WHEREAS, there has been presented to the Board at this meeting a form of a Bond Purchase Agreement (the "Bond Purchase Agreement"), a form of an Official Statement (the "Official Statement") and a form of the Tenth Supplemental Indenture; and

WHEREAS, pursuant to Section 53B-13-104(9) of the Act, the Board desires to grant to the Chair and/or Vice Chair of the Board and/or the Chair of the Finance and Facilities Committee of the Board the authority to approve the final principal amounts, terms, maturities, interest rates and purchase prices at which the Series 2002X Bonds shall be sold and any changes with respect thereto from those terms which were before the Board at the time of adoption of this resolution; provided such terms do not exceed the parameters set forth in this resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE STATE BOARD OF REGENTS OF THE STATE OF UTAH, AS FOLLOWS:

Section 1. All terms defined in the foregoing recitals hereto shall have the same meanings when used herein.

Section 2. All action heretofore taken (not inconsistent with the provisions of this resolution) by the Board and the officers of the Board directed toward the issuance of the Series 2002X Bonds are hereby ratified, approved and confirmed.

Section 3. The Board hereby authorizes, approves and directs the use and distribution of the Official Statement in substantially the form of the Official Statement presented to the Board at this meeting in connection with the offering and sale of the Series 2002X Bonds.

Section 4. The Tenth Supplemental Indenture, in substantially the form presented to this meeting, is in all respects authorized, approved and confirmed. The Chair, Vice Chair and/or Chair of the Finance and Facilities Committee and Secretary of the Board are hereby authorized to execute and deliver the Tenth Supplemental Indenture in the form and with substantially the same content as presented to this meeting for and on behalf of the Board with such alterations, changes or additions as may be authorized by Section 11 hereof.

Section 5. For the purpose of providing funds to be used to refund outstanding bonds of the Board and to make deposits into the Acquisition Fund and other special trust accounts established under the Indenture, the Board hereby authorizes the issuance and sale of the Series 2002X Bonds in the aggregate principal amount of not to exceed \$35,850,000. The Series 2002X Bonds shall bear variable rates of interest, as provided in the Indenture. The interest rates on the Series 2002X Bonds shall not at any time exceed 14% per annum. The Series 2002X Bonds shall mature on such date or

dates, as approved by the Chair, Vice Chair and/or Chair of the Finance and Facilities Committee, on or before November 1, 2009. The issuance of the Series 2002X Bonds shall be subject to final advice of Bond Counsel and to the approval of the Attorney General of the State of Utah.

Section 6. The form, terms and provisions of the Series 2002X Bonds and the provisions for the signatures, authentication, payment, registration, transfer, exchange, tender, auction, redemption and number shall be as set forth in the General Indenture, as amended and supplemented by the Tenth Supplemental Indenture. The Chair, Vice Chair and/or Chair of the Finance and Facilities Committee and the Secretary of the Board are hereby authorized to execute and seal by manual or facsimile signature the Series 2002X Bonds and to deliver the Series 2002X Bonds to the Trustee for authentication. All terms and provisions of the Indenture are hereby incorporated in this Resolution. The appropriate officials of the Board are hereby authorized to execute and deliver to the Trustee the written order of the Board for authentication and delivery of the Series 2002X Bonds in accordance with the provisions of the Indenture.

Section 7. The Series 2002X Bonds shall be sold to UBS PaineWebber Inc., Wells Fargo Brokerage Services LLC, Salomon Smith Barney Inc. and Zions First National Bank (the "Underwriters"), with an Underwriter's discount of not to exceed .85% of the face amount of the Series 2002X Bonds, plus accrued interest, if any. The Chair or Vice Chair of the Board and/or the Chair of the Finance and Facilities Committee are hereby authorized to execute and deliver the Bond Purchase Agreement and the Official Statement, in substantially the form of the Bond Purchase Agreement and the Official Statement, respectively, and with substantially the same content as presented at this meeting for and on behalf of the Board with final terms as may be established for the Series 2002X Bonds and such alterations, changes or additions as may be authorized by Section 11 hereof. Pursuant to Section 53B-13-104(9) of the Act, the Chair and/or Vice-Chair of the Board and/or the Chair of the Finance and Facilities Committee, are each hereby authorized to specify and agree as to the final principal amounts, terms, discounts, maturities, interest rates, rate determination methods and purchase price with respect to the Series 2002X Bonds for and on behalf of the Board by the execution of the Bond Purchase Agreement and the Tenth Supplemental Indenture and any changes with respect thereto from those terms which were before the Board at the time of adoption of this Resolution, provided such terms are within the parameters set by this Resolution.

Section 8. The appropriate officers of the Board, including without limitation the Chair, Vice Chair, Chair of the Finance and Facilities Committee, Commissioner of Higher Education, Assistant Commissioner for Student Loan Finance and Secretary are hereby authorized to take all action necessary or reasonably required by the Bond Purchase Agreement and the Indenture to carry out, give effect to and consummate the transactions as contemplated thereby and are authorized to take all action necessary in conformity with the Act.

Section 9. The Chair or Vice Chair of the Board and/or the Chair of the Finance and Facilities Committee, for and on behalf of the Board, and the Trustee are, and each of them is, hereby authorized to enter into an investment agreement or

agreements (the "Investment Agreement"), in form and substance satisfactory to the Chair or Vice Chair of the Board and/or the Chair of the Finance and Facilities Committee. Any and all proceeds of, and investment income attributable to, the Series 2002X Bonds may be loaned to or deposited from time to time pursuant to the Investment Agreement for the periods, and at the interest rates, specified therein.

Section 10. The Commissioner of Higher Education and designated associate or assistant commissioners or authorized officers of the Board are, and each of them is, hereby authorized to enter into and execute student loan purchase agreements with qualified lenders (the "Student Loan Purchase Agreements"), in form and substance satisfactory to the Commissioner of Higher Education and the Student Finance Subcommittee and in form and substance similar to present student loan purchase agreements being utilized by the Board in its Student Loan Program.

Section 11. The appropriate officials of the Board, including without limitation the Chair or Vice Chair of the Board and/or the Chair of the Finance and Facilities Committee are authorized to make any alterations, changes or additions in the Indenture, the Series 2002X Bonds, the Bond Purchase Agreement, the Official Statement or any other document herein authorized and approved which may be necessary to correct errors or omissions therein, to remove ambiguities therefrom, to conform the same to other provisions of said instruments, to the provisions of this Resolution or any resolution adopted by the Board, or the provisions of the laws of the State of Utah or the United States.

Section 12. The appropriate officials of the Board, including without limitation the Chair, the Vice Chair, the Chair of the Finance and Facilities Committee, the Commissioner of Higher Education, Assistant Commissioner for Student Loan Finance and Secretary of the Board, are hereby authorized and directed to execute and deliver for and on behalf of the Board any or all additional certificates, documents and other papers and to perform all other acts they may deem necessary or appropriate in order to implement and carry out the matters authorized in this Resolution and the documents authorized and approved herein.

Section 13. Upon their issuance, the Series 2002X Bonds will constitute special limited obligations of the Board payable solely from and to the extent of the sources set forth in the Indenture and such Series 2002X Bonds. No provision of this Resolution, the Series 2002X Bonds, the Bond Purchase Agreement, the Indenture, the Investment Agreement or any other instrument authorized hereby, shall be construed as creating a general obligation of the Board, or of creating a general obligation of the State of Utah or any political subdivision thereof, nor as incurring or creating a charge upon the general credit of the Board.

Section 14. After any of the Series 2002X Bonds are delivered by the Trustee to the Underwriters and upon receipt of payment therefor, this Resolution shall be and remain irrevocable until the principal of, premium, if any, and interest on the Series 2002X Bonds are deemed to have been fully discharged in accordance with the terms and provisions of the Indenture.

Section 15. If any provisions of this Resolution should be held invalid, the invalidity of such provisions shall not affect the validity of any of the other provisions of this Resolution.

Section 16. All resolutions of the Board or parts thereof inconsistent herewith, are hereby repealed to the extent only of such inconsistency. This repealer shall not be construed as reviving any bylaw, order, resolution or ordinance or part thereof.

Section 17. This Resolution shall become effective immediately upon its adoption.

PASSED AND APPROVED BY THE STATE BOARD OF REGENTS OF THE STATE OF UTAH THIS 13th DAY OF SEPTEMBER, 2002.

STATE BOARD OF REGENTS OF THE
STATE OF UTAH

Chair

(S E A L)

ATTEST:

Secretary

After the conduct of other business not pertinent to the above, the meeting was, on motion duly made and seconded, adjourned.

Chair

(S E A L)

ATTEST:

Secretary

IN WITNESS WHEREOF, I have hereunto subscribed my official signature and impressed hereon the official seal of the State Board of Regents of the State of Utah, this 13th day of September, 2002.

Secretary

(S E A L)

EXHIBIT "A"

Notice of Public Meeting

[See Transcript Document No. __]

EXHIBIT “B”

Notice of Annual Meeting Schedule

[See Transcript Document No. __]

MEMORANDUM

September 3, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: INFORMATION: UHEAA--Board of Directors Report

Since its last (May 31, 2002) report to the Regents, the UHEAA Board of Directors met on June 20, 2002. A copy of the agenda for the meeting is attached as Exhibit A. The Board took the following actions:

1. Welcomed Associate Commissioner Mark Spencer as the new ex officio Board member (replacing Norm Tarbox).

2. Approved minutes for the Board's meeting on April 30, 2002 (attached as Exhibit B).

3. Reviewed and approved Monthly Investment Reports for March 2002 for the Student Loan Guarantee Program (LGP), the SBR Loan Purchase Program (LPP), the Utah Educational Savings Plan Trust (UESP), the Utah Tuition Assistance Program (UTAP), and the Utah Engineering and Computer Science Loan Forgiveness Program (UECLP).

4. Approved administrative rule changes for three programs--

a. Utah Engineering and Computer Science Loan Forgiveness Program (UECLP)--a technical amendment to permit flexibility to award Certificates for Student Loan Forgiveness for students who are determined to be excellent candidates for fulfilling the program's purpose, but who may not be *currently* enrolled on a full-time basis at the time they apply and are recommended by their institutions for certificates.

b. Utah Educational Savings Plan Trust (UESP)--Technical amendments to implement changes allowed by issuance of IRS Notice 2001-91 issued December 7, 2001, and corresponding amendments to Utah's statutes enacted in the 2002 Regular Session.

c. Utah Centennial Opportunity Program for Education (UCOPE)--Technical amendments to provide additional desirable flexibility to institutions in the administration of UCOPE. The increased flexibility will be helpful in FY 2003, in which (due to federal and state financial shortfalls) available UCOPE funds are reduced and the relationship of total available need-based financial aid funds to total demonstrated financial need is materially reduced.

5. Approved development and offering of an additional UESP investment option—a 100% bond fund option which will provide a desirable additional portfolio management tool for many participants. It is expected that computer system changes will be completed in time to implement the additional option by early Fall.

6. Approved year-end fund designations in the Loan Purchase Program (LPP) Short-Term Note Fund and continuation of current UHEAA Borrower Benefits. A copy of the UHEAA Board Report #6, which contains detailed explanation of the fund designations and the borrower benefits is attached as Exhibit C. As discussed in the introduction to Report #6:

“The Loan Purchase Program . . . Short Term Note Fund (STNF) is the LPP Fund which contains the Program’s unrestricted assets and liabilities. Fund balances in the STNF are generally designated to underwrite student loan program borrower benefits (cost reductions), to provide liquidity for exceptional purchases when lenders make business decisions to sell loans to the secondary market while still in interim status, and to provide reserves for major financing and operating contingencies. The contingency reserves help to support the unusually favorable credit rating position of LPP.”

7. Reviewed and approved Fiscal Year 2003 Operating Budgets for LPP, LGP, and UESP. LPP and LGP are Enterprise Funds of the State of Utah, and UESP is treated as a Private Purpose Trust of the State of Utah.

8. Received a “Student Financial Aid FY 2003 Budget Update” report, which is essentially the same report that was included with UHEAA’s May 31, 2002 report to the Regents.

9. Received information copies of several press releases and articles. UHEAA’s press release, “Student Loan Interest Rates At All-Time Low,” is attached as Exhibit D.

Cecelia H. Foxley, Commissioner

Attachments (Exhibits A, B, C, and D)

CHF/CGN

AGENDA

MEETING OF THE UTAH HIGHER EDUCATION ASSISTANCE AUTHORITY BOARD OF DIRECTORS

**BOARD OF REGENTS BUILDING, THE GATEWAY
60 SOUTH 400 WEST
FIFTH FLOOR BOARD ROOM
SALT LAKE CITY, UTAH**

**Thursday, June 20, 2002
10:00 A.M. - 2:00 P.M.**

**(In compliance with the Americans with Disabilities Act (ADA),
individuals needing special accommodations (including
auxiliary communicative aids and services) during this
meeting should notify Stacey Fabros, ADA Coordinator, at the
Board of Regents Building, The Gateway, 60 South 400 West,
Salt Lake City, UT 84101 or at 321-7211 at least
three working days prior to the meeting.)**

1. Calling of the Roll & Welcome
2. Approval of Minutes of the April 30, 2002 Meeting
3. Motion for Executive Session at Next Meeting, **August 27, 2002** (if needed)
4. Consideration of Board Reports

- | | | |
|-----------|---------------|--|
| #1 | ACTION | Money Management Investment Reports |
| #2 | ACTION | Administrative Rule Change for Utah Engineering and
Computer Science Loan Forgiveness Program (UECLP) |
| #3 | ACTION | Administrative Rule Change for Utah Educational Savings |

Plan Trust (UESP)

- | | | |
|------------|--------------------|---|
| #4 | ACTION | Administrative Rule Change for Utah Centennial Opportunity Program for Education (UCOPE) |
| #5 | ACTION | New Investment Option for Utah Educational Savings Plan Trust (UESP) |
| #6 | ACTION | Year End Fund Designations in Short-Term Note Fund and Continuation of UHEAA Borrower Benefits |
| #7 | ACTION | Fiscal Year 2003 Operating Budget, SBR Loan Purchase Program (LPP) |
| #8 | ACTION | Fiscal Year 2003 Operating Budget, Utah Student Loan Guarantee Program (LGP) |
| #9 | ACTION | Fiscal Year 2003 Operating Budget, Utah Educational Savings Plan Trust (UESP) |
| #10 | INFORMATION | Student Financial Aid FY 2003 Budget Update |

5. Other Information Items

6. Executive Session (if needed)

7. Reminder: Date of Next Meeting: Tuesday, August 27, 2002

**UTAH HIGHER EDUCATION ASSISTANCE AUTHORITY
BOARD OF DIRECTORS
MINUTES**

**Board of Regents Building, The Gateway
60 South 400 West
Salt Lake City, UT 84101**

April 30, 2002

Members Present

Ms. Elva Barnes
Mr. Arnold Combe
Ms. Carrie Flamm
Mr. Walter Gnemi
Mr. Jack Goddard
Mr. David Grant
Mr. Brent Hoggan
Ms. Peggy Leavitt
Ms. Judy LeCheminant
Mr. Chalmers Gail Norris
Ms. Sara Sinclair
Mr. Ford Stevenson
Mr. Fred Stringham
Ms. Maria Sweeten
Dr. Norm Tarbox
Mr. Ammon Van Orden

UHEAA Staff Present

Mr. Philip Bernal
Mr. Scott Brown
Ms. Nancy Caldwell
Ms. Brenda Cox
Mr. Ronell Crossley
Ms. Cinda Eresuma
Mr. Brad Ewell
Ms. Stacey Fabros
Mr. David Feitz
Mr. Scott Gilmore
Mr. Jim Ginos
Dr. Dale Hatch
Mr. Michael Johnson
Mr. Bob McRae
Mr. David Olson
Ms. Geri Petersen
Ms. Lynda Reid
Mr. Dave Schwanke

Others Present:

Mr. William Evans, Assistant Attorney General
Ms. Edith Mitko, Office of the Commissioner of Higher Education
Mr. Brad Mortensen, Office of the Commissioner of Higher Education

Mr. Feitz informed the Board that Chairman Hoggan would be delayed. He introduced the new Board members: Mr. Combe, Ms. Flamm, Ms. Sinclair, Mr. Stevenson and Mr. Van Orden and invited them each to give a brief introduction of themselves. Mr. Feitz then asked the remainder of the Board and the other meeting attendees to introduce themselves.

Vice-Chair Goddard called the meeting of the UHEAA Board of Directors to order. He noted that Mr. Alter, Dr. Foxley and Dr. Nadauld were excused.

Vice-Chair Goddard asked that the Board review informational calendar items until the arrival of Chairman Hoggan. The first item discussed was Utah Higher Education Assistance

Authority (UHEAA) Board Report Five, Tab A, Information on UHEAA Board Role, SBR and UHEAA Board Membership.

Mr. Norris described and explained UHEAA and its relationship to the Board of Regents.

Mr. Davis gave a brief explanation of the Student Finance Subcommittee.

Mr. Gnemi asked if there was a foreseeable time when the need for issuance of new bonds would be lessened.

Mr. Davis replied that the current bonds are for 35 years and with changes in the program, such as growth and consolidation, bonds are still needed. He said that in the past, student loan maturity was about 6 years, but with consolidation some loans take up to 30 years to mature. He indicated the elimination of bond issuance is not foreseeable in the near future.

Mr. Norris added that although UHEAA functions like a business, we also have the responsibility to limit volume to encourage responsible borrowing. UHEAA does that by keeping the cost of borrowing lower, giving money back to borrowers, and supporting financial counseling programs in institutions.

The next item discussed was UHEAA Board Report Five, Tab B, Calendar Year 2002 Schedule of UHEAA Board Meetings.

Mr. Feitz reviewed the schedule of meetings for the UHEAA Board of Directors for 2002. He explained that the meeting scheduled for June 18, 2002 may need to be moved to June 20 and he would be surveying the Board members later to facilitate the change.

Mr. Feitz discussed UHEAA's move to its new, permanent facilities at The Gateway in early April 2002.

Mr. Norris explained that UHEAA needed more room at the Triad, but at the time of its inquiry, more room was not available. He continued that, after an RFP process, UHEAA (SBR Loan Purchase Program) purchased three floors of the building at The Gateway and leases a major portion of the second floor. He explained that UHEAA received legislative authorization to finance an \$8 million bond issue to purchase this long-term home for UHEAA and the Regents.

Mr. Stringham asked the terms of the bond.

Mr. Davis replied that they are 20 year tax-exempt bonds at a fixed rate of about 4.75%, with a 10-year option to retire the funds.

Chairman Hoggan arrived at the meeting and Vice-Chair Goddard gave him a report of what had previously been discussed.

Mr. Feitz continued with UHEAA Board member participation by explaining per diem and travel reimbursement policies.

Chairman Hoggan then asked the Board to consider the minutes of the October 1, 2001 UHEAA Board of Directors meeting.

It was moved by Ms. Sweeten and seconded by Ms. Barnes to approve the minutes of the October 1, 2001 UHEAA Board of Directors meeting. The motion carried unanimously.

Chairman Hoggan asked for a motion for an Executive Session at the June 2002 meeting, if needed.

It was moved by Mr. Stringham and seconded by Mr. Goddard to hold an Executive Session at the June 2002 meeting, if needed. The motion carried unanimously.

The next item considered was UHEAA Board Report Five, Tab C, State Law Regarding Conflict of Interest Disclosures.

Mr. Evans reviewed and discussed conflict of interest laws as they apply to participation on the UHEAA Board of Directors. He distributed disclosure forms that the Board members could complete and execute to reveal any potential conflict of interest to protect themselves from any appearance of wrongdoing during participation on the Board.

Mr. Gnemi asked if a new statement would supersede any prior statements.

Mr. Evans replied that a new statement could supersede or supplement a prior statement, at the Board member's discretion.

Mr. Gnemi asked if information on an old disclosure is now outdated if a new form should be filed or if the old form would simply lapse.

Mr. Evans replied that it would be at the discretion of the Board member if they would like to file a new disclosure or let the previous one lapse.

The next item considered was UHEAA Board Report One, Money Management Investment Reports.

Mr. Davis discussed the investment reports and attachments for: the State Board of Regents Loan Purchase Program (LPP); the Utah Student Loan Guarantee Program (LGP); the Utah Educational Savings Plan Trust (UESP); the Utah Tuition Assistance Program (UTAP); and the Utah Engineering and Computer Science Loan Forgiveness Program (UECLP) for the months of July, August September, October November and December 2001; January and February 2002; and for the quarters ending September 30, 2001 and December 31, 2001 for all programs.

Mr. Gnemi asked why UESP Administration funds are invested in equities.

Mr. Norris replied the investment was made with funds temporarily in this Administrative fund, which were to be moved to the Endowment fund, but were not, due to a miscommunication. He said the equity fund balance in the Administrative fund will be either moved to the Endowment fund or converted at the most opportune time.

It was moved by Mr. Gnemi and seconded by Dr. Tarbox to adopt the recommendation that the Board approve the investment reports and attachments as presented. The motion carried unanimously.

The next item considered was UHEAA Board Report Two, Authorization for Continuation of LPP Lender Incentives.

Mr. Norris reviewed lender participation incentives and their proposed estimates to facilitate upcoming negotiations with lenders at the end of the calendar year.

Mr. Goddard asked who might be in a position to offer better incentives to lenders than UHEAA can.

Mr. Norris replied that secondary markets may compete to lure lenders away from UHEAA's program.

It was moved by Mr. Goddard and seconded by Ms. Barnes to adopt the recommendation that the Board approve the "Current Lender Premium Schedule Proposed for Continuation," as set forth on page 2 of the report, and of the \$10 per account transfer fee, to be effective for the period January 1, 2003 through December 31, 2005. The motion carried unanimously.

The next item considered was UHEAA Board Report Three, FY 2003 Tuition and Student Financial Aid Situation.

Mr. Norris discussed recent developments in tuition levels and student financial aid funding levels, together with information provided in connection with a recent Regents discussion group deliberation.

Ms. Barnes asked about tuition increases and how much the State is subsidizing education costs compared to other states.

Mr. Norris replied that in Utah, effort as a state is high with the State tax resources available. He added that Utah has a larger percentage of college students per capita, including traditional and non-traditional students. He said that per student funding by institution type (e.g., research university, regional university, community college) does not compare favorably to many other states

although overall the funding compares less unfavorably because Utah has a higher percentage of students in four-year institutions than many other states.

Ms. Barnes asked if there could be a push for the federal government to allot more Pell Grant money.

Mr. Norris replied that Pell Grant money will increase over the next few years, but the grant program has not kept pace with enrollment growth and higher cost of living.

Mr. Norris presented the Board with two newspaper stories regarding changes in student loans. The first article projected interest rates to fall to about 4% for most student loans. Mr. Norris explained that an interest rate that low could have significant impact on UHEAA's borrower benefits since, with the current interest rate deductions, a borrower qualifying for every available benefit could conceivably have an interest rate of under 2% for FY 2003.

The second article presented by Mr. Norris regarded a proposal from the Bush administration to make consolidation loans into variable rate loans to discourage borrowers from consolidating and thereby increasing federal revenue. The proposal estimates a \$1.3 billion savings for the federal government, which would then go into Pell Grants.

Mr. Norris called the Board's attention to Attachment 3, and noted that the UHEAA administration has been given the charge to make analyses and create an economic model based on the current financial aid situation.

At Ms. Barnes' request, Mr. Norris presented the following resolution based on the discussion of the tuition and student financial aid situation: "Resolved, that the UHEAA Board of Directors recognizes and is deeply concerned about the continuing and growing gap between students costs of attendance in Utah higher education and need-based financial aid available for students with substantial demonstrated need. While student loan borrowing in Utah is below many other states and national averages, the student loan balance carried by graduates can be a serious problem if not kept to manageable levels. The UHEAA Board therefore charges the Executive Director to continue to present to Utah's Congressional delegation the strong need to support and increase federal need-based aid programs. The UHEAA Board also supports recommendations to the State Board of Regents to continue to request state funds for UCOPE sufficient to avoid future deterioration in financial opportunity for students as tuition and fees are increased."

It was moved by Ms. Barnes and seconded by Ms. Flamm to adopt the resolution as presented. The motion carried unanimously.

The next item considered was UHEAA Board Report Four, UESP Exploration of Corporate Relationships.

Mr. Norris reviewed and discussed the growth and progress of the Utah Educational Savings Program Trust and consideration of additional investment options and possible exploration of new corporate relationships.

Mr. Stringham asked what the current total program investments are.

Dr. Hatch invited attention to UHEAA Board Report Five, Tab L, showing current investments as of March 31, 2002 at \$185.5 million.

Mr. Norris reviewed four proposed performance objectives for UESP's mission and goals in UHEAA Board Report Four, pages 6-7.

Mr. Grant said that he recalled a resistance to an expansion out of state and wondered why a large portion of investors are from outside Utah.

Mr. Norris explained that the savings plan is available to investors nationwide, but is not marketed outside of Utah. He attributed the growth of the program out of state to favorable reviews in nationwide investment publications and relatively low fees for participant accounts.

It was moved by Ms. Barnes and seconded by Mr. Grant to adopt the specific performance objectives for UESP as presented in UHEAA Board Report Four. The motion carried unanimously.

Chairman Hoggan reviewed the discussion questions at the end of the report regarding the marketing of UESP nationwide and asked the Board for comments.

Mr. Stringham said that the program was put in place to help the citizenry of Utah. He added that nationwide marketing may influence the efficiency of the program and its current success.

Mr. Goddard asked what UESP's liability is if an investor's return is not what they anticipated.

Mr. Norris replied that although litigation cannot be completely ruled out, strong disclaimers have been provided in rules and participation agreements limiting the program's liability in the performance of any account.

Ms. Barnes added that UESP's program seems to be attracting out-of-state investors without any marketing effort. She added that marketing efforts should be directed toward those for whom the program was initiated.

Mr. Gnemi added that nationwide expansion could change the complexion of the program and possibly lead into areas for which UESP is not prepared.

Dr. Hatch explained that most other states have now contracted with national finance entities and Utah's program is one of the few left that is run by the State. He added that contracting with a national entity does require relinquishing a large part of management control to the financial firm.

Chairman Hoggan added that increasing the marketing efforts would take attention away from the main purpose of the student aid organization of UHEAA, which is the student loan administration.

Mr. Grant said that he would support nationwide marketing in order to increase revenue.

Mr. Norris said that keeping UESP within the state of Utah creates a few Utah jobs rather than jobs in another state at a large financial company. He added that keeping marketing costs low has benefitted our investors by allowing UESP to minimize fees.

It was moved by Mr. Gnemi and seconded by Mr. Stringham that UESP not affiliate with any other entity and not market nationally. The motion carried unanimously.

A motion for adjournment was made by Ms. Sinclair. The meeting was adjourned at 1:05 p.m.

Secretary

Date

FOR ACTION

UHEAA BOARD OF DIRECTORS

**YEAR-END FUND DESIGNATIONS IN SHORT-TERM NOTE FUND
AND CONTINUATION OF UHEAA BORROWER BENEFITS**

REPORT #6

JUNE 20, 2002

INTRODUCTION

The Loan Purchase Program (LPP, or “Program”) Short Term Note Fund (STNF) is the LPP Fund which contains the Program’s unrestricted assets and liabilities.¹ Fund balances in the STNF are generally designated to underwrite student loan program borrower benefits (cost reductions), to provide liquidity for exceptional purchases when lenders make business decisions to sell loans to the secondary market while still in interim status,² and to provide reserves for major financing and operating contingencies. The contingency reserves help to support the unusually favorable credit rating position of LPP.

In Fiscal Year 2002, the Program is projected to provide borrower benefits (cost savings for borrowers) totaling about \$10 million. Of the total, \$3.6 million is expected to be in interest reductions, \$4.3 million in provided principal reductions (which contribute to additional interest savings), and about \$2.1 million applied to pay guarantee fees (insurance premiums) on behalf of borrowers.

This report provides further information on the financing of the borrower benefits and on current fund designations, and recommends Board action to extend the borrower benefits and determine fund designations at year-end Fiscal Year 2002.

¹The Program is an “Enterprise Fund” of the State of Utah.

²Student loans are considered in interim status while the student is in school or during the six-month grace period after graduating, leaving school, or dropping to less than half-time enrollment status.

SHORT TERM NOTE FUND BALANCES AND FUND DESIGNATIONS

Schedule II-A of the proposed LPP FY 2003 budget (in Board Report #7 of the agenda for this meeting) provides information regarding the Fund Balance in the Short Term Note Fund (STNF). As shown in Table II-A, the Projected FY 2002 year-end Fund Balance in the STNF is \$70,782,737, which is a reduction of \$449,328 from the beginning Fund Balance of \$71,232,065. Of the Projected FY 2002 year-end Fund Balance, \$68,787,000 is Designated and \$1,995,737 is Undesignated.

The FY 2002 LPP Budget was approved by the Board on June 26, 2001, with a fairly large Undesignated portion in the Projected FY 2001 STNF Fund Balance, pending receipt and action on a plan for year-end fund designation to be included in the FY 2001 audited financial statement. The Board met by conference call on July 11, 2001 and approved the additional fund designations, to cover proposed changes in the provisions for underwriting of borrower benefits and increases in other contingency provisions as well. The final audited financial statement for LPP incorporated the July 11 Board actions as well as a small final difference in the STNF year end Fund Balance.

The attached Exhibit A presents the final actual STNF year-end Fund Balance for FY 2001 [Column (1)]. The adopted FY 2002 Budget provided for a projected year-end STNF Fund Balance of \$72,207,217, and no changes in the Fund Designations from the original FY 2001 Budget, with the understanding the division between Designated and Undesignated amounts in the projected Fund Balance for FY 2002 also would be changed by any actions approved by the Board in its scheduled July meeting. The FY 2002 budget projected year-end STNF Fund Balance, as adjusted by the Board's July 11 action, is shown in Column (2) of Exhibit A.

Column (3) of Exhibit A shows the FY 2002 Projected year-end STNF Fund Balance as reflected in the proposed FY 2003 budget document presented in Board Report #7 presented for Board action at this meeting. There are two changes from the FY 2002 budget projection for the year-end Fund Balance. The first change is in the projected actual Fund Balance—a reduction of \$1,424,480 from the initial FY 2000 Budget projection. The second change is a reduction in just one of the budgeted designation amounts—the provision of the Guarantee Fee Benefit (which is described and explained later in this report). The Guarantee Fee Benefit is the only one of the borrower benefits which is paid from designated reserves.

All other benefits are paid (or reflected as revenue offsets) from the current operating budget net cash flows. The designated reserves for the other benefits are for the purpose of underwriting commitments to fund the benefits in the unlikely event that UHEAA's ongoing program operations or cash flows should become severely disrupted so that the current cash flows no longer would cover the costs of the current benefits. The provision of these underwriting reserves is an unusual action on UHEAA's part, providing support for a basis for full confidence on the part of borrowers that they will in fact receive the promised benefits if they qualify for them.

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In the case of the Guarantee Fee Benefit, the payment of the benefit from the reserve rather than current cash flows has the effect of reducing the projected balance in that provision, from the beginning amount of \$2,763,000 to a year-end balance of \$616,000, as shown in Column (3) of Exhibit A. This particular provision, then, needs to be replenished regularly.

Columns (4) and (5) show information that will be discussed later in this report.

REVIEW OF BORROWER BENEFITS AND FUND DESIGNATIONS.

Both the borrower benefit provisions and the Board designations of reserve funds are reviewed regularly, and recommendations for further actions developed as need (for reserves) and opportunity (for further borrower benefits) are identified. Opportunity for further borrower benefits is considered based on current fund balances, current operating margins, and anticipated possible changes in program parameters from Federal legislative or regulatory actions. The fund designations are separate and apart from arbitrage repayment or other contingency provisions built into current operating budgets. *Current economic conditions and program net revenues do not provide a basis for recommending further improvements this year in UHEAA's already exceptional program of borrower benefits.*

During FY 2002, all borrower benefits except the Guarantee Fee Benefit were covered directly from current operating revenues and without needing to utilize any of the designated reserves. This is in accordance with the budget plan, as the reserves are set aside to assure the program's ability to continue the benefits as promised, on all loans originated during the period the benefits are in effect, even in the event of significant reductions in operating revenues that might result from future changes in federal statutory provisions for the Federal Family Education Loan Program. The guarantee fee payments come before UHEAA owns the loans and have, therefore, been directly funded outside the Bond Funds.

CURRENT PROVISIONS AND PROPOSED CHANGES

Liquidity Reserve

\$30,000,000

The Board has established the Liquidity Reserve as a hedge against short-term puts by lenders, to provide ready capacity to buy loans in cases where for business reasons a lender may decide to sell a block of its loans prior to the normal sale time under its forward purchase agreement with UHEAA. In such a case, the Liquidity Reserve would be available to buy the loans pending action by the program to issue additional student loan revenue bonds on an accelerated basis. This has occurred only twice in twenty years. And on both occasions, the program had advance notice of the proposed accelerated sales sufficient to have entered the bond market for the additional capital had that been necessary. Continuing experience has demonstrated that the size of the Liquidity Reserve can be reduced well below its current level.

It is proposed, therefore, that the Liquidity Reserve be reduced by \$3,000,000, and that this amount be used, together with most of the projected year-end undesignated fund balance, to increase the Other Contingencies Reserve provision and several Borrower Incentive Program Reserves, as discussed below.

Collateral Reserve

\$ 8,081,000

The Collateral Reserve has been created to backstop existing debt service reserves in the Board's outstanding student loan revenue bonds, and for possible use in future bond issues if needed to obtain most favorable financing terms. A provision in a previous contract with Sallie Mae for a credit facility required periodic additions to this reserve and the Operating and Servicing Reserve in accordance with a formula. The Sallie Mae facility was replaced three years ago, and no such requirement now exists. However, the formula additions were continued through the first two months of FY 2001, and last year the Board approved using \$500,000 of a \$3,000,000 reduction in the Liquidity Reserve to increase the Collateral Reserve to its present amount of \$8,081,000. Because LPP is building outstanding reserve balances in both of its present Student Loan Revenue Bond Systems, and enjoys consistently high bond ratings, no further additions to the Collateral Reserve are considered necessary and none is recommended at this time.

Operating and Servicing Reserve

\$ 7,970,000

The Operating and Servicing Reserve has been created to provide for possible future net operating and servicing costs, in the plausible eventuality of a program wind-down. Proposals for major or even fundamental changes in the federally-backed student loan programs are made from time to time. Establishment of the Federal Direct Loan Program (FDLP) in 1993 is one dramatic example of such proposals. The new Clinton Administration and Congressional supporters initially intended the new program to replace totally the Federal Family Education Loan Program (FFELP) under which UHEAA operates its Student Loan Guarantee Program (LGP) and the State Board of Regents Loan Purchase Program (LPP), which presently originates consolidation loans and provides a secondary market for FFELP Stafford (student) and PLUS (parent) loans. That eventuality did not develop, although a material though declining percentage of the national federally-backed student loans currently are originated under FDLP. Other, more recent proposals might change materially the basis by which lender returns on the FFELP loans are determined, in ways that could de-stabilize lender and secondary market participation in FFELP. Presently no substantial support for such proposals seems to be visible in either Congress or the Administration.

This reserve provides funding for the extra expenses that would be involved in continuing and winding down the current LGP and LPP programs should worst-case changes in the programs curtail or eliminate new volume in the future. Last year, the Board approved using \$500,000 from its \$3,000,000 reduction in the Liquidity Reserve to increase the Operating and Servicing Reserve to its present amount of \$7,970,000. No further increase is recommended at this time.

Reserve for Other Contingencies

\$ 3,000,000

The general contingency reserve provides a capacity for UHEAA to respond to unforeseen emergencies or opportunities without disturbing the long-range contingency provisions for collateral and for operating and servicing expenses, or the reserves to underwrite ongoing borrower benefit commitments. **It is recommended that an additional \$500,000 be added to this reserve, bringing it to a new total of \$3,500,000.** One potential very cost-effective use of this flexible reserve might be adding to the Board's condominium interest in its newly-occupied office building, especially should additional space be needed to accommodate growth in UHEAA's loan servicing operations. In addition, ownership of the space currently leased on the second floor of the building could provide material reductions in operating costs compared to lease costs.

Borrower Incentive Program Reserves

\$19,736,000

The Board of Directors previously approved borrower benefits which include the Guarantee Fee Benefit, Origination Fee Credit Benefit, Automatic Payment Benefit, Origination Fee Benefit (for loans originated before May 1, 2000), PLUS Loan Initial Year Interest Benefit, Stafford/PLUS Loan Interest Rate Reduction, and Consolidation Loan Interest Rate Reduction. Total reserves designated for the several different benefit provisions at year-end FY 2001, for FY 2002, were \$21,883,000. As explained above, payment of the Guarantee Fee Benefit directly from the reserve account has depleted the balance in the provision for that purpose, reducing the projected year-end balance for the combined total of the benefit programs to \$19,736,000.

These borrower benefits are based on two value principles: (1) incentives for borrowers to repay their loans on time benefit the Utah Student Loan Programs (USLP) by simplifying servicing requirements and by encouraging lower default and claims rates; and (2) *within limits of reasonable prudence, the Loan Purchase Program should use available net cash flows to provide best possible terms to its borrowers, since the program exists as a public service activity to facilitate financial access to postsecondary education.* An additional consideration is that the borrower benefits help UHEAA keep sufficient FFELP loan volume to maintain cost-effective operations.

1. Guarantee Fee Benefit. *LPP pays the one percent guarantee fee (insurance premium) for borrowers of UHEAA-guaranteed Stafford and PLUS loans³ from lenders having forward purchase agreements to sell the loans to LPP as they enter repayment. This benefit is paid directly from the reserve fund designated for this purpose in the Short Term Note Fund.*

³Loans guaranteed by UHEAA's Student Loan Guarantee Program (LGP).

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The cash outlay for this benefit in FY 2002 is projected to be \$2.1 million, reducing the remaining reserve for the benefit to \$616,000 at year-end, as shown in column (3), line 5, of Exhibit A. Because of delayed recognition of this expenditure (required by program auditors), the amount expensed in the current year of the cash outlay is different from the cash outlay amount. For FY 2002, the projected expensed recognition of these outlays, as reflected in the budget document (and subject to minor variance in the final audited financial statement) is \$1,053,000. A FY 2002 cash outlay of \$2.2 million is projected. **It is proposed to add \$2,384,000 to the \$616,000 FY 2002 year-end balance in the designation for this benefit.** This provision will comfortably fund the benefit for all loans guaranteed during FY 2003, providing a year-end balance in the account about equal to that at year-end 2002.

2. Origination Fee Credit Benefit. *For Stafford and PLUS loans guaranteed by UHEAA between May 1, 2000, and June 30, 2002, and sold to the Program after June 30, 2001 (as they enter repayment), LPP will credit to the borrower's account as of the date of purchase a principal reduction equal to the entire three percent origination fee the lender deducted from disbursement proceeds and remitted to the Secretary of Education. The benefit will be provided for all loans guaranteed during the specified period, regardless of how many years may elapse before the borrower leaves school and the loan enters the grace period before beginning repayment.*

Borrower principal reductions for this benefit during FY 2002 now are projected at about \$4,300,000. This will be covered easily from the budgeted net operating revenues for FY 2002. (Costs of all current benefits are estimated in the budget already.)

However, by managing the assignments of loans earning borrower benefits to specific bond series in which potential purpose arbitrage liabilities have been accumulated and arbitrage liability provisions established, program executives hope to reduce the future arbitrage liabilities rather than current operating results. In either event, the current \$8.850 million designated reserve for this benefit will remain untouched and available as a hedge against possible future need to phase out the benefit in the event of negative future statutory changes. **It is proposed that the Board authorize continuation of the Origination Fee Credit Benefit at the full 3% origination fee amount for another year, to cover loans originated from May 1, 2000 through June 30, 2003, and purchased after June 30, 2001. An increase of \$1,150,000 is recommended to increase the designated underwriting reserve for this benefit to \$10,000,000.**

3. Automatic Payment Benefit. *For all FFELP loans owned by the Program, LPP provides a full 1.25 percentage point interest rate reduction for loans covered by a direct withdrawal arrangement with the servicer, whereby loan payment amounts are automatically withdrawn from the borrower's checking or savings account. It is proposed to continue this benefit through FY 2003, and to increase the designated reserve amount by \$300,000, to \$5,000,000.*

4. Origination Fee Benefit. *For its in-repayment Stafford and PLUS loans guaranteed by UHEAA prior to May 1, 2000, and first disbursed on or after January 1, 1995, and on which the borrower makes the first 24 monthly payments within fifteen days of the due date, LPP provides a credit (reduction of principal) for the amount of origination fees in excess of \$240 that were paid on the borrower's loan account.⁴ (This benefit does not apply to loans guaranteed on or after May 1, 2000, since those loans automatically qualify for the much more generous benefit described in #2, above.) It is proposed to continue this benefit unchanged through FY 2003, keeping the designated reserve amount unchanged at \$670,000.*

5. PLUS Loan Initial Year Interest Benefit. *For PLUS Loans first disbursed between July 1, 1999 and June 30, 2002, and sold to the Program within 12 months of being fully disbursed, LPP will, 12 months after the loan is fully disbursed, credit the borrower's account with a principal reduction equal to the amount of interest the borrower paid during the first 12 months of repayment, or refund that amount to the borrower, at the borrower's option. It is proposed to continue this benefit unchanged through FY 2003, keeping the designated reserve amount unchanged at \$1,000,000.*

6. Stafford and PLUS Loan Interest Rate Reduction. *For its in-repayment Stafford and PLUS loans first disbursed on or after January 1, 1993, and on which the borrower makes the first 48 monthly payments within 15 days of the due date, LPP provides a two percentage point interest rate reduction after the 48th on-time payment. This reduction is available in addition to the 1.25 percentage point reduction described in #3, above. It is proposed to continue this benefit through FY 2003, and to increase the designated reserve amount by \$400,000, to \$3,000,000.*

⁴UHEAA's rules, unlike those of other lenders and secondary markets with a similar benefit, permit the borrower to be late up to an additional 15 days for up to but not exceeding three times, without losing eligibility for the benefit. This applies to the Origination Fee Benefit, Stafford/PLUS Loan Interest Rate Reduction, and Consolidation Loan Interest Rate Reduction.

7. Consolidation Loan Interest Rate Reduction. *For its Consolidation Loans first disbursed on or after January 1, 1993, and on which the borrower makes the first 48 monthly payments within 15 days of the due date, LPP provides a one percentage point interest rate reduction after the 48th on-time payment. This reduction is available in addition to the 1.25 percentage point reduction described in #3, above. (If a borrower consolidates Stafford or PLUS loans that had qualified for interest rate reductions, the previous reductions do not carry forward into the consolidation loan.)* **It is proposed to continue this benefit unchanged for FY 2003, and to increase the designated reserve amount by \$200,000, to \$1,500,000.** With the all-time low statutory interest rates for Stafford Student Loans during Fiscal Year 2003, a significant number of Stafford borrowers are expected to combine their outstanding loans in new Consolidation Loans in order to lock in the currently low interest rates. These long-term fixed low-rate loans will be expensive for LPP. It is nevertheless recommended that current benefits applicable to Consolidation Loans [Benefits #3 and #7] be retained for FY 2003. Program executives will monitor developments and if developing conditions indicate a need to “cut losses” may recommend adjustment or discontinuance of the applicable benefits for loans originated after June 30, 2003. For the present, the lower interest rates represent an opportunity for Utah borrowers to achieve low borrowing costs that is consistent with the public service philosophy of UHEAA and should be encouraged unless longer term developments prove to exceed UHEAA’s ability to continue to support them.

PROPOSED SHORT-TERM NOTE FUND DESIGNATIONS FOR YEAR-END FY 2001

The proposed reserve fund designations for year-end Fiscal Year 2002 are summarized in column (4) of Exhibit A. Approval of the recommended fund designations will leave a projected undesignated remainder of \$61,737 in the Short Term Note Fund at year-end FY 2002.

Designated reserves and undesignated balances at year-end in the Short-Term Note Fund have been and are projected to be as follows--

FY 1995 Actual	Designated \$50,934,000	Undesignated \$3.6 million
FY 1996 Actual	Designated \$54,467,000	Undesignated \$3.9 million
FY 1997 Actual	Designated \$60,670,000	Undesignated \$1.4 million
FY 1998 Actual	Designated \$63,888,000	Undesignated \$2.6 million
FY 1999 Actual	Designated \$65,185,000	Undesignated \$3.1 million
FY 2000 Actual	Designated \$69,082,000	Undesignated \$0.5 million
FY 2001 Actual	Designated \$70,934,000	Undesignated \$0.3 million
FY 2002 Projected	Designated \$70,721,000	Undesignated \$0.06 million

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No material undesignated fund balance is needed for working capital, because the major portion of the designated reserves is for longer-term contingencies and remains available for current cash flow needs.

Approval of the recommended actions will be consistent with long-standing UHEAA Board practice of making prudent provisions for contingent developments in Student Loan program policies or the economy and of providing lower student loan borrower costs within the limits of prudent fiscal management.

RECOMMENDATION

The Executive Director recommends Board of Directors approval of : (1) the proposed FY 2002 year-end reserve fund designations in the Short Term Note Fund, totaling \$70,721,000, as set forth in column (4) of the attached Exhibit A; and (2) continuation of all current borrower benefits to cover all loans guaranteed by UHEAA and originated during FY 2003 regardless of when the loans enter repayment and are purchased by LPP.

Attachment: Exhibit A

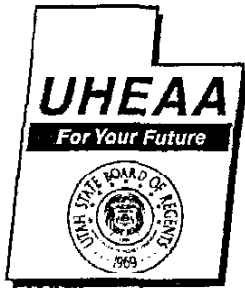
CGN/DS

Short-Term Note Fund--Fund Balances at Fiscal Year End, Preliminary and After Proposed Board Actions

	FY 2001 Final Statement After July 2001 Designations and FY 2001 Fnd Balance (1)	FY 2002 Budget Approved 6-26-01 With Designations Approved on 7-11-01 (2)	FY 2002 Projected Prior to Currently Recommended Designations (3)	FY 2002 Projected If Currently Recommended Designations Are Approved (4)	FY 2002 Recommended Changes From Preliminary Year-End [Col (3)-Col (2)] (5)
1. Liquidity Reserve	<u>\$30,000,000</u>	<u>\$30,000,000</u>	<u>\$30,000,000</u>	<u>\$27,000,000</u>	<u>-\$3,000,000</u>
2. Collateral Reserve	<u>\$8,081,000</u>	<u>\$8,081,000</u>	<u>\$8,081,000</u>	<u>\$8,081,000</u>	<u>\$0</u>
3. Operating and Servicing Reserve	<u>\$7,970,000</u>	<u>\$7,970,000</u>	<u>\$7,970,000</u>	<u>\$7,970,000</u>	<u>\$0</u>
4. Other Contingencies/Building Reserve	<u>\$3,000,000</u>	<u>\$3,000,000</u>	<u>\$3,000,000</u>	<u>\$3,500,000</u>	<u>\$500,000</u>
5. Borrower Incentive Program Reserves	<u>\$21,883,000</u>	<u>\$21,883,000</u>	<u>\$19,736,000</u>	<u>\$24,170,000</u>	<u>\$4,434,000</u>
Guarantee Fee Benefit	\$2,763,000	\$2,763,000	\$616,000	\$3,000,000	\$2,384,000
Origination Fee Credit Benefit	\$8,850,000	\$8,850,000	\$8,850,000	\$10,000,000	\$1,150,000
Automatic Payment Benefit	\$4,700,000	\$4,700,000	\$4,700,000	\$5,000,000	\$300,000
Origination Fee Benefit (Pre-May 2000 Loans	\$670,000	\$670,000	\$670,000	\$670,000	\$0
PLUS Loan Initial Year Interest Benefit	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$0
Stafford/PLUS Loan Interest Rate Reduction	\$2,600,000	\$2,600,000	\$2,600,000	\$3,000,000	\$400,000
Consolidation Loan Interest Rate Reduction	\$1,300,000	\$1,300,000	\$1,300,000	\$1,500,000	\$200,000
6. TOTAL DESIGNATIONS	<u>\$70,934,000</u>	<u>\$70,934,000</u>	<u>\$68,787,000</u>	<u>\$70,721,000</u>	<u>\$1,934,000</u>
7. UNDESIGNATED	<u>\$298,065</u>	<u>\$1,273,217</u>	<u>\$1,995,737</u>	<u>\$61,737</u>	<u>-\$1,934,000</u>
8. TOTAL FUND BALANCE	<u>\$71,232,065</u>	<u>\$72,207,217</u>	<u>\$70,782,737</u>	<u>\$70,782,737</u>	<u>\$0</u>

NOTES:

1. The Final FY 2002 Fund Balance after completion of year-end accounting and the audited financial statement almost certainly will be slightly different from the FY 2002 Projected as shown in Columns (2), (3), and (4). Assuming this is the case, the Total Designations in the audited financial statement will not change. The difference will be reflected by a change in the Undesignated amount.
2. After allowing for cash outlays from the Guarantee Fee Benefit reserve, the Budget 2003 projected year-end fund balances in the STNF will be \$68,351,000 Designated and \$2,117,576 Designated.



Utah Higher Education Assistance Authority

Utah Student Loan Guarantee Program (LGP)
 Utah State Board of Regents Loan Purchase Program (LPP)
 Utah Centennial Opportunity Program For Education (UCOPE)
 Utah Educational Savings Plan Trust (UESP)

May 30, 2002

Contact: Scott Brown at 801-321-7215 for more information

Student Loan Interest Rates At All-Time Low

Utahns understand the value of investing in education. Now, students and parents who have borrowed or who are planning to borrow money as part of their education investment can expect a big break in their education costs later this summer. Rates on Federal Stafford and Federal PLUS loans are reset every year on July 1 based on a formula that follows the 91-day Treasury bill. Stafford loans issued after July 1, 1998 that currently carry a 5.99 percent interest rate will automatically have the interest rate reduced to 4.06 percent, sharply below the 8.19 percent rate of just two years ago. Students still attending school who are accruing interest charges until graduating will see their interest rates drop to 3.46 percent, down from the current 5.39 percent. Parents who have taken out loans since July 1, 1998 to help pay for their children's higher education will see their PLUS loan rate drop from 6.79 percent to 4.86 percent.

With the costs of higher education going up, more students and parents are turning to loans to help finance college. According to Chalmers Gail Norris, Executive Director of the Utah Higher Education Assistance Authority (UHEAA), families should consider student loans part of the investment in the student's future. "Students who choose wisely in the amount of money they must borrow for college are investing in their future." Norris stressed the need for students to consider their ability to repay their loans once they finish school and enter the job market. However, Norris also noted that students should take advantage of the benefits of higher education because "with historically low interest rates available this summer, there has never been a more advantageous time to borrow for college."

In addition to the low rates this summer, UHEAA offers further breaks to Utah students and families in the following ways: (1) paying the one percent guarantee fee, or insurance premium, for the borrower; (2) reducing the principal of the loans entering repayment when purchased by UHEAA's secondary market, by the amount of the 3 percent origination fee the borrower paid to the federal government; (3) reducing the interest rate a further 1.25 percentage points for borrowers who setup automatic monthly payments from bank accounts (about one out of five current borrowers); and (4) reducing Stafford and PLUS loan interest rates an additional two percentage points if the loan borrower makes the first 48 monthly payments on-time (about one out of ten current borrowers). Savings to UHEAA's borrowers in the current fiscal year are projected to be \$8 million.

A borrower who has a Stafford loan with the new rate of 4.06 percent and who qualifies for all of UHEAA's borrower benefits could have an amazingly low net student loan interest rate of .81 percent during the 2003 academic year (July 1, 2002 through June 30, 2003).

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UHEAA is a subsidiary of the Utah State Board of Regents and administers Utah's student financial aid programs, including the student loan guarantee program and secondary market, state need-based financial aid, the Utah Educational Savings Plan Trust, and the Utah Engineering and Computer Sciences Loan Forgiveness Program

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MEMORANDUM

September 4, 2002

TO: State Board of Regents
FROM: Cecelia H. Foxley
SUBJECT: USHE – Information Technology Update

Issue

The Regents will recall receiving a report in November 2001 from the Arthur Anderson consulting firm addressing administrative computing systems in the USHE. Anderson recommended immediate action to update systems in seven institutions, but the recommendation for a centralized new structure was cost prohibitive. Since November, USHE institutions have been working together to find lower cost solutions for updating their administrative systems.

Background

Two USHE institutions, the University of Utah and Salt Lake Community College, have migrated from static "legacy" administrative systems to new web-based systems. The University of Utah selected PeopleSoft and Salt Lake Community College selected SCT Banner. The remaining seven institutions considered several factors as they reviewed available options.

- The need for a migration to enterprise software was becoming increasingly acute. The inefficiencies of the existing systems were a serious hindrance to accurate and timely financial and student reporting.
- Since all seven institutions were using the same legacy product, the institutions could migrate with the same vendor within the context of an existing USHE contract relationship.
- The downturn in the technology sector created a buyer's market. USHE is able to negotiate extreme discounts from Sun, Oracle, and SCT.
- SCT Banner remains one of the two most often selected enterprise solutions in higher education. The latest Banner release is fully web-enabled.

State Board of Regents
September 4, 2002

After careful review, the remaining seven institutions decided that since they were already using an SCT legacy product, the lowest cost solution for the seven was to migrate to the SCT next generation product called Banner. This migration will put eight of nine USHE institutions on the same administrative software. In addition, under the direction of Jerry Fullmer, Director of Information Technology on the Commissioner's Staff, all nine institutions have aggressively negotiated contracts for the same hardware platform, Sun, and the same database, Oracle.

The seven institutions have formed working groups to coordinate their migration efforts. Over the next three years, they will migrate the following modules in this order: Finance, Human Resources, Financial Aid, and Student Information Services. We expect this coordination to yield efficiencies and standardization which will serve the system well in the future. Again, aggressive negotiating as a system has made it possible for institutions to initiate the migration by redirecting existing technology funds. However, we will be asking the Regents to include in their FY 2004 budget request a modest amount of both on-going and one-time funds to assist with the migration.

Commissioner's staff members are working with UCAT to determine how to convert existing data structures to a USHE standard. It may well be that when UCAT data are standardized and compatible with USHE data, a modest SCT Banner ADP solution could also be implemented for UCAT.

Recommendation

No action is needed. This is an information item only.

Cecelia H. Foxley, Commissioner

CHF/MHS/JHF

MEMORANDUM

September 4, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: Olympic Legacy Park at University of Utah Rice Eccles Stadium

Issue

It is the desire of the Salt Lake Organizing Committee (SLOC) to locate at the University's Rice Eccles Stadium a park which will commemorate the 2002 Winter Games. Within this park will be located the Cauldron, which was a landmark structure of the Games. The park will be located in the plaza area south of the stadium bordering on 500 South Street.

Background

A general description of the proposed park is contained in the attached materials. The project will be financed by the SLOC, including an endowment to fund ongoing maintenance. Proposed costs for construction have not been released in detail, but are estimated to be approximately \$6 million. University officials have carefully reviewed and given preliminary approval to existing concept plans, and will continue to work closely with representatives of SLOC as project negotiations proceed.

As this project will not result in any new enclosed space, it does not require formal approval. But because of the public importance of the park, and because it will be housed on state property, it is being presented as information to the University of Utah Board of Trustees, the State Building Board, and the Board of Regents.

Recommendation

No action is needed. This is an information item only.

CHF/MHS
Attachments

Cecelia H. Foxley, Commissioner

MEMORANDUM

August 21, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: Action: Consent Calendar, Finance and Facilities Committee

It is the recommendation of the Commissioner that the Regents approve the following items on the Finance and Facilities Committee Consent Calendar:

1. **OCHE Monthly Investment Report (Attachment A).** Board Policy R541, Management and Reporting of Institutional Investments, requires the Finance and Facilities Committee of the Regents to review and approve the investment report of the Office of the Commissioner on a regular basis. All operating funds of the Office of the Commissioner are invested with the University of Utah Cash Management Pool. The investment report for July 1, 2002 for the Office of the Commissioner is attached.
2. **UofU and USU Capital Facilities Delegation Reports (Attachment B).** 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.
3. **USU Property to Be Liquidated (Attachment C).** As stated in the attached letter from Vice President Fred R. Hunsaker, Utah State University would like to sell approximately 10 acres of vacant land to Nibley City on the east side of 4550 Nibley Hollow Road. Nibley City wants to develop the property into a public park. The request is compatible with USU's needs. USU will receive \$105,000, the fair market value of the land. Utah State University Board of Trustees approved the sale on August 16, 2002. The University seeks Regents' approval to sell this property.
4. **USU and City of Logan Property Transfer (Attachment D).** As stated in the attached letter from Vice President Fred R. Hunsaker, USU would like to transfer a parcel of land located east of the Logan Golf and Country Club and north of the University's culinary reservoir to the City of Logan for a new culinary reservoir. In exchange, the City of Logan will transfer sufficient property in the area where First Dam is located which USU currently manages. USU will assign the City certain real estate purchase rights to provide for expansion of existing utilities. The City and USU will cooperate in enhancing and increasing emergency connections. Utah State University Board of

Trustees approved the property transfers on August 16, 2002. The University seeks Regents' approval to transfer these properties.

5. **Salt Lake Community College – Property Purchase and Exchange (Attachment E).** Salt Lake Community College is requesting Board of Regents' approval for the proposed purchase of a building located at 4306 South State owned by Wells Fargo Bank. This building will be traded in a simultaneous closing for two buildings owned by Towler Investment Company which are located at the corner of 1700 South and State Street. Since South High School was purchased in 1987, the College has been attempting to negotiate the purchase of three buildings so that the entire corner of 17th South and State would be under College ownership. One building, State Trailer Supply, was purchased in 1993. This proposed purchase and trade will permit the acquisition of the remaining two buildings. The total cost of this purchase and trade is \$550,000, which is the appraised value of the property, plus closing costs.
6. **Salt Lake Community College – Airport Hangar Lease (Attachment F).** Salt Lake Community College is requesting Board of Regents' approval for the proposed lease of hangar space located at the Salt Lake International Airport for use by the College's Flight Training Program. The College will rent approximately 9,400 square feet of hangar space plus two office/storage areas and 12 tie-down spaces from the Jet Center, Inc. The monthly lease cost of \$6,000 will be paid from revenues generated when students rent one of thirteen College planes for practice flights. This is a two-year lease which includes most standard items, such as utilities, except for cleaning. As part of the lease agreement, the College agrees to buy fuel from the Jet Center. This fuel purchase option permits the Jet Center to increase the volume of its fuel sales and thereby offer competitive fuel rates to SLCC and other entities at this location.
7. **Southern Utah University – Sale of Property to UDOT (Attachment G).** Southern Utah University requests Board of Regents' approval to sell a portion of its Valley Farm property to accommodate UDOT's intention to move utilities and widen State Highway 56. UDOT needs small pieces of various parcels of land totaling five acres. The proposed sale price is approximately \$108,000, of which \$61,500 is the cost of relocating a well on the farm property. (Background information on the proposed sale of SUU land to UDOT will be hand-delivered at the Board meeting.)

Cecilia A. Forley

CHF/NCT/JV
Attachments

September 4, 2002

TO: State Board of Regents
FROM: Cecelia H. Foxley
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. Approval of the Minutes of the Regular Meeting of the Utah State Board of Regents held July 12, 2002, at Southern Utah University in Cedar City, Utah (Attachment 1)
- B. Approval of the Minutes of the Special Meeting of the Utah State Board of Regents held August 28, 2002, at Utah State University in Logan, Utah and by teleconference (Attachment 2)

2. Grant Proposals - Approval to submit the following proposals:

- A. University of Utah – Public Health Service; “Behavioral Preparation for Treating Fibromyalgia;” \$2,971,310. Akiko Okifuki, Principal Investigator.
- B. University of Utah – Misc Private/Boehringer Ingelheim Pharmaceuticals; “Phase II...Safety of Oral 25 Mg, 50 Mg, 75 Mg Op-6535 & Placebo in the Treatment of Patients with Chronic Obstructive Pulmonary Disease;” \$2,165,234. Richard E. Kanner, Principal Investigator.
- C. University of Utah – Public Health Service/National Eye Institute; “Membrane Properties of Retinal Neurons;” \$2,958,750. Eric M. Lasater, Principal Investigator.
- D. University of Utah – Public Health Service; “Synaptic Function in the Nematode C. Elegans;” \$2,515,949. Erik M. Jorgensen, Principal Investigator.
- E. University of Utah – Public Health Service; “Studies of Isoprenoid Biosynthesis;” \$2,263,674. C. Dale Poulter, Principal Investigator.
- F. Utah State University – U.S. Air Force; “XSS-11 Microsatellite;” \$26,972,921. Steve Hansen, Principal Investigator.

- G. Utah State University – Department of Health & Human Services; “Slow Inactivation of Sodium Channels;” \$1,884,241. Peter C. Ruben, Principal Investigator.
- H. Utah State University – Department of Health & Human Services; “The Phillipines Oral Cleft Prevention Trial;” \$11,500,258. Ronald G. Munger, Principal Investigator.
- I. Utah State University – Lockheed Missiles and Space Company, Inc.; “Additional Screener Processor Element Units;” \$2,506,131.63. Niel S. Holt, Principal Investigator.
- J. Utah State University – Department of Health & Human Services; “Mechanistic Studies on CO₂-Dependent Map from E. Coli;” \$1,449,000. Richard C. Holz, Principal Investigator.
- K. Utah State University – National Aeronautics & Space Administration; “Far-Infrared Spectroscopy of the Troposphere (First IIP);” \$1,000,000. Gail Bingham, Principal Investigator.
- L. Utah State University – Johns Hopkins University; “Infrared Seeker - Space Calibration and Test (ISSCAT) Facility;” \$5,755,085. Vern Alan Thurgood, Principal Investigator.
- M. Utah State University – Department of Health & Human Services; “Taste Transduction and its Regulation;” \$1,386,380. Timothy A. Gilbertson, Principal Investigator.
- N. Utah State University – Government of Peru; “PSI II-Peru;” \$4,595,418. Wynn R. Walker, Principal Investigator.
- O. Utah State University – National Institutes of Health; “Mechanistic Studies on Methionyl Aminopeptidases;” \$1,449,000. Richard C. Holz, Principal Investigator.
- P. Utah State University – Naval Research Laboratory; “Response to Time Critical Sensor Image/Data Processing Task;” \$1,998,934. Niel Holt, Principal Investigator.
- Q. Utah State University – Naval Research Laboratory; “Time Critical Sensor Image/Data Processing Task Order #3;” \$1,196,039. Niel Holt, Principal Investigator.
- R. Utah Valley State College – Department of Education; “TRIO Talent Search;” \$1,163,505.
- S. Utah Valley State College – National Science Foundation; “NSF Regional Center for People with Disabilities for involvement in Science, Math, Engineering, & Technology Majors;” \$4,000,000.
- T. Utah Valley State College – National Science Foundation; “NSF Math and Science Partnership - State Office of Education;” \$750,000.

3. Proposed Revisions to Policy R203, Search Committee Appointment and Function, and Regents' Selection of Presidents of Institutions. It is proposed that § 3.3, "Chair Appoints Search Committee" be revised to state ". . . Additionally, not less than ~~[five]~~ three Regents shall be appointed to all search committees." This makes policy consistent with current practice. (Attachment 3)
4. Proposed Revisions to Policy R922, Personal Conduct. It is proposed that §3.3 be revised to add the following language: "It is important that staff members treat each other with courtesy and respect. Taunting, verbal harassment, or any actions that might create an intimidating, hostile, or offensive environment in the workplace are not permitted. (See also Policy R952 regarding discrimination and sexual harassment.) Personnel have the responsibility to assist other staff in their growth and development and should be willing to share their knowledge and expertise. A willingness to assist other staff when needed to complete necessary work of the Commissioner's Office is expected." (Attachment 4)
5. Proposed Revisions to Policy R928, Leaves of Absence with Payment. It is proposed that § 3.4, Use of Sick Leave, be revised as follows: ". . . Sick leave may not be used for vacation purposes, but after all accrued sick leave has been exhausted, additional absences due to illness ~~[will]~~ may be charged to earned vacation time, until exhausted, ~~[unless]~~ if approved by the cognizant [Deputy or] Associate Commissioner. [approves a specific request in writing from the employee that earned vacation time not be used for this purpose]. . . ." (Attachment 5)
6. 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 November 8, 2002, at Snow College to consider property transactions, personnel issues, litigation, and such other matters permitted by the Utah Open and Public Meetings Act.

Cecelia H. Foxley, Commissioner

MINUTES
MEETING OF THE STATE BOARD OF REGENTS
SOUTHERN UTAH UNIVERSITY
July 12, 2002

Regents Present

Nolan E. Karras, Chair
Pamela J. Atkinson, Vice Chair
Jerry C. Atkin
Linnea S. Barney
Daryl C. Barrett
Khay Douangdara
David J. Grant
L. Brent Hoggan
Michael R. Jensen
Charles E. Johnson
Jed H. Pitcher
Sara V. Sinclair
Marlon O. Snow
Maria Sweeten

Regents Excused

Kim R. Burningham
James S. Jardine
David J. Jordan
E. George Mantes

Office of the Commissioner

Cecelia H. Foxley, Commissioner
David Buhler, Associate Commissioner for Public Affairs
Chalmers Gail Norris, Associate Commissioner for Student Financial Aid
Mark H. Spencer, Associate Commissioner for Finance and Facilities
Deanna D. Winn, Associate Commissioner for Academic Affairs
Philip V. Bernal, Manager of Outreach Services
Joyce Cottrell, Executive Secretary
Harden R. Eyring, Executive Assistant
Linda Fife, Assistant Commissioner for Programs
Brad Mortensen, Assistant Commissioner for Finance and Facilities
Phyllis C. Safman, Assistant Commissioner for Academic Affairs
Gary S. Wixom, Assistant Commissioner for Applied Technology Education and Extended Programs

INSTITUTIONAL REPRESENTATIVES

University of Utah

J. Bernard Machen, President
Paul T. Brinkman, Associate Vice President for Budget and Planning
Nancy S. Lyon, Assistant Vice President for Governmental Affairs
Laura Snow, Special Assistant to the President and Secretary to the University

Utah State University

Kermit L. Hall, President
Celestial Starr Bybee, Student Body President

Weber State University

Paul H. Thompson, President
Norman C. Tarbox, Jr., Vice President for Administrative Services

Southern Utah University

Steven D. Bennion, President
Renee C. Ballenger, Director of News Services
David T. McGuire, Director of Human Resources
Lucinda B. Mitchell, Assistant Director of Human Resources
Dean O'Driscoll, Director of Marketing & Public Relations and Assistant to the President
Dorian G. Page, Associate Vice President for Administrative and Financial Services
Gregory L. Stauffer, Vice President for Administrative and Financial Services
Matt Glazier, Student Body President

Snow College

Michael T. Benson, President

Dixie State College

Robert C. Huddleston, President
Shandon D. Gubler, Member, Board of Trustees
Ben Joe Markland, Student Body President

College of Eastern Utah

Ryan L. Thomas, President

Utah Valley State College

Kerry D. Romesburg, President
Ryan Vogel, Student Body President

Salt Lake Community College

H. Lynn Cundiff, President

Utah College of Applied Technology

Gregory G. Fitch, President

Representatives of the Media

Brandy Lee, *Weber State University Signpost*
Kirsten Stewart, *Salt Lake Tribune*
Twila Van Leer, *Deseret News*

Others

DeMar "Bud" Bowman, Utah House of Representatives
Boyd Garriott, Office of the Legislative Fiscal Analyst
Kristen Small, Brigham Young University (Utah Student Association)
Kevin Walthers, Office of the Legislative Fiscal Analyst

Following a breakfast meeting with the SUU Board of Trustees, Chair Karras called the meeting of the Committee of the Whole to order at 9:12 a.m. and welcomed everyone to the Southern Utah University Campus. He excused Regents Burningham, Jardine, Jordan and Mantes.

Update on Legislative Special Sessions

Chair Karras referred to the material in Tab A and said System officials had originally feared an additional cut of 1.6 percent. However, on the Saturday preceding the Special Legislative Session, Governor Leavitt said there would be no more cuts to education. A compromise was reached between the Governor and Majority Leadership so that higher education ended up with a .56 percent cut. The College of Eastern Utah was held harmless and was asked to pay a corresponding amount toward their deficit. The tuition waivers issue was delayed. Chair Karras explained that "the hole had been plugged" with one-time money. He advised the Presidents to "batten down the hatches" for the problem with the economy is not over. He expressed the System's appreciation to the Governor and Legislature for their help in keeping the cuts to education as low as possible.

Commissioner Foxley referred to Replacement Tab A in the Regents' folders. The information in that replacement tab was presented to the Higher Education Appropriations Subcommittee co-chairs. With the cut going into this year, the unfunded enrollment growth, and the new cuts, we are still facing a challenge. The proper balance must be determined between the students' share of the cost of their education and the state's share. She noted that most other states are facing similar challenges.

Southern Utah University – Campus Master Plan

Vice President Stauffer presented SUU's Campus Master Plan. He reminded the Regents that an extensive revision had been presented to the Board when they were last on the SUU Campus. No changes have been made since that time. Vice President Stauffer expressed the appreciation of the entire SUU community for the beautiful campus which provides a stimulating learning environment for the students. Future plans are to keep the academic buildings close together, with the parking on the perimeter of the campus. He offered to respond to questions. **Regent Barrett moved approval of Southern Utah University's Campus Master Plan. The motion was seconded by Vice Chair Atkinson and carried unanimously.**

President Bennion expressed his delight to have the Regents in Cedar City. He said SUU's new Provost, Abe Harraf, would be arriving on campus the following week. The University has also promoted two existing administrators to vice presidencies: Georgia Beth Thompson is Vice President for Student Services, and D. Mark Barton is Vice President for Advancement.

Amendments to Policy R851, *Guidelines for Retirement Programs*

Harden Eyring thanked Richard Hill, University Counsel at Weber State University, for working with TIAA-Cref and the Internal Revenue Service on the retirement issue. In consultation with these and other experts, Mr. Eyring learned that there is no legal requirement for a 55-year age limit; it is merely a guideline in Regent policy. A suggestion was made to remove that limitation. Since there is no good reason for retaining the age limit, the proposed amendments to policy R851 removed that guideline. Mr. Eyring pointed out that the IRS still restricts individuals who have not terminated their employment to be at least 59½ years old in order to opt for cashability. Clarification of this restriction was included in the proposed amendments to the policy. **Regent Atkin moved approval of the proposed amendments to policy R851. The motion was seconded by Regent Sinclair. Mr. Eyring said one institution had suggested substituting “withdrawal” for “cashability” in the policy. He asked that this change be included in the motion. Regents Atkin and Sinclair agreed, and the motion carried unanimously.**

Amendments to Policy R512, *Determination of Resident Status*

Commissioner Foxley said the Legislature had made no change to move the date of implementation (May 6) to “grandfather” those students already in the System who are working toward the establishment of residency for tuition purposes. Harden Eyring has been working with the residency officers at the institutions to change college and university policies so that they are consistent with the law. Commissioner Foxley referred to Replacement Tab D in the Regents’ folders and asked Mr. Eyring to explain the proposed amendments to the policy.

Mr. Eyring said the System has been dealing with a 12-month standard, which will change as a result of H.B. 331, enacted by the 2002 Legislature. He reviewed the adjustments needed to policy R512: (1) The policy has had two sections – one dealing with adults and one with minors. The policy was first approved when individuals gained majority at the age of 21. Now the age of majority is 18 so there is no need for two sections. (2) Legislation extended the time required for residency from 12 months to 24 months, or the completion of 60 semester credit hours (four semesters at 15 credit hours per semester). An alternative would be to demonstrate that a person moved to Utah for a purpose other than being a student. (3) The policy now puts less emphasis on the requirement for a student to physically remain in Utah during the process of completing the 60 credit hours. (4) Since 10 semester credit hours is a full load for graduate students, graduate credit hours count 1.5 times toward the 60-hour requirement, or a total of 40 credit hours of graduate-level course work. (5) The law makes explicit the relationships that indicate domicile, such as a Utah driver’s license, voter registration, etc. (6) The policy has been revised to clarify that someone who is absent from the state for specific purposes (military service, church mission, etc.) would not have to re-establish residency. (7) Credits earned by military personnel, their spouses and children can count toward the 60-hour requirement. Mr. Eyring said the plan is to develop a Residency Officers’ Handbook which would provide further interpretation of each of these issues.

President Romesburg said an individual had approached him recently to say that he could not attend UVSC as a resident under the new guidelines. President Romesburg said he was surprised that the

presumptive rule of 12 months had been changed to 24 months. The individual had moved to Utah for a job and was recently laid off. He will have been here for more than 12 months and he wants to go to school to better his employability. UVSC will prepare an appeal and treat this case as an exception. President Romesburg said these changes will impact many people. He asked if this was in keeping with the intent, and if the Regents really wanted to make this requirement. Commissioner Foxley responded that we do not want to penalize those people who moved to Utah for employment purposes when they need education or training for their employment. President Romesburg asked Commissioner Foxley to address this problem directly when working with residency officers at each campus. Mr. Eyring said this issue would be handled through the Residency Officers' Handbook.

Regent Grant asked about students who accumulate credit hours through the Internet before moving to Utah. Mr. Eyring said the policy specifies that the 60 hours of credit must be earned while living in Utah. Commissioner Foxley added that those students in Utah who take these 60 credit hours have other requirements, such as primary residency, driver's license, and voter registration. The out-of-state student is not doing these things to establish residency. **Regent Atkin moved approval of the proposed amendments to policy R512. Regent Barrett seconded the motion.**

Regent Johnson noted that sections 4.1.2 and 4.1.7 of the policy are not consistent regarding the documentation required to establish residency and asked why the policy was not consistent. Commissioner Foxley said § 4.1.7 was an old part of the policy. Mr. Eyring clarified that § 4.1.7 would be used in the appeals process for students in situations such as that described by President Romesburg. President Bennion said he had received calls from individuals who have worked in Utah for 18-20 months before losing their jobs. These people want to go to school in Utah. Some individuals have a financial plan and feel they have been "booted out." Without an implementation period and warning period, this is difficult for them. Regent Snow asked if it would be possible to reduce the credit hour requirement to 48. Mr. Eyring responded that the 60-hour requirement was required by legislation. **Vote was taken on the motion, which passed.**

Progress Report of the Health Benefits Committee

Regent Pitcher, who chairs the committee, referred to the Supplement to Tab E in the Regents' folders, which was previously faxed to the Regents and Presidents. The Supplement contained information from a 1989 study. Pages 3-4 of the report detailed the materials researched by the committee, and page 4 outlined their observations. Regent Pitcher briefly reviewed some of the observations. He noted that only two of the USHE institutions (University of Utah and Utah State University) require employee participation in the insurance premiums. The other seven require no contribution. Health studies to date have not included UCAT. The committee believes this should be done in the future. The committee also recommended including in the study workers compensation insurance, short- and long-term disability, and life insurance. Regent Pitcher said it was the committee's recommendation to move ahead on a request for proposal (RFP) for health benefits for FY2003-04. Included in the RFP should be standardized benefits for the institutions on a self-funded basis, and central administration. The committee did not recommend the inclusion of the University of Utah and Utah State University, as they are already in a self-funded arrangement and have received savings from those arrangements. The committee would like to work closely with the Presidents and their financial and human

resources executives in developing this program. They also felt strongly that the System should consider using best practices currently being used in the various institutions.

There also should be more emphasis on wellness programs. The committee suggested exploring the use of implementation of disease management programs such as those being used for diabetes and cardio-care. Another area which might be explored is that the size of the group (total number of employees and dependents) may be as high as ten to twelve thousand. The committee felt it may be possible to negotiate better terms with providers because of that size. The cost and use of prescription drugs will probably not improve. There will be steep increases in medical malpractice coverage which will filter back to the employer and employee. Also, general liability coverage has gone up four or five times and will continue to increase. Medicare and Medicaid reimbursements in this state have been cut back. Providers have to have a way to transfer these costs to the users. The cost for the construction of new health care facilities is another drastic expense. These costs will have to be absorbed. A national actuarial firm has projected dramatic HMO cost increases in 2003. This does not include traditional coverage.

Regent Sinclair agreed that it was a very serious situation, but we do have an opportunity for savings. Regent Grant said if the employees of the University of Utah and Utah State University were included in the RFP, the total participation rate could drive the costs down still more.

President Thomas asked if, in addition to participation on the part of the employee, the committee could consider the possibility of restructuring the plan design to include higher deductibles. This would result in more significant savings. Regent Pitcher agreed. Chair Karras noted that this would be included in the best practices. For example, the IHC plan for their own employees is a "best practices" system.

Vice Chair Atkinson said as the program is restructured, it would provide a good opportunity to build in some accountability on the part of the participants. She endorsed the idea of a greater focus on prevention. Participants in health plan groups who work on prevention with diet, exercise, group support programs, etc. are finding that these factors make a big difference in keeping premiums down because the overall cost of their health care is down.

Chair Karras said he would also like to include student health insurance in the committee's considerations, as well as early retirement. He said it was important to be aware of the cost of these issues and to curb some of the costs associated with early retirement. He asked Regent Pitcher to include this in the committee's study. He also asked Regent Hoggan to participate on the committee. A student asked that students be included in the discussion on student health insurance. Regent Snow suggested that faculty and staff also be included and asked to provide input on their needs.

President Cundiff said Salt Lake Community College plans to be self-insured by this time next year. The College covers all of the benefits for the employees without a co-pay. The general feeling is that this is a very unusual thing; however, salaries are 10 to 12 percent below average for community colleges, so the College has been able to use benefits as an incentive in recruiting new faculty, staff, and administrators. If employees are asked to contribute toward their insurance premiums, it will be problematic for faculty retention. Chair Karras said the Regents do not want the employees to feel that the Regents do not care or that they want to inflict pain on them. However, our health care costs are skyrocketing. We need to get these costs under

control and do a better job of managing these costs. He pledged to make this process as positive as possible for the employees so that they do not want to seek employment elsewhere.

Regent Sinclair called attention to an article in a recent issue of the *Harvard Business Review*. The article described a different approach to health care insurance: the employees receive the money that the employer would have spent on the insurance and then the employees make the choice.

Regent Atkin pointed out that there were substantial opportunities for efficiency gains in this program. He asked Regent Pitcher about the proposed RFP and benchmarking. He recommended that the benchmarking be done before an RFP is issued and asked if the committee would do that. Regent Pitcher said the committee would need help from consultants as well as consultation with institutional human resources representatives.

President Huddleston said the worst thing that could happen would be for our employees to pay increased premiums and increased deductibles with no salary increases. Most of our colleges are poor in salaries but rich in benefits. If we force our employees to pay a co-pay on their premiums and higher deductibles with no salary increases, we will lose employees. President Machen said when he came to Utah he was surprised to learn that most institutions had no employee participation in the area of health insurance.

Regent Atkin moved approval of the process and moving forward as quickly as possible. The motion was seconded by Regent Sinclair.

Chair Karras asked Regent Atkin to have the Compensation Committee look at total compensation in their future deliberations. President Romesburg encouraged the committee and the consultants to look at this on a System approach involving the institutions. The large schools will, in fact, be subsidizing the smaller schools. This should be approached as a System decision rather than how it will affect the individual institutions. Regent Grant asked if cafeteria plans could be included in the study. Vice Chair Atkinson said flexible reimbursement programs would be included in the best practices. President Bennion said standardization was vital. One concern shared by some of the Presidents is centralization and how that will affect institutions outside the Wasatch Front. President Cundiff asked the committee to move quickly. SLCC will be having discussions in December or January about next year's compensation.

Vote was taken on the motion, which carried unanimously.

Southern Utah University – Campus Master Plan

Chair Karras referred to Tab B and said there had been no changes since SUU's Campus Master Plan was last approved. **Regent Barrett moved approval of the SUU Master Plan. The motion was seconded by Vice Chair Atkinson and carried unanimously.**

Overview of 2002 Master Planning Effort

Commissioner Foxley referred to the Supplement to Tab F in the Regents' folders. The four Regents excused from this meeting happen to serve on the Missions and Roles Master Planning Task Force. That task force meeting will be rescheduled as soon as possible. Thus, the Regents and Presidents on the Missions and Roles Task Force have been asked to meet with one of the two other groups for the current discussion.

Two items which would provide a helpful background for discussion by all of the task forces were shown on the Supplement to Tab F. Commissioner Foxley asked that the presentations on Population and Student Enrollment Projections and the demonstration of AdviseUtah and UtahMentor be made before the group broke into meetings of the Funding and Student Success Task Forces.

Population and Student Enrollment Projections. Associate Commissioner Spencer distributed an enrollment report and noted an increase of eight percent in FTE and six percent in headcount for 2001-2002 over the previous year's enrollment figures. Figure 3 of the enrollment data showed enrollment growth over the past 20 years, which has doubled in headcount and increased significantly in FTE. Chair Karras asked about population projections. Dr. Spencer referred to Figure 1 which showed projections for 18- to 29-year-olds, and Figure 2 which projected population in Utahns aged 30 and older. He noted that the 20-year projections were made in 2000 and are now outdated. He will check current data before bringing this information back to the Board. Over the next 20 years, it is estimated that Utah will continue to have a 2½ to 4 percent increase in population, with some peaks. Future data will also be broken out by institution. Copies of last year's projections were available for the task force discussion. Chair Karras asked if the System could still anticipate a 27 percent increase for the next five years. Associate Commissioner Spencer said the percentage will go down slightly but the numbers should be the same. Other factors impact participation rates, such as the economy, tuition increases, less than full funding for enrollment growth, etc.

AdviseUtah. Assistant Commissioner Safman said the AdviseUtah web site (www.adviseutah.org) is fully up and running. It was done for \$40,000, considerably under the budgeted \$200,000 that was projected. Seven categories of users are featured, and each category has specific information for those particular users. The web site is rich with advising information. We are able to track how many people enter the site, not counting OCHE staff, as well as where the hits are coming from, which pages receive the most attention, etc. There are direct links to each of the institutions, including UCAT. The "Can I Go to College If...?" page is very useful for all categories of students and the various obstacles they might face. This has been incorporated into UtahMentor. Other helpful topics are career and job clusters and lower division preparation, which shows which lower division courses are transferable to a major. Dr. Safman pointed out that community college faculty must talk with university faculty about transfer and articulation issues and requirements. A majors meeting will be held in the fall to look at issues with general education, how those courses prepare students for entry into the majors, and which courses will transfer. Assistant Commissioner Fife has spent a great deal of time on the majors guide and putting it into a database. Regent Johnson asked if a student could see which credits would be accepted at other institutions. Dr. Safman said this information was available in the transfer guide. She noted that AdviseUtah will become part of UtahMentor in a year or so.

UtahMentor. Associate Commissioner Norris referred to the hand-out in the Regents' folders. He offered to set up the Student Success Task Force in the computer training room at the Gateway offices to give members a chance for a better look at UtahMentor (www.utahmentor.org). This site is maintained in close cooperation with Utah's public and private institutions. UtahMentor is focused primarily on secondary students

and their families. It helps them with researching various careers, understanding a campus, and learning what financial aid options are available. Online applications are available for both college admissions and financial aid. Coming this fall will be a free test preparation module. Also, a special module will be available for high school counselors to enable them to use UtahMentor as an online tool to counsel electronically with their students. Regent Johnson expressed his enthusiasm for both programs.

The Regents and Presidents met with their respective task forces beginning at 11:10 a.m. The Committee of the Whole reconvened at 1:55 p.m.

Report of the Chair

Chair Karras said he had intended to make some changes in Board committee assignments but had been unable to contact one of the key individuals. The intent is to better distribute the work to all of the Regents. Chair Karras said he appreciated the support he had received from the Executive Committee. He asked the Regents on the Presidents' Resource and Review Teams to be more involved with the institutions, in addition to performing the presidential reviews. He asked them to be aware of the impact of what is happening on the campuses and to report back to the Board. The Public Relations Committee will become more active, and trustees will become more involved in System issues. Chair Karras said we need more personal involvement with the legislature. The Public Relations Committee should handle the "disconnect" with some legislators. He asked Vice Chair Atkinson to chair a special committee on programs being discontinued and to coordinate with the institutions to make sure key programs are not eliminated. Other members of that committee will be Regents Jensen and Sinclair and Presidents Machen and Romesburg.

Commissioner Foxley said she would let the Regents and Presidents know the future meeting dates of the task forces. Everyone is invited to all of the meetings, regardless of where they are assigned. She told the student leaders that they were also invited to attend the discussions and that she had appreciated their excellent input today.

Reports of the Task Forces

Student Success. Chair Johnson said the objective of the Student Success Task Force was to identify the issues, and then rely on the institutions to develop the appropriate solutions. Four student leaders participated in the discussion, which he called "very intellectually stimulating." The group learned that some students do not go to college primarily to become educated. Some go to find a spouse or to get away from home for a year or two. He made the following observations: (1) Finding out what actually happens in the classroom is very important. The USHE General Education Committee (referred to as the "Educated Persons Group") will report at the next meeting of the task force. Assessment, teaching methods and techniques to educate a student are also vital. (2) Advising is key. Different advising and success measures are required for lower division students, upper-division students, and graduate students. He pledged to continue the work on AdviseUtah to ensure that every need is met. (3) Best practices should be documented. Good things are happening, and each institution will be asked to report on their best practices for student success. Students will determine their own success, but we will try to remove the institutional barriers. The next meeting of the Student Success Task Force will be on August 8 in the Gateway offices, beginning at 12:00 noon.

Funding. Chair Karras said the task force had endorsed the funding formula. The issue is how to implement it. The group will put together forecasts, look at internal efficiencies, discuss the right mix of adjunct and full-time faculty, etc. The students' share of tuition is approximately 25-30 percent, but is much higher at a few schools. The task force needs to look at the proper role of tuition and how much state revenue could be predicted. UCAT must be included as goals are differentiated. One idea was to look at peer institutions as different levels of funding are built. It is also important to "sort out" institutional missions and roles.

General Consent Calendar

Upon motion by Regent Hoggan and second by Regent Atkin, the following items were unanimously approved on the General Consent Calendar (Tab J). Regent Hoggan called attention to a \$35 million grant at Utah State University. President Hall said this was added to approximately \$136 million in grants. President Machen noted that the University of Utah had received approximately \$250 million in grants.

1. Minutes –
 - A. Minutes of the Regular Meeting of the Utah State Board of Regents held May 31, 2002, at Weber State University in Ogden, Utah
 - B. Minutes of the Special Meeting of the Utah State Board of Regents held July 2, 2002, at the Regents' Offices at The Gateway, Salt Lake City, Utah
2. Grant Proposals - Approval to submit the following proposals:
 - A. University of Utah – National Institutes of Health; "Comparative Functional Genomic of Homeostatic Control;" \$2,621,779. Jean-Marc Lalouel, Principal Investigator.
 - B. Utah State University – National Institute of Neurological Disorder and Stroke; "Slow Inactivation of Sodium Channels;" \$1,884,241. Peter C. Ruben, Principal Investigator.
 - C. Utah State University – National Aeronautics and Space Administration; "ORZS - Optimization of Root Zone Substrates for Reduced Gravity Experiment, Phase II;" \$1,226,647. Gail Bingham, Principal Investigator.
 - D. Utah State University – National Science Foundation; "Engineering, Math and Science Partnerships with Native Americans;" \$2,212,700. Sue Haupt, Principal Investigator.
 - E. Utah State University – Space Exploration Technologies, Inc.; "Space Exploration Technologies, Inc. - Elan Musk;" \$35,545,779. Pat Patterson, Principal Investigator.
3. Elimination of Policy R171, Postsecondary Proprietary School Act and Rules. In conformance with legislation passed in the 2002 Legislative Session transferring responsibility for postsecondary proprietary schools to the Department of Commerce, Division of Consumer Protection, there is no longer a need for this policy.

4. USHE – 2001-2002 Final Work Program Revisions
5. USHE – 2002-2003 Work Program Revisions
6. USHE – 2002-2003 Budget Implementation Reports
7. USHE – 2002-2003 Appropriated Operating Budgets
8. USHE – 2001-2002 Spring Semester and End-of-Year Enrollment Report
9. 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 September 12-13, 2002, at Utah State University, to consider property transactions, personnel issues, litigation, and such other matters permitted by the Utah Open and Public Meetings Act

Adjournment

Chair Karras thanked President Bennion for the opportunity of meeting on the SUU Campus. The meeting was adjourned at 2:10 p.m.

Joyce Cottrell CPS
Executive Secretary

Date Approved

MINUTES
MEETING OF THE UTAH STATE BOARD OF REGENTS
WEBER STATE UNIVERSITY AND BY CONFERENCE CALL
August 28, 2002

Regents Attending/Participating

Nolan E. Karras, Chair
Pamela J. Atkinson, Vice Chair
Jerry C. Atkin
Daryl C. Barrett
Khay Douangdara
L. Brent Hoggan
James S. Jardine
Michael R. Jensen
David J. Jordan
E. George Mantes
Jed H. Pitcher
Sara V. Sinclair
Marlon O. Sow
Maria Sweeten

Regents Excused

David J. Grant
Charles E. Johnson

Commissioner's Office

Cecelia H. Foxley, Commissioner
David Buhler, Associate Commissioner for Public Affairs
Joyce Cottrell, Executive Secretary

Others

Gerry Adair, Utah House of Representatives
Michael Bouwhuis, Regional President, Davis Applied Technology College
Rodney Brady, Former President
Neil Hansen, Utah House of Representatives
Carl Saunders, Utah House of Representatives
Brent Wallis, Regional President, Ogden-Weber Applied Technology College

Representatives of the Media

Brandy Lee, *WSU Signpost*
Lisa Roskelly, *Ogden Standard Examiner*
Kirsten Stewart, *Salt Lake Tribune*
Twila Van Leer, *Deseret News*

(Many faculty, staff, students and friends of Weber State University also attended the meeting.)

Commissioner Foxley welcomed the faculty, staff, students and friends of Weber State University at 4:00 p.m. She described the day as "glorious" and said the Regents were happy to be on the Weber Campus. She welcomed Representatives Adair, Hansen and Saunders, who have been great friends of higher education in the State of Utah. She thanked them for their long years of support of higher education in general and of Weber State University, specifically. She recognized former President Rodney Brady and thanked him for his attendance. The Commissioner welcomed Regional ATC Presidents Mike Bouwhuis and Brent Wallis and acknowledged the importance of partner educational institutions. She thanked the members of WSU's Board of Trustees who were in attendance and said the Regents appreciated their long-standing support of Weber State University and of all higher education in Utah.

Commissioner Foxley recognized and expressed her appreciation to the members of the Presidential Search Committee, who represented all constituent groups of the University and the larger community. She explained that this historic day was the culmination of much hard work on the part of the committee. She thanked the committee members for their hard work and dedication.

The Commissioner introduced Chair Karras, acknowledging that he required no introduction to the Davis and Ogden-Weber areas.

Chair Karras said as an alumnus of Weber State University, he was especially honored to be at the meeting to select its next President. He called the meeting to order at 4:10 p.m. and asked Secretary Cottrell to call the roll. Technical difficulties delayed the roll call of the Regents who were participating via conference call.

Chair Karras introduced Regent Mantes, who chaired the Search Committee. He briefly explained that the committee had conducted an extensive national search. The position was announced in national, regional and local publications and was listed on the Weber and Board of Regents' web sites. Letters were sent to over 350 individuals and groups throughout the country, soliciting nominations and applications for the position. From hearings with various constituent groups, the committee developed the selection criteria which they used to determine which of the 55 highly qualified candidates would be best suited for the WSU presidency. Each candidate file was carefully considered as the committee determined who would be interviewed. Regent Mantes said he was pleased that by the end of the search process, the committee members had become good friends.

Chair Karras asked Scott Marquardt, Chair of the WSU Board of Trustees, to comment. Chair Marquardt thanked President Thompson for his outstanding service to the institution and to the community. Under his leadership, the University has received widespread support from the community.

Chair Karras asked former President Rod Brady to comment. Acknowledging that the years he was President of Weber State College (1978-1985) were the most enjoyable years of his life, former President Brady said his goals had been (1) to make Weber the finest institution in the country in all respects, (2) to make Weber an institution where every faculty member is a master teacher, and (3) to never forget that the most important people on campus were the students. He expressed his appreciation that Presidents Nadauld and Thompson, who succeeded him, had also recognized the importance of those goals.

Regent Mantes nominated Dr. F. Ann Millner as the next President of Weber State University. The motion was seconded by Vice Chair Atkinson. Vote was taken by roll call and the motion carried unanimously.

Commissioner Foxley escorted Dr. Millner into the room to a standing ovation. Chair Karras said it had been an incredibly difficult decision for the Regents because of the many highly qualified individuals in the candidate pool, all of whom had a wealth of knowledge and experience. The excellent reputation of Weber State University had made the position very attractive to a great many individuals.

Chair Karras congratulated President Millner and briefly reviewed her qualifications. She has been at Weber State University for the past 20 years, where she has served as Vice President for University Relations, Associate Dean of Continuing Education, Assistant Vice President for Community Partnerships, and Director of Outreach Education in the School of Allied Health Sciences. Prior experience includes teaching and administrative experience at Gwynedd Mercy College, Southwest Texas State University, Thomas Jefferson University, and Vanderbilt University. She received her Ed.D. in Educational Administration from Brigham Young University, an M.S. Degree in Allied Health Education and Management from Southwest Texas State University, and a B.S. Degree in Education from the University of Tennessee. She is also active in the community. She is a past president of the Ogden-Weber Chamber of Commerce and is a member of the Ogden Rotary Club.

As he presented Dr. Millner with a Weber sweatshirt, President Thompson said he had wanted to buy something purple for his successor to wear, and he was pleased to note that President Millner's wardrobe appropriately already contains "Weber purple." He congratulated the Regents on their selection, saying Dr. Millner is very well qualified to be Weber's next President. She is experienced at all levels from teaching through the vice presidency. In her nine years as a vice president at WSU, she has done an outstanding job. She is highly respected on campus and in the community. President Thompson congratulated her on her appointment and said the University has a promising future under her leadership.

Chair Karras noted that President Millner's appointment would begin on October 1. He expressed the Regents' appreciation for President Thompson's willingness to continue in that position until the Board had completed the selection process. Chair Karras paid tribute to President Thompson, calling him the most capable and dedicated person he knows. Paul Thompson is without guile. He puts everyone else's good before his own, and he gets things done. Chair Karras praised President Thompson for building a team on which more than one individual was qualified to be his successor. He expressed the Regents' gratitude to him for his leadership of Weber State University.

Dr. Millner said she never believed her dream to be President of Weber State University would ever become a reality. She agreed to become an applicant for the position because she cares so much for the institution. She thanked the Regents and the Search Committee for making this "a dream come true." She expressed her gratitude to them for entrusting her with the presidency of Weber State University. She also thanked the various individuals who had encouraged her along the way. President Millner said she had been told that Chair Karras had remarked to his father that he was honored to participate in the selection process for the presidency of his alma mater. She said the University was proud to have him as a graduate.

President Millner said we often stand on the shoulders of others. This provides a solid and firm foundation on which to grow. She thanked Presidents Thompson, Nadauld and Brady for providing the firm foundation on which Weber has been built. Sometimes it is easy to forget how important this is to a university. Having a solid foundation allows the institution to do many more things. She expressed her appreciation to the faculty, staff and students who have contributed to the success of the University.

When she first came to Weber 20 years ago, President Millner said she had not expected to remain more than a few years. However, new challenges and opportunities made it possible for her to remain. She said she was committed to the quality of the institution and called the faculty and staff "uncommonly student centered." In addition, the people with whom she has associated in the community have made the Ogden area a wonderful place to live. They, too, have helped build WSU over the past 100 years. She concluded by saying she was very proud and honored to be the next President of Weber State University.

Chair Karras told of a phone call he had received from an Ogden resident urging him to "vote for Ann for President." When asked why, the gentleman replied, "I helped her build her house, and any woman who can help scrape concrete should be the next President of the University!"

Commissioner Foxley invited everyone to greet President Millner and to have some refreshments. She also announced that the media representatives would have a chance to interview the new President following the reception. She thanked everyone for helping to celebrate this historic day.

The meeting was adjourned at 4:43 p.m.

Joyce Cottrell CPS
Executive Secretary

Date Approved

MEMORANDUM

September 4, 2002

TO: State Board of Regents

FROM: Cecelia H. Foxley

SUBJECT: 2003-2004 Institutional Budget Hearings

Issue

In order to inform the Regents of institutional needs for the upcoming State budget cycle, the USHE Presidents will present their highest budgetary needs to Regent subgroups on September 13th. President Greg Fitch of the Utah College of Applied Technology will present information on UCAT budget needs as well, although statute requires the UCAT Operating Budget Request to be prioritized by the UCAT Board of Trustees and forwarded directly to the Governor and Legislature for consideration. The budgetary needs of the Utah Education Network (UEN) will also be presented.

Background

Although the Commissioner's Office typically holds face to face administrative hearings with each institution, this year institutions have submitted their needs in writing to save on travel costs. Through these written summaries, the Commissioner's Office has gained an understanding of urgent budget needs throughout the system. The themes of these needs are summarized in Attachment 1. Several other events impacting the USHE 2002-2003 Operating Budget Request are summarized below.

- The status of available state resources continues to be very uncertain. After the Legislature enacted cuts of \$395 million in FY 2001-2002 and \$298 million in FY 2002-2003, it remains uncertain how future revenue projections will materialize. Also, in balancing the 2002-2003 budget, the Legislature used approximately \$104 million in one-time sources to fund ongoing expenditure programs. This ongoing funding shortfall will be the first area to receive any revenue growth in FY 2003-2004.
- For FY 2002-2003, after reducing USHE budgets by \$40.7 million, the Legislature allocated \$10.1 million of the \$24.1 million needed for enrollment growth (or 42%). The resulting backlog coupled with strong continued growth could result in one of the largest-ever enrollment growth requests for USHE.
- Through the work of the USHE 2002 Master Planning Task Force on Funding, the USHE continues to address the need for a comprehensive Higher Education Funding Formula that addresses the costs of providing a quality education for new and existing students.

- State officials are considering rate increases for items such as fleet, risk insurance, and state retirement that will directly impact USHE institutions. Large risk insurance premium increases could dramatically increase the amounts needed in this category compared to past years.
- The effects of HB 331 are starting to materialize so that the impact on institutions can be measured.
- Standard mandated cost increases could exceed traditional amounts as other governmental and private organizations try to pass along costs as a result of the economic downturn, such as postage, campus dispatch services, and water rates.
- Seven USHE institutions are preparing to migrate their administrative data processing systems to the SCT Banner product, while two other institutions have already migrated to new systems. No additional state support has yet been received to address the cost of these system migrations (see Tab M).
- Institutions continue to be faced with extraordinary inflationary increases in the areas of health insurance.

The Regent budget hearings become the next phase of the budget request process for the USHE. Through these hearings, Regents will become familiar with urgent institutional needs. Over the coming weeks the Commissioner's Office will work with Presidents and other institutional representatives to coordinate and organize institutional needs into a systemwide budget request. The Regents will consider this material and the information from the budget hearings as they adopt the USHE 2003-2004 Operating Budget Request during the meeting on November 8.

Attachment 2 outlines the roles of the Regents, Governor, Fiscal Analyst, and Legislature in the State budget process. Attachment 3 lists subgroup assignments for the Regent budget hearings.

Recommendation

No action is required. This is an information item only.

Cecelia H. Foxley, Commissioner

Utah System of Higher Education Themes for 2003-2004 Budget Request

Attachment 1

Themes	UofU	USU	WSU	SUU	Snow	DSC	CEU	UVSC	SLCC	SBR
Formula Funding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Compensation										
Health and Dental										
Enrollment Growth										
Budget Reductions				✓				✓		
Tuition Increases	✓							✓		
Standard Mandated Costs										
Incoming Requests										
New Facility Operations and Maintenance										
Fuel and Power										
Water Rate Increases										
Federal Mandates										
Liability Insurance										
Fleet Services										
Other Standard Mandated Costs										
ADA Accommodations (Programmatic)										
Dispatch Costs										
Student Financial Aid - Federal Match										✓
New Century Scholarships										✓
Hazardous Waste										
Possible Systemwide Initiatives										
Salary Equity	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Engineering and Technology Initiative	✓	✓	✓			✓		✓		
Administrative Data Processing/Technology Infrastructure	✓	✓	✓	✓	✓	✓	✓			
Student Success/Retention			✓	✓	✓	✓				
Libraries	✓	✓	✓		✓			✓	✓	
Student Financial Aid		✓	✓	✓			✓			
HB 331 Impact		✓				✓		✓		
Student Financial Aid - UCOPE										✓
Nursing/Healthcare Education	✓		✓							
Distance Education/Technologically-delivered Instruction							✓			
Institutional Issues										
Student Faculty Ratio		✓								
Cooperative Extension Operating		✓								
Genomics		✓								
Agriculture Experiment Station		✓								
Utah Climate Center		✓								
State Venterinary Diagnostic Laboratory		✓								
Graduate Education		✓								
Operating Budget Refurbishment			✓							

Statutory and Constitutional Responsibilities for the Utah System of Higher Education Operating Budget Request Process

Board of Regents

UCA 53B-7-101

"The board shall recommend a combined appropriation for operating budgets of higher education institutions for inclusion in the state appropriations act...

"The appropriations recommended by the board shall be made with the dual objective of: (a) justifying for higher educational institutions appropriations consistent with their needs, and consistent with the financial ability of the state; and (b) determining an equitable distribution of funds among the respective institutions in accordance with the aims and objectives of the statewide master plan for higher education....

"The board shall request a hearing with the governor on the recommended appropriations. After the governor delivers his budget message to the Legislature, the board shall request hearings on the recommended appropriations with the appropriate committees of the Legislature.

"The board shall recommend to each session of the Legislature the minimum tuitions, resident and nonresident for each institution which it considers necessary to implement the budget recommendations."

Governor

UCA 6-38-2

"The governor shall, within three days after the convening of the Legislature in the annual general session, submit a budget for the ensuing fiscal year by delivering it to the presiding officer of each house of the Legislature. ...

"The budget shall contain a complete plan of proposed expenditures and estimated revenues for the next fiscal year based upon the current fiscal year tax laws and rates....

"For the purpose of preparing and reporting the budget, the governor shall require from the proper state officials, including public and higher education ... itemized estimates of revenues and expenditures....

"The governor may also require other information under guidelines and at times as the governor may direct....

"The governor may require the attendance at budget meetings of representatives of public and higher education, state departments and institutions, and other institutions or individuals applying for state appropriations...."

Fiscal Analyst

UCA 36-12-13

"The powers, functions, and duties of the Office of the Legislative Fiscal Analyst under the supervision of the fiscal analyst are ...

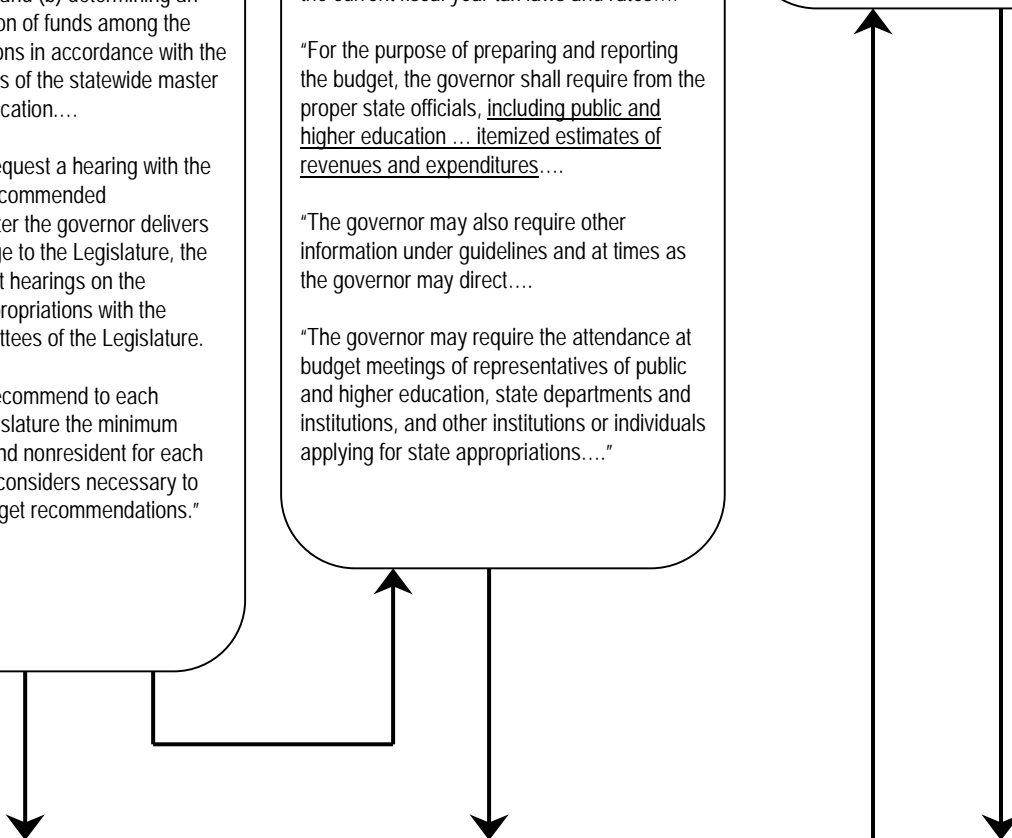
"To analyze in detail the executive budget before the convening of each legislative session and make recommendations to the Legislature on each item or program appearing in the executive budget...."

Legislature

Utah Constitution XIII-2-11

"The Legislature shall provide by law for an annual tax sufficient, with other sources of revenue, to defray the estimated ordinary expenses of the state for each fiscal year..."

Articles VI and VII also identify the distinct powers granted to the executive and legislative branches, respectively, and provide for the legislature to pass bills including appropriation bills.



The USHE Budget Process

The passage of the appropriations act at the conclusion of each legislative session is the culmination of several months of preparation and deliberation. Funding for higher education, which is included in the general appropriations act, involves cooperation among the Utah System of Higher Education Institutions (USHE), State Board of Regents (SBR), the Office of the Commissioner of Higher Education (OCHE), the Governor's Office of Planning and Budget (GOPB) and the Legislative Fiscal Analysts Office (LFA) as well as the Governor and Legislature.

Item: Forms and Guidelines

By: OCHE

Dates: April-May

OCHE distributes forms and guidelines to the USHE institutions for use in preparing operating and capital budget requests. The budget preparation calendar and parameters for requesting budget enhancements are established. (The Governor also publishes separate budget guidelines in June of each year.)

Item: Institutional Requests

By: USHE

Dates: July-September

OCHE collects and analyzes the institutional requests. OCHE prepares recommendations on base budgets and proposed enhancements for SBR consideration.

Item: Budget Hearings/Adoption

By: SBR

Dates: September-October

SBR holds hearings with the institutions to determine budget needs to forward to the Governor and Legislature for consideration. SBR adopts their budget request and forwards relevant documentation.

Item: Gov. Budget Preparation

By: Governor/GOPB

Dates: November –
Early December

GOPB, with input from the State Tax Commission and review with the LFA, prepares up-to-date revenue projections to be used in finalizing the Governor's budget recommendations.

Item: Budget Presentation

By: Governor

Dates: Early December

The Governor publicly releases his budget recommendations.

Item: Fiscal Analyst's Analysis

By: LFA

Dates: December –
Mid-January

The LFA analyzes the Governor's recommendations, independently projects revenue (with review by GOPB), and prepares operating and capital budget recommendations for consideration by the Legislature.

Item: Legislative Deliberations

By: Legislature

Dates: Mid-January– Early March

The Legislative Executive Appropriations Committee has nine subcommittees which hold hearings on the Governor's budget recommendations. The Higher Education Appropriations Subcommittee looks specifically at the Board of Regents' request and the Governor's recommendations for higher education. The subcommittees gather relevant testimony on agency budgets before sending their recommendations to the Executive Appropriations Committee. The Executive Appropriations Committee prepares appropriations bills to be considered by the full Legislature. The Legislature passes the bills and

forwards them to the Governor for signature, veto, or passage into law without signature.

Item: Budget Implementation

By: Governor

Dates: March-April

The Governor signs or vetoes the enrolled appropriations bills. The state constitution allows the Governor line item veto authority.

Item: Budget Approval

By: SBR

Dates: June-July

SBR approves institutional budgets for the upcoming year in summary form. These budgets incorporate any new state funding that was appropriated to USHE institutions. More specific budget review is performed by institutional Boards of Trustees.

BREAKOUT GROUPS FOR INSTITUTIONAL BUDGET HEARINGS

September 13, 2002

Group 1

(Walnut Room)

Group 2

(Ballroom)

Group 3

(Student Senate Chambers)

Institutions:

- University of Utah
President J. Bernard Machen
- Utah State University
President Kermit L. Hall
- Utah Education Network
Executive Director Michael A. Petersen

- Weber State University
President Paul H. Thompson
President F. Ann Millner
- Southern Utah University
President Steven D. Bennion
- Utah Valley State College
Interim President Lucille T. Stoddard
- Dixie State College
President Robert C. Huddleston

- Snow College
President Michael T. Benson
- College of Eastern Utah
President Ryan L. Thomas
- Salt Lake Community College
President H. Lynn Cundiff
- Utah College of Applied Technology
President Gregory G. Fitch

Regents:

Daryl C. Barrett
Kim R. Burningham
Khay Douangdara
Michael R. Jensen
Charles E. Johnson
Jed H. Pitcher

Jerry C. Atkin
Linnea S. Barney
James S. Jardine
David J. Jordan
Nolan E. Karras
Sara V. Sinclair

Pamela J. Atkinson
David J. Grant
L. Brent Hoggan
E. George Mantes
Marlon O. Snow
Maria Sweeten

Staff Resource/Recorder:

Mark H. Spencer

Brad Mortensen

Gary S. Wixom