

STATE BOARD OF REGENTS MEETING  
SALT LAKE COMMUNITY COLLEGE STUDENT CENTER, REDWOOD CAMPUS  
JANUARY 15, 2010

Agenda

8:00 a.m. - BREAKFAST MEETING – STATE BOARD OF REGENTS AND  
9:30 a.m. SALT LAKE COMMUNITY COLLEGE BOARD OF TRUSTEES  
Room 219 (Corner Room)

9:30 a.m. - BOARD OF REGENTS MEETING (CLOSED SESSION)  
12:00 noon Room 219

12:00 noon - LUNCH  
1:00 p.m. Oak Room

1:00 p.m. - MEETINGS OF BOARD COMMITTEES  
2:15 p.m.

ACADEMIC, CTE AND STUDENT SUCCESS (PROGRAMS) COMMITTEE  
Regent Anthony W. Morgan, Chair  
Room 221

ACTION:

- |    |  |       |
|----|--|-------|
| 1. | University of Utah – Doctor of Occupational Therapy Degree   | Tab A |
| 2. | Utah State University – Associate of Pre-Engineering Degree  | Tab B |
| 3. | Dixie State College  |       |
|    | A. Associate of Applied Science Degree in Clinical Laboratory Science<br>(Medical Laboratory Technician) | Tab C |
|    | B. Associate of Applied Science Degree in Operations Management  | Tab D |
|    | C. Bachelor of Science Degree in Psychology  | Tab E |
| 4. | Salt Lake Community College – Associate of Applied Science Degree in Energy<br>Management Technician     | Tab F |

CONSENT:

- |    |  |       |
|----|--|-------|
| 5. | Consent Calendar, Programs Committee   | Tab G |
|    | A. University of Utah – University of Utah Graduate Center at St. George                           |       |
|    | B. Utah State University – Three-Year Follow-up Reports  |       |
|    | i. Bachelor of Science Degree in Biochemistry  |       |
|    | ii. Master of Science and Ph.D. Degrees in Human Dimensions of Ecosystem<br>Science and Management |       |
|    | C. Dixie State College of Utah – Discontinuation: Practical Nursing (PN) Certificate Program       |       |

INFORMATION:

- |    |  |       |
|----|--|-------|
| 6. | Information Calendar, Programs Committee   | Tab H |
|    | A. University of Utah  |       |
|    | i. Early Childhood Education Emphasis within the Human Development and Family Studies Major, Department of Family and Consumer Studies |       |
|    | ii. Financial Planning Emphasis within the Consumer and Community Studies Major. Department of Family and Consumer Studies             |       |
|    | iii. Entertainment Arts and Engineering Emphasis, Division of Film Studies   |       |
|    | iv. Name Change: Center for Integrated Design and Construction to Integrated Technology in Architecture Center                         |       |
|    | v. Name Change: Division of Film Studies to Department of Film and Media Arts  |       |
|    | B. Utah State University – Name Changes  |       |
|    | i. Teaching Emphasis in the Bachelor of Science in Human Movement Sciences to Physical Education Teaching Emphasis                     |       |
|    | ii. Master of Science Degree in Health, Physical Education and Recreation to Master of Science in Health and Human Movement            |       |
|    | C. Southern Utah University – English Composite Emphasis in Secondary Education and Creative Writing                                   |       |
|    | D. Snow College – Program Review: Business Program   |       |
|    | E. Dixie State College of Utah – Bachelor of Science Degree in Integrated Studies, Emphasis in Operations Management                   |       |

FINANCE, FACILITIES AND ACCOUNTABILITY COMMITTEE

Regent Nolan E. Karras, Chair

Rooms 207-213

ACTION:

- |    |   |       |
|----|---|-------|
| 1. | Utah State University – Swaner EcoCenter Gift                 | Tab I |
| 2. | Southern Utah University – Peer Institutions                  | Tab J |
| 3. | Snow College – Purchase of Ephraim Elementary School and Land | Tab K |

CONSENT:

- |    |  |       |
|----|--|-------|
| 4. | Southern Utah University – Residential Property Purchase | Tab L |
|----|--|-------|

INFORMATION:

- |     |  |       |
|-----|--|-------|
| 5.  | USHE – Financial Ratios Report   | Tab M |
| 6.  | USHE – Annual Grants and Contracts Report                                  | Tab N |
| 7.  | USHE – Report of Auxiliary Funds   | Tab O |
| 8.  | USHE – Annual Report on Institutional and System Bonded Indebtedness       | Tab P |
| 9.  | Report of the Audit Review Subcommittee                                    | Tab Q |
| 10. | Efficiencies in Higher Education Through the Use of Information Technology | Tab R |
| 11. | University of Utah – Follow-up Report on 2009A Series Bond                 | Tab S |
| 12. | UHEAA Update: Student Loan Activities                                      | Tab T |

## COMMUNITY/GOVERNMENT RELATIONS AND PLANNING COMMITTEE

Regent John H. Zenger, Chair

Room 223

### INFORMATION:

- |    |  |       |
|----|--|-------|
| 1. | Legislative Preview  | Tab U |
| 2. | Roles and Authority Task Force – Update  | Tab V |
| 3. | USHE Annual Data Report  | Tab W |
| 4. | Outreach Report (Biennial Report)  | Tab X |
|    | A. Scholarship Update  |       |
|    | i. Regents' Scholarship  |       |
|    | ii. New Century Scholarship  |       |
|    | B. Overall Outreach Endeavors and Impact   |       |
| 5. | Participation Task Force – Update  | Tab Y |
| 6. | Update on the Utah Data Sharing Alliance (Alliance between USOE, USHE, DWS)<br>Student Longitudinal Database System (ARRA Grant) | Tab Z |

### DISCUSSION:

- |    |                                       |        |
|----|---------------------------------------|--------|
| 8. | USHE Master Plan Committee Discussion | Tab AA |
|----|---------------------------------------|--------|

2:30 p.m. -

## COMMITTEE OF THE WHOLE

4:00 p.m.

Oak Room

- |    |  |        |
|----|--|--------|
| 1. | Report of the Commissioner<br>Early College High Schools (Christine Kearn)     |        |
| 2. | Discussion and Possible Action on Appointment of Dixie State College President |        |
| 3. | General Consent Calendar   | Tab BB |
| 4. | Reports of Board Committees  |        |
| 5. | Resolutions  |        |
| 6. | Report of the Chair  |        |

Projected times for the various meetings are estimates only. The Board Chair retains the right to take action 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, 60 South 400 West, Salt Lake City, UT 84180 (801-321-7124), at least three working days prior to the meeting. TDD # 801-321-7130.

January 6, 2010

MEMORANDUM

TO: Utah Board of Regents

FROM: William A. Sederburg

SUBJECT: University of Utah - Doctor of Occupational Therapy – Action Item

Issue

University of Utah requests approval to offer the Doctor of Occupational Therapy degree (OTD) effective Summer 2010. This program was approved by the institutional Board of Trustees on November 13, 2009.

Background

The purposes of the proposed Doctor of Occupational Therapy degree (OTD) are to provide students with a strong theoretical base of knowledge, advance their leadership skills, and strengthen their knowledge and skills in evidence-based research related to their areas of specialty. The proposed program will accept students who hold either a bachelor's or master's degree in Occupational Therapy from an accredited program, have worked for two years in the field and have passed the National Certification for Occupational Therapist Board. The proposed program will require 36 credits for doctoral students with additional 24-36 credits for students entering with a bachelor's degree. The program will be offered through online technology to serve students who are working full time. However, students will be required to attend annual on-campus seminars. The program will use the standards set by the Accrediting Council for Occupational Therapy, the accrediting body. Teaching in the program will be five faculty who hold doctorates, two who are completing their doctorates, and an additional two with master's degrees. Student enrollment (headcount) is expected to begin with 10 and grow to 30, the maximum, by the third year. Students are expected to take six credit hours per semester to accommodate their work schedules.

Nationally, there is a need for doctorally-prepared faculty; and the profession may move to the doctorate as the entry-level requirement. In addition, there is a growing need for occupational therapists to accommodate diverse populations. Thus, with only 19 other accredited programs in the United States, and none in Utah, the proposed program is expected to draw interested students from within the state and surrounding region.

The program will be supported by differential tuition and internal reallocation.

### Policy Issues

Utah State University, Snow College, and Salt Lake Community College, which offers the associate degree in Occupational Therapy, support the proposed program. There were no issues raised by USHE institutions.

### Commissioner's Recommendation

The Commissioner recommends that the Regents review the Doctor of Occupational Therapy requested by the University of Utah, raise questions, and, if satisfied, approve the request.

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William A. Sederburg, Commissioner

WAS/PCS  
Attachment

Academic, Career and Technical Education, and Student Success Committee

Action Item

Request to Offer a Doctor of Occupational Therapy

University of Utah

Prepared for:  
William A. Sederburg  
by  
Phyllis C. Safman

January 6, 2010

## **Section I: The Request**

The University of Utah requests approval to offer the Doctor of Occupational Therapy degree (OTD) effective Summer 2010. This program has been approved by the institutional Board of Trustees on November 13, 2009.

## **Section II: Program Description**

### **Complete Program Description**

The proposed professional doctorate in occupational therapy (OTD) will be offered within the Division of Occupational Therapy to individuals who have already earned a degree in occupational therapy from an entry-level educational program accredited by the Accreditation Council for Occupational Therapy Education (ACOTE). In addition, applicants to this program will have successfully passed the National Certification for Occupational Therapist Board examination and will have practiced as an occupational therapist for at least two years. The proposed OTD program will have two paths for entry – one for those individuals whose entry-level occupational therapy degree was at the bachelor's degree level, and one for those individuals who earned their entry-level occupational therapy degree at the master's degree level. The focus of the professional doctorate is, in part, to provide clinicians with a stronger, more up-to-date theoretical base, to advance their leadership skills, and to provide them with knowledge and skills in evidence-based research related to their chosen area of emphasis.

The proposed OTD degree will admit students who meet the basic tenets and educational level of occupational therapy. There will be two tracks offered to obtain the proposed program degree; common to both tracks will be a requirement for a minimum of two years of clinical experience prior to entering the program. The doctoral level courses will total 36 credits, including foundational courses, core curricular courses, a specialization area of emphasis chosen by the student in collaboration with the faculty, and a capstone project that will serve as the culminating work which will demonstrate the student's level of scholarship. Students who apply to the program and who have earned a bachelor's degree in occupational therapy will take an additional 24-36 credits of coursework, evaluated on a case-by-case basis upon review of the student's transcript(s). Since it is anticipated that most of the students seeking the OTD will be working professionals who are either place-bound, time-bound, or both, the program will be offered primarily through distance education technology.

Although residency for clinical doctorates is not formally required, given that this degree will be delivered in an online format, the Division of Occupational Therapy will require students to come to campus at least once a year for a multiple day seminar. The seminar will focus on educational components that are more appropriately delivered face to face and team building among the students will be facilitated so that discussions occur more easily once they are associating on-line throughout the rest of the curriculum. Prior to taking the Capstone Series (OC TH 7400 and 7450) each student's progress based on grades will be reviewed by a faculty committee. If student have made good progress with their coursework, they will be approved to begin the series of classes leading to completion of all the requirements for graduation.

The capstone project will be the final qualifying exercise for the OTD degree. This capstone project will integrate, synthesize, and apply the knowledge and skills acquired during doctoral coursework into a scholarly project designed by the student to meet his or her professional goals in an area of clinical

practice. The student will design a project of specialization that reflects both the purpose of the OTD program, as well as the student's proposed innovation in practice. Based on the topic, a project committee chair within the Division of Occupational Therapy will be assigned to provide guidance. Students will prepare and defend their proposal before a committee in Capstone Class I (OC TH 7400). During Capstone Class II (OC TH 7450) the students will carry out the action or program proposed during Capstone I. For example, if a student has proposed a college course during the Capstone II course, the student will implement the course or part of it. Or, if a student proposed a specific research study, he or she would collect the data that were proposed and complete the study. If, for example, a student proposed a justification and plan to change policy at the state level, the action proposed would be presented formally to appropriate policy makers in the hopes the action would be taken. The major outcomes for Capstone II are: a) the implementation of the approved proposal in Capstone I, b) collection of data regarding the action, program, or study, c) analysis of these data, and, d) a discussion of how these results contribute to the advancement of the occupation in society, occupational science, or occupational therapy knowledge base. The other requirement that must be met is that the students will disseminate their results to the appropriate audience through presentations at the state and/or national level, peer reviewed publications and/or implementation of the project. Students will defend their final project before their committee.

The advisory committee will consist of three members. Two of the members must be from the Division of Occupational Therapy with the chair of the committee being a full-time faculty member — either regular faculty or graduate school approved clinical full-time faculty. The third member will be chosen based on area of expertise as it relates to the project.

The entry-level degree program in occupational therapy that leads to the Master's in Occupational Therapy (MOT) degree will not change at the University of Utah (U of U) as a result of developing and implementing the OTD program. However, the proposed program will be a way for U of U graduates to continue to advance their education which ultimately will lead to strengthening the occupational therapy profession in Utah. The currently accredited entry-level Master's Degree in Occupational Therapy (MOT) will continue; this program began admitting students in 1999 and currently graduates up to 30 students annually. The U of U's program is the only entry-level program in the state for an occupational therapist; there are no other accredited institutions in Utah offering a professional doctorate. The proposed OTD program has been designed in response to several needs: there is a national shortage of doctorally-prepared faculty throughout the U.S.; there is a possibility that the occupational therapy profession may move to an entry-level doctoral level in the next decade; and there has been an expressed demand by practicing occupational therapists within the state and in neighboring states to develop an accessible post-professional program. The proposed program will also strengthen the existing Master's of Occupational Therapy (MOT) program and help the Division increase research capability and service provision to the community.

### **Purpose of the Degree**

The purpose of the proposed OTD program is to provide a professional doctorate curriculum to practicing occupational therapists with the goal of expanding their knowledge, skills and experience to enable them to become clinical scholars who will continue to autonomously function within their scope of practice. The proposed program will prepare them to be contributors to evidence-based literature that drives practice and leaders in the profession. This proposal to develop an OTD is driven by the increasing body of knowledge needed to be a scholar in the field; it also responds to a pressing national and regional need to develop a professional doctorate program in occupational therapy. The Division of Occupational Therapy is the natural venue as it is the only accredited occupational therapy program in the state. There are no other accredited educational programs in Utah or surrounding states that offer professional doctorates in



occupational therapy. Although Rocky Mountain University of Health Professions located in Provo, Utah does offer a professional doctorate in occupational therapy (OTD), it is not yet accredited by a regional or specialized accrediting body recognized by the United States Department of Education. There are currently nineteen professional doctorate programs in the U.S., but the closest programs to Utah are located in California (University of Southern California), Nebraska (Creighton University), and Oklahoma (University of Oklahoma).

### **Institutional Readiness**

The entry-level program in the Division of Occupational Therapy within the College of Health at the University of Utah has been in existence since 1999. The program was accredited in 2008 and was granted a full ten-year continuation of accreditation with no deficit areas. Up to 30 students are admitted each year into the three year program; pass rates on the National Board for Certification in Occupational Therapy (NBCOT) for the past 5 years are at 97 percent for first time test takers, with the overall pass rate at 100%; the program's reputation leads many area employers to actively seek out graduates. The Chair of the Occupational Therapy Program, Dr. JoAnne Wright has been with the program since its inception and she will provide leadership to the proposed OTD program as well. There will be no adverse impact on the existing entry-level program; if anything, the programmatic resources will be of mutual benefit to each other.

The Dean of the College of Health and the Senior Vice President for Health Sciences as well as the College of Health Curriculum Committee have approved the degree and believe that the Division of Occupational Therapy has the capacity to offer this degree at this time.

### **Faculty**

Five of the Division faculty members have earned doctorates, and two additional faculty members are in the process of completing their doctoral education. All faculty in the Division are full-time; three are on tenure lines, and the remaining five are on clinical, non-tenure lines. The Division of Occupational Therapy currently has one vacant faculty line which will be filled by the time the proposed OTD program starts. Courses in the proposed OTD program will be taught by existing faculty or by adjunct faculty who will be sought out for their particular area of expertise and national reputation. Since it is anticipated that the proposed OTD program will be offered primarily through online technology, the existing faculty will be taking courses in the next year to obtain or sharpen their skills in distance education technology.

### **Staff**

Existing support staff will be utilized to assist with the development of administrative aspects of this program. This includes a full-time administrative assistant, and a .75 FTE clerical assistant. There may need to be a realignment of work schedules and responsibilities of existing staff in order to accommodate the anticipated programmatic growth. Once the program is established, it may be necessary to hire a .5 FTE clerical assistant. The resources are available to do so if the need arises.

### **Library and Information Resources**

The current library infrastructure will be able to support the OTD program and therefore additional library resources will not be needed. Because the library has the breadth of resources and services, it can provide the needed level of support to clinical doctorate students.

The use of synchronous online instruction through Adobe Connect has been/is being considered for classes that would benefit from face to face, online interaction. This web-based application is cost effective and can be set up easily. Other courses will be provided through Blackboard Vista and will be

asynchronous. The Technology Assistance Computer Center (TACC) will be used by faculty as they develop their courses as well as the Center for Teaching and Learning Excellence. Many of the faculty have used Blackboard Vista and are comfortable with the various formats that can be used to provide quality education. This program has been discussed with them and they are enthusiastic about assisting in its development.

### **Admission Requirements**

All applicants to the OTD program will have:

1. A master's degree in occupational therapy, or a baccalaureate degree in occupational therapy;
2. A completed University of Utah application to the Graduate School;
3. A completed Division of Occupational Therapy application to OTD Program;
4. Official transcripts from all previous educational institutions;
5. A minimum cumulative grade point average in prior course work of 3.0 on a 4.0 scale;
6. An essay outlining professional goals;
7. A minimum of two years of practice experience;
8. Results of the most recent Graduate Record Examination (taken within the last 5 years) indicating a combined score of at least 1,000;
9. Three professional references from individuals who can describe the applicant's potential for success in a doctoral-level program;
10. A current copy of resume/CV; and,
11. Verification of a license as an occupational therapist and initial NBCOT certification.

### **Student Advisement**

Existing full-time faculty will be available to advise OTD students, it is anticipated that this will take the form of mentoring, rather than the usual advisement that accompanies entry-level education.

### **Justification for Graduation Standards and Number of Credits**

The proposed professional doctorate program is 36 credits in length for those students who have earned an entry-level master's degree, which consists of foundational coursework, core coursework, and elective courses designed by the student and faculty advisor in a emphasis area that will also relate to the capstone and research project. The proposed professional doctorate program for students whose entry-level occupational degree was at the bachelor's level requires an additional 24 – 36 credits, depending on the outcome of their transcript evaluation. Both groups of students will complete a research based project as a part of the degree and defend as part of the process.

It should be noted for clarification that the Masters of Occupational Therapy (MOT) currently awarded at the University of Utah requires 111 credits (8 semester cohort model) for completions - 24 of those hours are devoted to full time internship. The purpose of the entry-level bachelor's or master's level degree is to provide all the requisite knowledge and skills at the generalist level. The philosophical basis of the proposed OTD is that this advanced clinical degree will build upon the clinician's occupational therapy degree and experience and provide an educational opportunity to become more specialized in a chosen area of emphasis. As part of the admissions process, the clinician must demonstrate that he/she has a defined area of interest or emphasis.

The credit hours required by this degree will assist the currently practicing clinician to advance her/his abilities and knowledge. To this end, the OTD does not require "clinical" hours as a part of the degree but is

more focused on the development of the thought processes and experiences needed to develop the critical thinking skills, specialization, and advanced leadership abilities related to practice. This is consistent with the other post-professional OTD's offered around the country. Much of the course work will focus on the clinical aspects of occupational therapy and the development of clinicians so that practice in the clinical realm will be at a higher more advanced level.

### External Review and Accreditation

The Accreditation Council for Occupational Therapy Education (ACOTE) has developed standards for doctoral-level programs which the University program will follow. Currently there is voluntary accreditation offered for post-professional programs although standards have been created. None of the nineteen post-professional occupational therapy programs in the U.S. has sought elective accreditation. However, the Division is exploring this option but has decided to wait until the accrediting body provides more information before the Division of Occupational Therapy pursues formal accreditation for this degree.

### Projected Enrollment:

\* Note that this does not refer to FTEs

Year	Student Headcount	# of Faculty	Student-To-Faculty Ratio	Accreditation Req'd Ratio
1	10	2 *	10:1	N/A
2	20	4 *	10:1	N/A
3	30	6 *	10:1	N/A
4	30	6 *	10:1	N/A
5	30	6 *	10:1	N/A

### Expansion of Existing Program

This is not an expansion of an existing program.

## Section III: Need

### Program Need

There is a pressing need for the profession of occupational therapy to develop advanced educational programs in order to move the profession forward. Some of these documented needs include a national shortage of doctorally-trained faculty, an urgent need to expand the profession's evidence base, a critical call for strong leadership to insure that the profession of occupational therapy continues to be able to collaborate with other professions within the health care arena, the continually changing health care delivery system in the U.S., and the emergence of refugee, immigrant, and minority populations within the U.S. that need culturally relevant interventions.

### Labor Market Demand

The entry-level occupational therapy program at the University of Utah has been producing competent graduates who are in demand from area health care facilities. U.S. News and World Report labeled occupational therapy a "recession-proof career" (U.S. News & World Report, 2008) and the U.S. Department of Labor projects growth in the occupational therapy profession as follows: "Employment is expected to grow much faster than average and job opportunities should be good, especially for therapists treating the elderly. Employment of occupational therapists is expected to increase 23 percent between

2006 and 2016, much faster than the average for all occupations. The increasing elderly population will drive growth in the demand for occupational therapy services" (U.S. DOL, 2009). Students entering the OTD program will be working professionals; attainment of their advanced degree will most likely lead to their advancement into managerial and administrative positions. In addition, graduates of this program will most likely be able to fill existing vacancies in entry-level OT educational programs as adjunct faculty. Need projections are compiled from local, state, and national data, and job placement information, including the types of jobs graduates have obtained from similar programs.

### **Student Demand**

A survey was developed in the fall of 2008 and widely distributed to current students, area practitioners, alumni of the program, and occupational therapists from neighboring states. One hundred thirty-five surveys were returned with more than half indicating a desire to enroll in an OTD program within the next year. Others indicated a desire to return to pursue an advanced degree in 5+ years.

### **Similar Programs**

There are no other OTD programs at any of the accredited universities in Utah.

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

There is no intentional collaboration with other USHE institutions.

### **Benefits**

The University of Utah will benefit from this program as it will increase the number of OT courses available to practitioners. The proposed program will increase the amount of research being done through the Division of Occupational Therapy, thus highlighting this institution as a premier occupational therapy educational program. It will benefit the community and consumers in that therapists will obtain more theoretical and skill based knowledge that they can apply while providing occupational therapy services. The program also will increase leadership skills of existing practitioners and increase the pool of doctorally prepared practitioners who can move into vacant adjunct faculty positions both here and throughout the U.S.

### **Consistency with Institutional Mission**

The fundamental mission of the Occupational Therapy program is consistent with that of the University and the College of Health. The program seeks to transmit, discover and investigate knowledge--both old and new--related to occupation, occupational therapy, occupational science and society in general and to provide the highest quality education to students of occupational therapy and occupational therapy practitioners, based on contemporary theory, practice and technologies.

The program seeks to provide service to the academic, professional and general communities in which the proposed program is involved and address the needs for occupational therapy in the community, state and region. This will be accomplished by educating both entry-level practitioners and doctoral-level occupational therapists and providing consultative, advocacy, leadership and disability prevention services to the community.

## Section IV: Program and Student Assessment

### Program Assessment

Programmatic evaluation will be accomplished through tracking applications, admissions, retention, and successful completion of OTD students. Student satisfaction surveys, exit interviews, and alumni surveys will be utilized to monitor satisfaction with the program.

### Expected Standard of Performance

After research and faculty-driven discussion, the areas of performance and standards have been set. Each course will have built in standards of performance for that particular content area. These are based on critical needs related to the prime content areas more fully described below. They are: Evidence-Based Practice (EBP); Occupational Therapy Theory; Advocacy; Leadership; Education; Occupational Justice; and Research. Prior to registering for the capstone courses (OC Th 7400 and 7450) students will be evaluated on their progress by a faculty committee. Once approved to continue, the student may then register for the capstone series. This capstone project is a critical and defining component of the Division of Occupational Therapy's OTD program. It is designed to provide evidence of programmatic outcomes by completion of a culminating project that reflects competency in the student's chosen area of emphasis.

The expected outcomes for this program align with the doctoral level outcomes developed by the Accreditation Council for Occupational Therapy Education (ACOTE) and are listed below:

- 1) EVIDENCE-BASED PRACTICE (EBP): Graduates of the OTD program will be able to apply, evaluate, and synthesize evidence-based practice to create a specific program and/or intervention to promote efficacious, client-centered, and culturally relevant practice. This exceeds the ACOTE doctoral degree-level standard of "demonstrates thorough knowledge of evidence-based practice." Examples of measurement of outcome achievement include case presentations, submission of scholarly papers summarizing EBP, clients' goal attainment scales, and client satisfaction surveys.
- 2) OCCUPATIONAL THERAPY THEORY: Graduates of the OTD program will be able to use knowledge of current theoretical and practice models to articulate and improve service provision, and/or policies in response to society's evolving and changing occupational needs. This addresses the ACOTE doctoral degree-level standard of "be prepared to articulate and apply occupational therapy theory and evidence-based evaluations and interventions to achieve expected outcomes as related to occupation." Evidence of successful achievement of this outcome will include: active engagement in class discussions, ability to summarize and critically evaluate readings, and individual assignments focusing on critical analysis of theories.
- 3) ADVOCACY: Graduates of the OTD program will be able to influence policy, practice, and education by being advocates for occupational therapy for individuals, populations, organization, and for the profession. This meets the ACOTE doctoral degree-level standard of "be prepared to advocate as a professional for the occupational therapy services offered and for the recipients of those services." Successful achievement of this outcome will be measured by engagement in a community-based or institutional-based project in which there will be a demonstration of the graduate's ability to act as a change agent through tangible recommendations for changes and enlisting support from others.

4) LEADERSHIP: Graduates of the OTD program will demonstrate leadership skills through the assumption of leadership roles at local, national, and/or international levels within the occupational therapy profession and broader health arenas. This aligns with the ACOTE established doctoral degree-level standard of "demonstrate active involvement in professional development, leadership, and advocacy." Achievement of this outcome will be measured through assumption of leadership roles in local, state, national, and/or international professional associations.

5) EDUCATION: Graduates of the OTD program will be able to develop and implement educational experiences for professional education, specific clients, populations, settings, and/or the general public through the application of learning theory and educational design principles. This exceeds the ACOTE doctoral degree-level standard that states that the OTD graduate should "be prepared to be a lifelong learner and keep current with evidence-based practice." Examples of successful attainment of this outcome include the ability to design and deliver an educational experience, as well as collect, reflect, and analyze feedback from learners.

6) OCCUPATIONAL JUSTICE: Graduates of the OTD program will be able to address individual, institutional, and societal issues in health and with marginalized populations in order to promote occupational justice. This addresses the ACOTE doctoral degree-level standard of "demonstrating in-depth knowledge of delivery models, policies, and systems related to the area of practice where occupational therapy is currently practiced and where it is emerging as a service." Evidence of attainment of this outcome will be the inclusion of occupational justice principles into a student's program design.

7) RESEARCH: Graduates of the OTD program will be able to increase the body of knowledge in occupational therapy practice through the preparation and dissemination of scholarship in the student's chosen area of emphasis. This correlates with the ACOTE doctoral degree-level standard that states that a graduate must "be prepared to be an effective consumer of the latest research and knowledge bases that support practice and contribute to the growth and dissemination of research and knowledge." Examples of accomplishment of this outcome will be through the submission of articles for publication in refereed publications, as well as submission of proposals for presentation at conferences, professional meetings, and other interdisciplinary venues.

8) CULMINATING PROJECT: A critical component of this OTD program will be the student's capstone project which will be evidence of the programmatic outcome of completion of a culminating project that reflects competency in the student's chosen area of emphasis. This reflects the ACOTE doctoral degree-level standard which states that the graduate can relate theory to practice and demonstrate synthesis of advanced knowledge in a practice area through completion of a culminating project. Successful completion of the capstone project, including the graduate's defence of his/her work, will be the measurement of this outcome.

## Section V: Finance

Financial Analysis Form					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Students</b>					
Project FTE Enrollment	6	12	18	18	18
Cost Per FTE	8,538	8,538	8,538	8,538	8,538
Student/Faculty Ratio	10:1	10:1	10:1	10:1	10:1
Projected Headcount	10	20	30	30	30
<b>Projected Tuition</b>					
Gross Tuition	87,318	183,368	288,804	303,244	318,407
Tuition to Program	34,507	72,633	114,397	120,116	126,122
<b>5 Year Budget Projection</b>					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Expense</b>					
Salaries & Wages	38,520	77,040	115,560	115,560	115,560
Benefits	12,712	25,423	38,135	38,135	38,135
Total Personnel	3	4	5	5	5
Current Expense	0	0	0	0	0
Travel	0	0	0	0	0
Capital	0	0	0	0	0
Library Expense	0	0	0	0	0
Total Expense	\$51,232	\$102,463	\$153,695	\$153,695	\$153,695
<b>Revenue</b>					
Legislative Appropriation	0	0	0	0	0
Grants & Contracts	0	0	0	0	0
Donations	0	0	0	0	0
Reallocation (SCH)	17,100	34,200	51,300	51,300	51,300
Tuition to Program	34,587	72,633	114,397	120,116	126,122
Fees	0	0	0	0	0
Total Revenue	\$51,687	\$106,833	\$165,697	\$171,416	\$177,422
<b>Difference</b>					
Revenue-Expense	\$ 455	\$ 4,370	\$ 12,002	\$ 17,721	\$ 23,727

### Budget Comments

The project enrollment is for 10 students to start the program each year so that there will be a maximum of 30 students after the initial three year startup. Students are not expected to enroll full time. The FTE enrollment is calculated by each student taking six credits which equates to .6 FTE per student. This is then multiplied by the expected student enrollment for each year. The projected tuition amount is based on

tuition rates for 2008-2009. Since the percentage of increase in tuition is not yet known, an estimated 5 percent increase is assumed for each year including year the first. The amount is for a student taking 6 credits per semester for 3 semesters.

### **Funding Sources**

The OTD program will be funded through differential tuition and productivity funds based on student credit hours (SCH). Differential tuition is prorated at \$183/credit hour and is based on 6 credits per semester. This totals \$1,098 per student per semester. SCH is calculated at \$95 per credit hour.

### **Reallocation**

This program will be supported through internal reallocation.

### **Faculty Compensation**

Salaries & Wages: This number reflects the expense of teaching the particular classes for each year. This number reflects an average of current faculty salaries divided by the effort required to teach the classes.

### **Impact on Existing Budgets**

There will be no adverse financial impact on the existing MOT program budget. With differential tuition, and an increase in student credit hours, there will be additional revenue being generated through the OTD program.



## Appendix A: Program Curriculum

Course Prefix & Number	Title	Credit Hours
<b>Pre-Requisite Courses</b>		
PSY 6250	Applied Statistics	4
OC TH 6000	Research in Occupational Therapy	3
OC TH 6060	Foundational Theories	3
WRTG 7060	Scientific Writing	3
Other Departments	Electives and/or additional courses	11-23
	<b>Sub-Total</b>	<b>24-36</b>
<b>Core Courses</b>		
OC TH 7020	Occupational Science	3
OC TH 7060	Advanced Theory	3
OC TH 7130	Teaching & Adult Learning	3
OC TH 7150	Culture and Occupation	3
OC TH 7240	Leadership	3
OC TH 7270	Program Development/Grant Writing	3
OC TH 7300	Evidence-Based Practice and Research I	3
OC TH 7350	Evidence-Based Practice and Research II	3
OC TH 7400	Capstone I	3
OC TH 7450	Capstone II	3
	<b>Sub-Total</b>	<b>30</b>
<b>Elective Courses</b>	<b>Academic Program/Department Courses or Programs (possible # of credits in right column)</b>	
OC TH 6350	Disability Studies	3
OC TH 6860	Disability Studies Forum	1
OC TH 6720	Immigration & Resettlement: Interdisciplinary & Community Perspectives	3
OC TH 7950	Independent Study	1-3
OC TH 7940	Special Topics	3
OC TH 7970	Clinical Problems in OT	1-3
OC TH 7982	Special Workshops	1-5
	Center for Teaching and Learning	3-9
	Professional Practice in Special Ed. <i>OR</i> Family & Consumer Studies <i>OR</i> Social & Behavioral Sciences	3-9
	Gerontology Interdisciplinary Program	3-9
	<b>Sub-Total</b>	<b>6-9</b>
<b>Emphasis Areas</b>		
	Contemporary Trends in Practice with Children & Youth	
	Occupational Justice	
	Disability Studies	
	Excellence in Teaching	
	Program & Policy Development & Advocacy	

Course Prefix & Number	Title	Credit Hours
	Optimal Aging	
	<b>Total Number of Credits</b>	<b>36</b>

### OTD Course Descriptions

#### **WRTG 7060 Scientific Writing (3)**

Prerequisite: Graduate standing required.

Designed to help graduate students in the sciences develop the skills needed for scientific research and communication. Provides students with the opportunity to write in the variety of forms that they are likely to encounter in their professional lives (i.e. memos, proposals, reports, presentations) in a scientific context.

#### **PSY 6250 Applied Statistics**

**Prerequisite:** college-level intermediate algebra (or higher level math class).

A graduate-level examination of statistical procedures commonly used in the health, social and behavioral sciences. Topics include: sampling distributions, probability, confidence intervals, t tests, ANOVA, correlation, regression, nonparametric statistics, data transformations, and the logic of null hypothesis significance testing.

#### **OC TH 6000 Research in Occupational Therapy (3)**

This course studies the descriptive, comparative, and evaluative research methods (including qualitative and quantitative) as they apply to medical, social, and basic science relevant to occupational therapy practice. Goal of the course is to encourage students to incorporate research and its outcomes into practice. Students will be required to critically analyze professional literature as well as develop a pilot project.

#### **OC TH 6060 Foundational Theories in Occupational Therapy (3)**

The history, philosophy, and integration of major theoretical frameworks and models associated with occupational therapy practice are discussed in this course. Clinical reasoning is explored as an underlying foundation to therapeutic practice.

#### **OC TH 7020 Occupational Science (3 Cr.)**

This course will use seminal literature, both current and historical, to explore current issues, controversies, and alternative interpretations of Occupational Science and to examine the emergence and evolution of Occupational Science worldwide. The temporal, spatial, physical and contextual aspects of occupation will be explored. The relationships of occupation to health, well-being and adaptation through the ICF and other models of participation will be considered. The relationship of Occupational Science and Occupational Therapy, and occupation-based practice will be explored.

#### **OC TH 7060 Advanced Theories in Occupational Therapy (3 Cr.)**

The course will review the historical foundations of occupation as the central paradigm of the profession. Students will learn to analyze the major conceptual models and supporting theoretical and evidence based research, including the Model of Human Occupation, Occupational Adaptation, Ecology of Human

Performance, and the Person – Environment – Occupation Model. The concept of participation is discussed as a key component of health according to the International Classification of Functioning (ICF) (World Health Organization) and a major outcome of the Occupational Therapy Practice Framework. Students will also select, analyze and apply other practice models and research that will relate to case studies, and in particular, a case from their own area of practice.

#### **OC TH 7130 Academic & Clinical Teaching in Occupational Therapy (3 Cr.)**

This course will focus on the development of teaching and learning skills applicable across a variety of settings. Principles of adult learning theory will be explored in detail as they relate to academic and clinical education. Students will learn the process of instructional design including developing a syllabus, course objectives, assessment instruments and grading criteria. Students will develop teaching skills appropriate for varying audiences (students, peers, clients) and the type of setting (academic, clinical, and professional conferences/workshops). Mechanisms to enhance both presentation and delivery of material will be emphasized, along with learning different formats using advanced technology. Opportunities to receive and provide feedback to others will be provided.

#### **OC TH 7150 Culture and Occupation (3 Cr.)**

The influence of culture upon occupational roles and performances is examined in this course where learners will be required to explore culture at multiple levels. They will examine their own culture and its impact on their practice; the culture of their clients and its impact on health beliefs, practices and occupations; the professional culture of occupational therapy; and societal influences on occupational choice. The concept of cultural competence and its characteristics will be examined in relationship to the learners' practice. Occupational justice will also be discussed as it relates to societal needs

#### **OC TH 7240 Leadership (3 Cr.)**

This leadership course is designed to explore leadership using past experiences, contemporary leadership theories and experiential exercises to move the student from where they are as a leader forward to become a stronger change agent who is knowledgeable about how systems and policies are developed using theories. Content will look at personal leadership style as well as applied leadership, change theory, entrepreneurial skills and innovative practice.

#### **OC TH 7270 Program Development/Grant Writing (3 Cr.)**

This course is designed to give students skills related to all components of developing and evaluating a proposal for new services. Understanding the implications of different demographic and societal trends on populations will be used to generate ideas for new programming. The primary assignment for this course is the completion of a program proposal. This proposal will include a completed needs analysis, an evidence-based literature review, and an in-depth description for a new occupation-based program of services, including finances, marketing, and program evaluation. Along with learning how to write a successful proposal, students will gain knowledge and skills to obtain funding through a variety of sources. Each student must include a request for funding in the proposal to an appropriate funding agency, (i.e., foundation, grant competition) that is consistent with that funding agency's specifications.

#### **OC TH 7300 Evidence-Based Practice and Research I (3 Cr.)**

This is the first of two courses that emphasize integrating research and occupational therapy practice. The course is designed to develop skills with identifying key words and accessing appropriate data bases for carrying out an evidence-based inquiry. Throughout the course, students will read and critically evaluate peer-reviewed qualitative and quantitative articles, in terms of research design, trustworthiness, validity,

and reliability, respectively. Through this process, students will gain and apply their knowledge of interpreting statistics as well. Students will be introduced to the critically appraised topic (CAT) process and will demonstrate basic proficiency with synthesizing the best evidence from both qualitative and quantitative studies. Students will be expected to frame their findings from evidence-based inquiry in terms that clients and lay persons can understand.

#### **OC TH 7350 Evidence-Based Practice and Research II (3 Cr.)**

**Prerequisite:** OC TH 7300-Evidence-Based Practice and Research I

This is the second of two courses that increase understanding and application of research and background information to address occupational therapy evidence-based questions and/or programmatic outcomes. The structure of the course provides opportunities to further understand and analyze both quantitative and qualitative research designs. Students will understand how research designs and methods relate to research questions and to the information available. This course will also involve increased application of database skills and synthesis of information as evidenced by completion of a scholarly paper as background and preparation for the Capstone 1 project.

#### **OC TH 7400 Capstone I (3 Cr.)**

**Prerequisites:** OC TH 7300-Evidence-Based Practice and Research I, and OC TH 7350-Evidence-Based Practice and Research II, and OC TH 7270-Program Development/Grant Writing; Permission of the Division.

This course is designed to integrate knowledge and skills acquired during doctoral coursework with a scholarly project designed by the student to meet his or her professional goals. Upon completion of 12 credits in the OTD program, each student will identify a relevant and contemporary issue that bears further study. After further study of the evidence and literature relevant to the topic, the student will write a paper that proposes systematic action to be taken with that topic that will lead to a meaningful outcome. The proposal can focus on the development of a new occupational therapy intervention program, the design of a research study, design of a college level course, program evaluation, or recommendations for institutional policy change. Based on the topic, a project committee chair within the Division of Occupational Therapy will be assigned to provide guidance with completion of the proposal. Students will prepare and then defend their proposal before a committee. Completion of Capstone I is required before registering for Capstone II.

#### **OC TH 7450 Capstone II (3 Cr.)**

**Prerequisites:** OC TH 7400-Capstone I, OC TH 7300-Evidence-Based Practice and Research I, and OC TH 7350-Evidence-Based Practice and Research II, and OC TH 7270-Program Development and Grant Writing; Permission of the Division.

For completion of this course, students will carry out the action or program proposed during Capstone I. For example, if a student has proposed a college course, during the Capstone II course, the student will implement the course or part of it. Or, if a student proposed a specific research study, he or she would collect the data that was proposed and complete the study. If, for example, a student proposed a justification and plan to change policy at the state level the action proposed would be presented formally to appropriate policy makers in the hopes the action would be taken. The major outcomes for Capstone II are a) the implementation of the proposal approved of in Capstone I, b) collection of data regarding the action, program, or study, c) analysis of this data and d) a discussion of how these results contribute to the advancement of the occupation in society, occupational science, or occupational therapy knowledge base. In addition to completion of a formal paper, students will disseminate their results to the appropriate audience through presentations at the state and/or national level, peer reviewed publications and/or

implementation of the project. Students will defend their final project before their committee. Regular meetings will be held with advisors during the process.

**Pre-Requisite Courses for OTD Program (for BS to OTD track):**

**WRTG 7060 Scientific Writing (3)**

**Prerequisite:** Graduate standing required.

Designed to help graduate students in the sciences develop the skills needed for scientific research and communication. Provides students with the opportunity to write in the variety of forms that they are likely to encounter in their professional lives (i.e. memos, proposals, reports, presentations) in a scientific context.

**PSY 6250 Applied Statistics**

**Prerequisite:** college-level intermediate algebra (or higher level math class).

A graduate-level examination of statistical procedures commonly used in the health, social and behavioral sciences. Topics include: sampling distributions, probability, confidence intervals, t tests, ANOVA, correlation, regression, nonparametric statistics, data transformations, and the logic of null hypothesis significance testing.

**OC TH 6000 Research in Occupational Therapy (3)**

This course studies the descriptive, comparative, and evaluative research methods (including qualitative and quantitative) as they apply to medical, social, and basic science relevant to occupational therapy practice. Goal of the course is to encourage students to incorporate research and its outcomes into practice. Students will be required to critically analyze professional literature as well as develop their own research project.

**OC TH 6060 Foundational Theories in Occupational Therapy (3)**

The history, philosophy, and integration of major theoretical frameworks and models associated with occupational therapy practice are discussed in this course. Clinical reasoning is explored as an underlying foundation to therapeutic practice.

## Appendix B: Program Schedule

The following schedule is a suggested schedule for students wishing to attend year round and take 6 credit hours per semester.

### Master's to OTD

	Spring	Summer	Fall
Year 1	OC TH 7020 - OS 3 OC TH 7130 - Teaching & Learning 3	OC TH 7060 – Adv Theory 3 OC TH 7150 – Culture & Occupation 3	OC TH 7270 -Program Dev/Grant 3 OC TH 7300 - EBP/Research I 3
Year 2	OC TH 7350 - EBP/Research II 3 OC TH 7240 - Leadership 3	OC TH 7400 - Capstone I 3 Elective 3	Elective 3 OC TH 7450 - Capstone II 3

Core Courses 30

Electives 6

Total Credits 36

### Bachelor's to OTD (Transitional time-limited track)

	Spring	Summer	Fall
Year 1 Foundations	PSY 6250 Applied Statistics 3 OC TH 6060 Found. Theories 3	WRTG 7060 Scientific Writing 3 OC TH 6000 Research in OT 3	Research Methods 3 Elective 3
Year 2	OC TH 7020 - OS 3 OC TH 7130 – Teaching & Learning 3	OC TH 7060 - Adv Theory 3 OC TH 7150 – Culture & Occupation 3	OC TH 7270-Prog Dev/Grant 3 OC TH 7300 - EBP/Research I 3
Year 3	OC TH 7350 - EBP/Research II 3 OC TH 7240 - Leadership 3	OC TH 7400 - Capstone I 3 Elective 3	Elective 3 OC TH 7450 - Capstone II 3

Pre-Requisites 24-36 (minimum required pre-requisites; additional electives

Core Courses 30 may be required based on individual review of past

Electives 6 educational experiences)

Total Credits 60-72

## Appendix C:

The Accreditation Council for Occupational Therapy Education (ACOTE) has developed Standards for a Doctoral Degree-Level Educational Program for the Occupational Therapist (ACOTE, 2006). The Preamble for these Standards states:

*"The rapidly changing and dynamic nature of contemporary health and human services delivery systems provides challenging opportunities for the occupational therapist to use knowledge and skills in a practice area as a direct care provider, consultant, educator, manager, leader, researcher, and advocate for the profession and the consumer." (ACOTE, 2006, page 1)*

The specific areas of competencies for professional doctorate programs are as follows:

### *FOUNDATIONAL CONTENT REQUIREMENTS:*

*Program content must be based on a broad foundation in the liberal arts and sciences. A strong foundation in the biological, physical, social, and behavioral sciences supports an understanding of occupation across the life span. Coursework in this area must facilitate development of the following competencies:*

- *Articulate the influence of social conditions and the ethical context in which humans choose and engage in occupations;*
- *Demonstrate the ability to use technology in screening, evaluation, intervention, and data analysis as appropriate for the area of practice;*
- *Demonstrate knowledge and appreciation of the role of socio-cultural, socioeconomic, diversity factors, and lifestyle choices in contemporary society;*
- *Demonstrate knowledge of global social issues, along with prevailing health and welfare needs;*
- *Demonstrate knowledge and understanding of human development throughout the life span (infants, children, adolescents, adults, and elderly persons, and,*
- *Apply quantitative statistics and qualitative analysis to interpret tests, measurements, and other data.*

### *BASIC TENETS OF OCCUPATIONAL THERAPY:*

*Program content in this area focuses on the history, philosophical base, and theoretical foundations of the profession of occupational therapy. Coursework in this area aims to facilitate the development of the following competencies:*

- *Explain the meaning and dynamics of occupation and activity, including the interaction of areas of occupation, performance skills, performance patterns, activity demands, context(s), and client factor;*
- *Apply theoretical constructs to evaluation and intervention with various types of clients and practice contexts, including population-based approaches, to analyze and effect meaningful occupation*
- *Articulate to consumers, potential employers, colleagues, third-party payers, regulatory boards, policymakers, other audiences, and the general public both the unique nature of occupation as viewed by the profession of occupational therapy and the value of occupation to support participation in context(s) for the client;*
- *Articulate the importance of balancing areas of occupation with the achievement of health and wellness, and Explain the role of occupation in the promotion of health and the prevention of disease and disability for the individual, family, and society;*

- *Analyze the effects of physical and mental health, heritable diseases and predisposing genetic conditions, disability, disease processes, and traumatic injury to the individual within the cultural context of family and society on occupational performance, and,*
- *Analyze, synthesize, evaluate, and apply models of occupational performance and theories of occupation.*

#### SCREENING, EVALUATION, AND REFERRAL:

*The process of screening, evaluation, referral, and diagnosis as related to occupational performance and participation must be culturally relevant and based on theoretical perspectives, models of practice, frames of reference, and available evidence. In addition, this process must consider the continuum of need from individuals to populations. The program must facilitate development of the following competencies:*

- *Use standardized and non-standardized screening and assessment tools to determine the need for occupational therapy intervention. Select appropriate assessment tools based on client needs, contextual factors, and psychometric properties of tests. These must be relevant to a variety of populations across the life span, culturally relevant, based on available evidence, and incorporate use of occupation in the assessment process. These include, but are not limited to, specified screening tools, skilled observations, assessments, checklist, occupational histories, consultations with other professionals, and interviews with the client, family, significant others, and community;*
- *Interpret criterion-referenced and norm-referenced standardized test scores based on an understanding of sampling, normative data, standard and criterion scores, reliability, and validity. Consider factors that might bias assessment results, such as culture, disability status, and situational variables related to the individual and context; and,*
- *Articulate screening and evaluation processes for a practice area. Use evidence-based reasoning to analyze, synthesize, evaluate, and diagnose problems related to occupational performance and participation.*

#### INTERVENTION PLAN: FORMULATION AND IMPLEMENTATION:

*The process of formulation and implementation of the therapeutic intervention plan to facilitate occupational performance and participation must be culturally relevant; reflective of current occupational therapy practice; based on available evidence; and based on theoretical perspectives, models of practice, and frames of reference. In addition, this process must consider the continuum of need from individuals to populations. The program must facilitate development of the following competencies:*

- *Use evaluation findings to diagnose occupational performance and participation based on appropriate theoretical approaches, models of practice, frames of reference, and interdisciplinary knowledge. Develop occupation-based intervention plans and strategies (including goals and methods to achieve them) based on the stated needs of the client as well as data gathered during the evaluation process in collaboration with the client and others. Intervention plans and strategies must be culturally relevant, reflective of current occupational therapy practice, and based on available evidence.*
- *Select and provide direct occupational therapy interventions and procedures to enhance safety, wellness, and performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, play, leisure, and social participation through the therapeutic use of occupation.*
- *Provide development, remediation, and compensation for physical, cognitive, perceptual, sensory (e.g., vision, tactile, auditory, gustatory, olfactory, pain, temperature, pressure, vestibular, proprioception), neuromuscular, and behavioral skills.*



- *Demonstrate care coordination, case management, and transition services in traditional and emerging practice environments*
- *Modify environments (e.g., home, work, school, community) and adapt processes, including the application of ergonomic principles*
- *Design, fabricate, apply, fit, and train in assistive technologies and devices (e.g., electronic aids to daily living, seating systems) used to enhance occupational performance.*
- *Provide design, fabrication, application, fitting, and training in orthotic devices used to enhance occupational performance and training in the use of prosthetic devices, based on scientific principles of kinesiology, biomechanics, and physics.*

#### **CONTEXT OF SERVICE DELIVERY:**

*Context of service delivery includes the knowledge and understanding of the various contexts, such as professional, social, cultural, political, economic, and ecological, in which occupational therapy services are provided. Competencies in this area should include:*

- *Critically evaluate and address the various contexts of health care, education, community, political, and social systems as they relate to the practice of occupational therapy;*
- *Critically analyze the current policy issues and the social, economic, political, geographic, and demographic factors that influence the various contexts for practice of occupational therapy;*
- *Integrate the current social, economic, political, geographic, and demographic factors to promote policy development and the provision of occupational therapy services;*
- *Advocate for changes in service delivery policies, effect changes in the system, and identify opportunities to address societal needs;*
- *Critically analyze the trends in models of service delivery and their potential effect on the practice of occupational therapy, including, but not limited to, medical, educational, community, and social models, and,*
- *Use national and international resources in making assessment or intervention choices, as well as contribute to the development and implementation of international occupational therapy education, research, and practice.*

#### **LEADERSHIP AND MANAGEMENT:**

*Leadership and management skills include principles and applications of leadership and management theory. OTD programs are designed to produce leaders in the profession, and therefore, the following competencies must be developed:*

- *Demonstrate leadership skills in the ability to plan, develop, organize, and market the delivery of services to include the determination of programmatic needs, service delivery options, and formulation and management of staffing for effective service provision.*
- *Demonstrate leadership skills in the ability to design ongoing processes for quality improvement (e.g., outcome studies analysis) and develop program changes as needed to ensure quality of services and to direct administrative changes.*
- *Demonstrate knowledge of and the ability to write program development plans for provision of occupational therapy services to individuals and populations*
- *Identify and adapt existing models or develop new service provision models to respond to policy, regulatory agencies, and reimbursement and compliance standards.*

#### **RESEARCH:**

*Application of research includes the ability to read, understand, and conduct research that affects practice*

*and the provision of occupational therapy services. The program must facilitate development of the following competencies:*

- *Articulate the importance of research, scholarly activities, and the continued development of a body of knowledge relevant to the profession of occupational therapy;*
- *Select, apply, and interpret basic descriptive, correlational, and inferential quantitative statistics and code, analyze, and synthesize qualitative data;*
- *Demonstrate the skills necessary to design a research proposal that includes the research question, relevant literature, sample, design, measurement, and data analysis;*
- *Design and implement a research study that evaluates clinical practice, service delivery, and/or professional issues;*
- *Write scholarly reports appropriate for presentation or for publication in a peer-reviewed journal;*
- *Demonstrate an understanding of the process of locating and securing grants and how grants can serve as a fiscal resource for research and practice, and,*
- *Complete a culminating project that relates theory to practice and demonstrates synthesis of advanced knowledge in a practice area.*

#### *PROFESSIONAL ETHICS, VALUES, AND RESPONSIBILITIES:*

*Professional ethics, values, and responsibilities include an understanding, appreciation of, and commitment to the ethics and values of the profession of occupational therapy. The OTD program must facilitate development of the following competencies:*

- *Demonstrate advocacy by participating in and exploring leadership positions in organizations or agencies promoting the profession (e.g., American Occupational Therapy Association, state occupational therapy associations, World Federation of Occupational Therapists, advocacy organizations), consumer access and services, and the welfare of the community, and,*
- *Promote occupational therapy by educating other professionals, service providers, consumers, third-party payers, regulatory bodies, and the public.*

## Appendix D: Faculty (in reverse alpha order)

**JoAnne Wright, PhD, OTR/L, CLVT, Division Chair and Professor (Clinical):** Dr. Wright is the Developer/Chair of the Division of Occupational Therapy, College of Health at the University of Utah. Dr. Wright received her undergraduate degree from the University of Utah College of Health, Department of Health Education. She received her Master of Science Degree in Occupational Therapy from Tufts University and her Ph.D. in Occupational Science, as well as a Graduate Certificate in Gerontology, from the University of Southern California. Dr. Wright has been a faculty member at the University of Southern California as well as graduate advisor at Western Michigan University and has worked extensively in student education. She has been an occupational therapist for over 20 years and is also a certified low vision therapist (CLVT). She is an adjunct professor in the Department of Health Promotion and Education, the Center for Aging and the College of Nursing Gerontology Certificate Program. Dr. Wright brings to this project strong leadership skills and a background working with a variety of clients and students.

**Yda Smith, MOT, OTR/L, ABD, Assistant Professor (Clinical):** Professor Smith received her OT degree at the University of Puget Sound. She has been a full-time faculty member with the Division of Occupational Therapy at the University of Utah for the past ten years. She is also Faculty Director for University Neighborhood Partners – Hartland Partnership, providing student-based services to assist recently arrived refugees adjust to life in America. She is currently working on a dissertation through the Department of Education, Culture and Society looking at the experiences of the Somali Bantu during their refugee resettlement process in Salt Lake City. Yda has recently received an Interdisciplinary Teaching Seed Grant Award from the office of Interdisciplinary Studies and a course development grant from the International Exchange Committee at the University of Utah.

**Pollie Price, PhD, OTR/L, Assistant Professor:** Dr. Price earned her research doctorate from the University of Southern California Department of Occupational Science and Occupational Therapy in 2003. Dr. Price is in her fifth year of the tenure process. Dr. Price has successfully taught graduate students for the past 6 years at the University of Utah. Prior to that, she has had faculty and adjunct appointments at the University of Southern California Department of Occupational Science and Occupational Therapy, University of Kansas Medical Center Occupational Therapy Program, California State University-Dominguez Hills, and has guest lectured at the University of Florida Department of Occupational Therapy, Gainesville, Florida, and Rocky Mountain University of Health Professions Transition to OTD Program, Provo, Utah. Areas of teaching expertise include research and professional connections between research, theory, best practice and education; group process; and adult rehabilitation. She has also helped to develop the University of Utah Graduate Certificate Program in Disability Studies, and co-developed and co-teaches the core interdisciplinary core course.

**Tina McNulty, PhD, OTR/L, Assistant Professor:** Dr. McNulty is currently an assistant professor at the University of Utah. She has worked for ten years as an educator at Colorado State University, University of New Mexico, and Pacific University in Oregon. Prior to working in academia, she worked for ten years in geriatric rehabilitation and in adolescent and adult psychiatry programs as licensed occupational therapy. Dr. McNulty has published articles focused on estimating home safety from the hospital setting, implementation of fall reduction strategies with well community-dwelling older adults, functional concerns of older adults with and without depressive symptoms, and time use of women who are homeless living in an emergency shelter for survivors of domestic violence. She has also published an article about the use problem-based learning to promote professional reflection and growth. She is currently investigating potentially modifiable lifestyle factors in persons with Parkinson's disease, i.e., time use, perceptions of

occupational challenges, and level of resilience.

**Louise Dunn, ScD, OTR/L, Assistant Professor:** Dr Dunn earned her research doctorate from Boston University in 2005. She is on a tenure track and successfully has taught graduate students for the past five years at the University of Utah. Her areas of expertise include pediatrics, evidence based practice, research, and group process. She redesigned three of the pediatric courses, developed a service-learning component for the pediatric coursework, designed two of the research courses, and successfully facilitated discussions groups for two evidence-based practice courses at Boston University.

**Donna Costa, DHS, OTR/L, FAOTA, Professor (Clinical):** Dr Costa has an earned professional doctorate from the University of Indianapolis in Occupational Therapy, as well as a Master's degree in Health Care Administration from the New School of Social Research in NY, and dual baccalaureate degrees in Occupational Therapy and Psychology from the University of Buffalo. She is currently a Professor (Clinical) at the University of Utah, also holds an adjunct teaching appointment in the College of Nursing, and is a faculty member in the Center on Aging. Dr. Costa is a Fellow of the American Occupational Therapy Association and is the author of two books on fieldwork education published by AOTA Press, as well as numerous articles. She was formerly the Chair of the Occupational Therapy Program at Stony Brook University in NY where she developed and obtained grant funding for an OTA to OT Career Laddering Program leading to the BS/MS degrees.

**Beth Cardell, MS, OTR/L, Assistant Professor (Clinical):** Professor Cardell received her OT degree from Misericordia University and a masters degree in Health Promotion and Education from the University of Utah. She has been full-time faculty with the Division of Occupational Therapy at the University of Utah since 2003. Her teaching interests include evaluation methods with the adult population, cognition, anatomy and neuroanatomy, and activity analysis. Beth received certification as a Higher Education Teaching Specialist in 2007 and is currently pursuing her PhD in the Department of Health Promotion and Education. Her research interests include the health of people with chronic disabilities, adjustment to sudden onset disability, and resilience.

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January 7, 2010

MEMORANDUM

TO: State Board of Regents  
FROM: William A. Sederburg  
SUBJECT: Master Plan Committee Discussion

Issue

By state statute (Utah Code 53 B-6-101) the Board of Regents is to maintain a master plan for higher education in Utah. The latest draft of a master plan dates back to 2000 and is in need of updating.

Background

The enclosed discussion document, as provided by Committee Chair Zenger, will serve as an outline for the Committee's strategic discussion. In preparation for the discussion and for back ground purposes, please review the 1986 Master Plan Executive Summary (R301), the 2000 Master Plan (R302), the System-wide Vision and Mission Statements (R310), the Configuration of the USHE and Institutional Missions and Roles, and the Service Area Designations and Coordination of Off-Campus Courses and Programs (R315). Each of these policies can be accessed on-line through the Regents' Policy set at <http://www.utahsbr.edu/bor01g.html#section3>.

Commissioner's Recommendation

This item is for information only.

WAS/CKM /JAC  
Attachments

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William A. Sederburg, Commissioner

# Community/Government Relations & Planning Committee

## Master Plan Discussion

January 15, 2010

This document is meant to assist the Committee in its discussion of the USHE master plan. Questions and issues listed were initially raised by Committee Chair Zenger.

### Governing Principles

- Focus for Regents should begin at the State level, not institutions one-at-a-time.
- USHE objectives should include increasing educational attainment in the State, with an emphasis on preparing students for successful entry into the workforce.

### Strategic Issues

#### 1. Strategic Issues at the State Level

- a. Prepare a draft of a master plan for higher education, as outlined in Utah Code 53 B-6-101. Should the next strategic plan essentially be an update of the Master Plan 2000, which can be found online as part of the Regents policy set (R302) at <http://www.utahsbr.edu/policy/R302.pdf>
  - i. In addition to the eight elements included in the 2000 Strategic Plan, should the following also be included:
    1. Aims, purposes and objectives for the system as a whole?
    2. Defining the roles and programs of each institution?
    3. Criteria for determining future needs for new programs, and the elimination, curtailment of consolidation of current programs?
    4. Ways to finance new projects?
    5. New methods and sources of financial support for higher education?
    6. Procedures for the maximum utilization of existing facilities?
  - ii. Are there other elements missing or outdated in the Master Plan 2000 document that should be included or deleted in the next master plan?
- b. Prepare a document that lays out the position of the Regents regarding several broader issues currently being faced by Utah and other State systems. The

Regents and the Commissioner's Office need to be reasonably unified on these issues. These issues include:

- i. To what degree are the educational resources of the State being matched to the pressing public needs of the State? Do we have the right mix of degrees and disciplines?
- ii. Do Regents currently provide a proper balance between oversight and regulation with allowing the nine institutions appropriate autonomy? If not, what needs to be changed? On which side do we err?
- iii. Do we have the proper balance between institutions having entrepreneurial freedom and us providing clarity for each institution regarding its mission? Are we allowing inappropriate or wasteful mission creep? Are we providing the proper vision for what institutions should aspire to become?
- iv. Are we using our function of allocating resources to institutions as a way to further an efficient State system of higher education and to ensure that State goals are met? If we are not, how should we begin to do that more effectively?
- v. Have we provided appropriate clarity to institutional Boards of Trustees regarding their responsibilities? Would this enable us to move further away from institutional oversight and regulation? (How should we go about better educating these Boards on their responsibilities going forward? Should the Regents use the occasion of their visits to Trustee meetings as teaching opportunities along with information acquisition? Or should we schedule two sessions per year to which we invite all Trustees for training on their responsibilities, with the expectation that everyone would be to attend one?)
- vi. How should we be interacting with the other non-public funded institutions of higher education? (Utah Code Title 53-B-6-103 specifically says that the USHE "shall seek the cooperation of all private, denominational, and other post-high school educational institutions situated in this state which are not supported by public funds.")
- vii. Is the current practice of having our regional universities combine the community college function with a four-year institution that grants bachelor's and master's degrees a sustainable model in the long run?

*Are there other issues needing addressing and what is the best way to arrive at a clear answer to these questions?*



## 2. Strategic Goals to Measure State-wide Performance

1. The Regents have asked the Commissioner's staff to prepare state-wide goals and measurable objectives regarding participation, completion, and economic development. As the discussion of the next master plan proceeds, what are the specific data points that should be included as measureable objectives to ensure the fulfillment of the goals? Below are some possible data points to consider.
  - a. Preparation—K-16 Alliance progress
  - b. Access—Tuition as % of average income, availability of needs based scholarships
  - c. Participation—Targets for various racial and economic groups
  - d. Mobility—Ability to move credits from one institution to another, consistency of standards from one institution to another
  - e. Retention—A standard for measuring the number who complete what they started
  - f. Graduation rates—various categories of institutions and their graduation rates
  - g. Economic development—measures of contributions to State's and region's economy
2. Are there other data points or more specific points within the above categories that the Regents would like include?

January 6, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Utah State University–Associate of Pre-Engineering–Action Item.

Issue

Officials at Utah State University (USU) request approval to offer an Associate of Pre-Engineering degree, effective Spring Semester 2010. This program was approved by the Utah State University Institutional Board of Trustees on November 20, 2009, and was approved by the Regents' Program Review Committee on December 11, 2009.

Background

The proposed Associate of Pre-Engineering (APE) degree will be administered by USU's College of Engineering and will be offered at USU's three regional campuses via traditional face-to-face instruction and laboratory experiences as well as interactive broadcast (IVC) delivery. The APE degree will provide students with a well-defined, professionally oriented curriculum that differs from the broad goals of the Associate of Science degree in General Studies, under which students may now graduate. The specialized APE degree will be aimed at two groups—those already working in industry (for whom a specialized degree is a condition of employment or advancement), and those aiming to transition to an engineering bachelor's degree at USU or other USHE institutions.

USU's regional campus system plays an important role in providing educational access to non-traditional students. The proposed APE degree expands the engineering career option to two groups of non-traditional students in Uintah Basin, Brigham City, and Tooele: (1) Those with a strong interest in engineering; and (2) a growing number of mid-career individuals employed in industry that see potential upward mobility in an engineering degree. The latter group requires an educational opportunity delivered regionally and in the evening because they are fully employed adult learners.

USU's regional campus system plays an important role in providing educational access to non-traditional students. The proposed APE degree does not provide an entry-level qualification; however, it does enhance the qualifications of those already in full-time positions or those with work experience.

The majority of the students are expected to use the proposed APE degree as a point of departure for future specialization in engineering (a Bachelor of Science degree) at USU Logan or elsewhere.

#### Policy Issues

Other Utah System of Higher Education institutions have reviewed this proposal, have given input, and are generally supportive of Utah State University offering this degree.

#### Commissioner's Recommendation

The Commissioner recommends that the Regents approve the Request to Offer an Associate in Pre-Engineering at Utah State University, effective Spring Semester, 2010.

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William A. Sederburg, Commissioner

WAS/GW  
Attachment

Academic, Career and Technical Education and Student Success Committee

Action Item

Request to Offer an Associate of Pre-Engineering Degree

Utah State University

Prepared for  
William A. Sederburg  
By  
Gary Wixom

January 6, 2010

## **Section I: The Request**

Utah State University's (USU) College of Engineering, in partnership with USU's Regional Campuses and Distance Education (RCDE) system, requests approval to offer an Associate of Pre-Engineering (APE) degree through the regional campuses effective Spring, 2010. Pursuant to Regents Policy R312, the Land-Grant status of Utah State University permits the institution to "offer associate's degrees and fulfill a community college role in areas of need ... through its extension services" (R312.3.4). This proposal was approved by the USU Board of Trustees on 20 November 2009.

## **Section II: Program Description**

### **Complete Program Description**

The proposed Associate of Pre-Engineering (APE) degree will be administered by USU's College of Engineering and will be offered at USU's three regional campuses via traditional face-to-face instruction and laboratory experiences as well as interactive broadcast (IVC) delivery. The APE degree will provide students with a well-defined, professionally oriented curriculum that differs from the broad goals of the Associate of Science in General Studies, under which students may now graduate. The specialized APE degree will be aimed at two groups---those working in industry (for whom a specialized degree is a condition of employment or advancement), and those aiming to transition to an engineering bachelor's degree at USU or other USHE institutions. As outlined in this request, the proposed APE degree will satisfy the first two years of coursework toward one of five engineering BS degrees accredited at USU: Mechanical Engineering (77 credits), Civil Engineering (72 credits), Environmental Engineering (72 credits), Electrical Engineering (66 credits), and Computer Engineering (66 credits).

### **Purpose of the Degree**

As an alternative to the presently approved Associate of Science in General Studies, the proposed APE degree will provide educational access to two groups of non-traditional students (see paragraph above). The APE degree would become available immediately at USU Brigham City and USU Uintah Basin, and would be made available at USU Tooele in Fall, 2010. Each of these communities has needs for skilled workers in its engineering-related industries, and each has an expanding USU regional campus with robust enrollment growth. Offering the APE degree at USU's regional campuses will enable students in the above-mentioned communities to have the same intermediate degree recognition as is currently available to students at Snow College, the College of Eastern Utah, and four other USHE institutions. The prestige attached to a specialized degree not only motivates students, but also serves the needs of engineering-related industries. Moreover, as noted above, the APE degree will enable students to transition seamlessly to one of five engineering bachelor's degrees at USU or elsewhere. Thus, the proposed APE degree for USU's regional campuses is integral to the institution's land-grant mission.

## **Institutional Readiness**

Oversight of the proposed APE degree, including student advising, will be provided by the Associate Dean for Academic Affairs in the USU College of Engineering, and all course curricula will be coordinated with the respective Logan campus academic units.

USU's readiness to offer the proposed APE degree was enhanced in 2007 with the passage of HB 185 by the Utah legislature. This legislation enabled USU not only to expand its degree offerings at regional campuses and education centers but also to develop partnerships with Snow College and the College of Eastern Utah. With respect to engineering, HB 185 funds provided support for three new PhD lecturers at regional campus locations to teach pre-engineering courses. In addition, new labs were built at USU Brigham City and USU Uintah Basin, and such labs are now under construction at USU Tooele. Pre-engineering faculty will expand to four with an additional hire at USU Tooele during the 2009-2010 academic year.

Recent history provides further evidence of USU's institutional readiness to offer this degree. In the fall of 2007, under the broad authority of the Associate of Science in General Studies, USU Brigham City began offering pre-engineering courses to small numbers of students. Two years later, 50 part-time students are enrolled in a pre-engineering curriculum, with an additional 30 expressing interest. Most are non-traditional adult learners who are full-time employees at local industries such as ATK. Their primary motivation for pursuing an engineering degree is upward mobility in their existing employment environment. Nine of these students are on track to graduate in spring semester, 2010.

Further evidence of readiness is seen in USU's infrastructure investments. At USU Uintah Basin, the UBATC/USU building was completed during summer, 2009, and the new Bingham Entrepreneurship and Energy Research Center will open in 2010. In addition, a \$1.5 million gift from the Anadarko Petroleum Corporation will support the region's pre-engineering program. High school and adult learners are now being recruited to the pre-engineering program at USU Uintah Basin. Similarly, at USU Tooele, major investments are now being made in laboratory facilities that will host pre-engineering students. The addition of PhD-level faculty in electrical engineering at USU Tooele will complete USU's faculty requirements for pre-engineering programs at the regional campuses.

Students at USU's regional campuses now take their pre-engineering coursework under the existing Associate of Science in General Studies. The requested APE degree will enable these students to graduate with a degree that not only reflects their specialized coursework, but also serves their employment needs more effectively. Finally, the APE degree will directly parallel the degrees now offered by Snow College and the College of Eastern Utah---institutions with which USU has articulation agreements and partnerships---and four other USHE institutions.

## **Faculty**

Presently, three PhD engineering faculty members have been hired: one for USU Uintah Basin Campus and two for USU Brigham City. A fourth faculty member will be hired during the 2009-2010 academic year for the emerging USU Tooele program. Although physically located at regional campus sites, all faculty are senior lecturers (non tenure-track) in the Department of Engineering and Technology Education on the Logan Campus. As the regional campuses pool their faculty resources via Interactive Broadcast technology, students receive the instructional

benefits of a broad range of engineering specializations. This “team approach” to instruction enables students to make informed choices about their career paths as they transition to a USU engineering bachelor’s degree in Logan.

### **Staff**

Each of the regional campuses has clerical and advising services sufficient to facilitate the proposed APE degree program over the next five years. As noted earlier, oversight of the APE degree, including student advising, will be provided by the Associate Dean for Academic Affairs in the USU College of Engineering

### **Library and Information Resources**

The needed library and IT resources are presently in place. Library resources are available either at the USU Logan library or on-line through USU library services. A number of online courses are already taught from the USU campus via the IT networks, and online courses for four core-engineering courses were made available in Fall, 2009.

### **Admission Requirements**

The admission requirements for the proposed APE degree at USU regional campuses will be the same as those that now exist for the College of Engineering on the USU Logan campus. Standards for GPA and repeated courses are the same at both regional campuses and the USU Logan Campus.

### **Student Advisement**

Advisement for engineering students at USU Logan and for RCDE pre-engineering students is coordinated by the Associate Dean for Academic Affairs in the College of Engineering at USU Logan. To ensure consistency, the advisors at the regional campuses will receive basic training on pre-engineering requirements and are then linked directly to three Logan campus advisors in the College of Engineering. An additional advisor will be hired if RCDE enrollments in pre-engineering courses continue to grow. A description of Engineering Advising at USU can be found at: <http://www.engineering.usu.edu/html/information/advising-office>.

### **Justification for Graduation Standards and Number of Credits**

Graduation standards for the proposed APE degree at USU’s regional campuses will directly parallel those required for acceptance into the professional Bachelor of Science engineering programs on the Logan campus. These standards are outlined in the USU General Catalog and can be viewed directly at: <http://www.usu.edu/majorsheets/>. The number of credits required is in harmony with approved APE programs at USHE institutions.

### **External Review and Accreditation**

All USU engineering programs received accreditation in 2008 from the Accrediting Board for Engineering and Technology (ABET). Each program must show that transfer credits meet the program’s objectives and evaluation standards. Although the courses at USU’s regional campuses were not included in the 2008 accreditation process, these courses will be included in the future if the proposed APE degree is approved, and therefore shows on a student’s transcript. Course

content, texts, evaluation standards, and supporting materials for pre-engineering courses at USU's regional campuses will directly parallel Logan campus coursework and will be coordinated by on-campus advisors.

### Projected Enrollment

Year	Student Headcount	# of Faculty	Student-to-Faculty Ratio	Accreditation Req'd Ratio
1	65	3	25	N/A
2	75	4	22	N/A
3	85	4	21	N/A
4	95	5	20	N/A
5	110	6	19	N/A

## Section III: Need

### Program Need

USU's regional campus system plays an important role of providing educational access to non-traditional students. The proposed APE degree expands the engineering career option to two groups of non-traditional students in Uintah Basin, Brigham City, and Tooele: (1) Those with a strong interests in engineering, but of limited financial means for a 4-5 year stay at USU Logan; and (2) a growing number of mid-career individuals employed in industry who see potential upward mobility in an engineering degree. The latter group requires an educational opportunity delivered regionally and in the evening because they are fully employed adult learners.

Additionally, the proposed APE degree is clearly aligned with Utah's commitments to engineering (specifically, the Utah Legislature's Engineering Initiative as well as the Governor's Initiative). Many observers agree that the strength of Utah's economy---and Utah's key role in providing strong national security---requires increased production of engineering graduates.

### Labor Market Demand

USU's regional campus system plays an important role of providing educational access to non-traditional students. The average age of the students currently enrolled is 28 years – nearly 5 -6 years older than students on the USU Logan campus. More than 75% of the students at Utah State University's regional campuses are working full time. The principle employers are ATK, Automated Structures, Brigham City Community Hospital, Brigham City Corporation, Butler America, Hill Air Force Base, Kellerstrass Oil, Kimberly Clark, Price Container and Packaging, Rebound Unlimited, TCR Composites, Yesco, KGB, Baker Hughes/Baker Oil Tools, Strata Networks, Simplot, and Rocky Mountain Power. About 15 % of the USU regional campus enrollments are unemployed, previously full-time, workers. As evidenced by the above list, the pre-engineering offerings of the USU regional campuses serve a wide range of employers with engineering needs.

The proposed APE degree does not provide an entry-level qualification. However, it does enhance the qualification of those already in full time positions or with work experience. Nearly all of the employers noted above consider additional training in promotion and retention decisions. Some



regional campus students, therefore, will terminate at the APE level because this degree satisfies their immediate employment requirements. The majority are expected to use the proposed APE degree as a point of departure for future specialization in engineering (a Bachelor of Science degree) at USU Logan or elsewhere.

There continues to be a demand for engineering in many fields essential to Utah's economy as well as the economy of the nation. Today, the US Bureau of Labor Statics lists more than 1.5 million engineering jobs. The two largest cadres are the mechanical engineers and the civil engineers accounting for more than one-third of all engineering positions. About 37 percent of engineering jobs are found in manufacturing industries. In fact, engineers are employed in every major industry.

### **Student Demand**

The demand for bachelor's degrees in engineering on the USU Logan campus continues to be strong, owing to its excellent reputation. We anticipate that many students with the APE degree will eventually transition to bachelor's degree work in Logan, where the student-to-faculty ration is 13.8 to 1 and where 96% of students pass the National Fundamental of Engineering on their first try (compared to a 55% national average). As noted earlier, 50 students are currently enrolled in the engineering track offered under the Associate of Science in General Studies at USU Brigham City, with another 30 students expressing interest. Approval of the proposed APE degree will increase enrollments for reasons discussed earlier under "Purpose of the Degree."

### **Similar Programs**

The Associate of Pre-Engineering degree is offered at Snow College (62 credits), College of Eastern Utah (68 credits), Dixie State College (74 credits), Southern Utah University (64 credits), Utah Valley University (68 credits), and Salt Lake Community College (68 credits). Completers of the APE degree can transfer to bachelor's degree programs at the University of Utah, Southern Utah University and Utah State University. Students enrolled at USU's three regional campuses are not served by any of these USHE institutions. Thus, USU's proposed APE degree at regional campuses does not compete with degrees offered by other schools in the Utah System of Higher Education. Articulation agreements between USHE institutions currently offering the APE degree and Utah State University will not be affected by the addition of this degree at USU.

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

The proposed degree will serve populations within the service regions of the USU regional campuses and it is not anticipated that this degree offering will negatively impact any other USHE institutions.

### **Benefits**

Communities served by USU's regional campuses---Brigham City, the Uintah Basin, and Tooele---have ongoing needs for skilled workers in their engineering-related and defense-related industries. APE degree recognition will serve the needs of fully employed adult learners in engineering-related industries. In addition, offering the APE degree at USU's regional campuses will enable students in the above-mentioned communities to have the same intermediate degree recognition as is currently available to students at six other USHE institutions. Finally, the APE degree will enable

students to transition seamlessly to one of five engineering bachelor's degrees at USU or elsewhere.

### **Consistency with Institutional Mission**

The proposed APE degree for USU's regional campuses is integral to USU's land-grant mission of outreach, especially to underserved and non-traditional students. Engineering is a core educational enterprise for USU. Compelling evidence for this assertion is found in the fact that USU students have launched more experiments on the space shuttle and in-rocket flights than any other university in the nation. Offering the APE degree at USU's regional campuses will strengthen this mission.

## **Section IV: Program and Student Assessment**

### **Program Assessment**

Assessment plans for all of the engineering degrees at Utah State are presented in the accreditation documents for the various degrees. These have been accepted by ABET. USU's assessment plans for the proposed APE degree are the same as for the BS degrees.

### **Expected Outcomes of Performance**

Standards of academic performance for students at USU's regional campuses parallel those currently implemented on the USU Logan campus. During Fall Semester, 2009, a first cadre of five pre-engineering students from USU Brigham City transitioned to the USU Logan campus with their Associate of Science in General Studies degrees in hand. These students will be monitored carefully to determine their success in various bachelor's degree engineering programs at USU Logan.

## **Section V: Finance**

Financial Analysis Form					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Students</b>					
Projected FTE Enrollment	40	56	68	76	88
Cost Per FTE	\$11,700	\$8,241	\$7,727	\$8,108	\$7,965
Student/Faculty Ratio	25	22	21	20	19
Projected Headcount	50	70	85	95	110
<b>Projected Tuition</b>					
Gross Tuition	\$383,000	536,200	651,100	727,700	842,600
Tuition to Program	\$200,000	400,00	425,000	490,000	545,000
5 Year Budget Projection					

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Expense</b>					
Salaries & Wages	\$160,000	\$210,000	\$210,000	\$275,000	\$330,000
Benefits	\$72,000	\$94,500	\$94,500	\$118,250	\$141,930
Total Personnel	\$50,000	\$52,000	\$75,000	\$75,000	100,000
Current Expense	\$40,000	\$40,000	\$60,000	\$60,000	\$60,000
Travel	\$5,000	\$5,000	\$6,000	\$8,000	\$9,000
Capital	\$50,000	\$60,000	\$50,000	\$60,000	\$40,000
Library Expense	\$0	\$0	\$0	\$0	\$0
Total Expense	\$468,000	\$461,500	\$525,500	\$616,250	\$700,930
<b>Revenue</b>					
Legislative Appropriation	\$232,000	\$232,000	\$304,500	\$304,500	\$304,500
Grants & Contracts	0	0	0	0	0
Donations	0	\$1000	\$1000	\$1000	\$1000
Reallocation	0	0	0	0	0
Tuition to Program	\$383,000	\$536,200	\$651,100	\$727,700	\$842,600
Fees	60,700	\$84,980	\$103,190	\$115,330	113,540
Total Revenue	\$847,000	\$854,180	\$1,149,790	\$1,148,530	\$1,261,640
<b>Difference</b>					
Revenue-Expense	\$375,000	\$372,680	\$624,290	\$533,540	\$560,710

### Budget Comments

Tuition and fees are based on 2008-2009 figures. Current Expenses are for staff and other personnel. Capital expense is based on startup equipment and replacement in three years.

### Funding Sources

The Engineering program at USU's regional campuses was funded under HB 185 in 2007. By the third year of the program, new faculty positions will be funded from tuition generated by the proposed APE degree program.

### Reallocation

No reallocation is necessary.

### Impact on Existing Budgets

This request will not have an impact other programs.

## Appendix A: Program Curriculum

### All Program Courses

<u>Fall Semester</u>		
<u>Degree</u>	<u>Course</u>	
ALL	CHEM 1210	Principles of Chemistry I
ALL	CHEM 1215	Principles of Chemistry Lab I
ECE	CS 1400	Introduction of Computer Science - CS 1
CEE	CS 1400	Introduction of Computer Science - CS 1
ECE	ECE 2700	Digital Circuits
ALL	ENGR 1000	Introduction to Engineering Design
ALL	ENGR 2010	Engineering Mechanics Statics
MAPE	MAPE 2300	Thermodynamics I
ALL	MATH 1210	Calculus I
ALL	MATH 2210	Multivariable Calculus
ALL	PHYS 2220	General Physics - Science & Engineering II
<u>Spring Semester</u>		
<u>Degree</u>	<u>Course</u>	
ECE	CS 1410	Introduction of Computer Science - CS 2
ECE	CS 2420	Algorithms & Data Structures - CS 3
ALL	ECE 2250	Electrical Circuits
ALL	ENGR 2030	Engineering Mechanics Dynamics
CEE	ENGR 2140	Strength of Materials
MAPE & Civil	ETE 2210	Electrical Engineering for Nonmajors
ALL	MAPE 1200	Engineering Graphics
ALL	MATH 1220	Calculus II
ALL	MATH 2250	Linear Algebra & Differential Equations
ALL	PHYS 2210	General Physics - Science & Engineering I
<u>Summer Semester</u>		
<u>Degree</u>	<u>Course</u>	
CEE	CEE 2240	Engineering Surveying
<u>Every Semester</u>		
<u>Degree</u>	<u>Course</u>	
CEE	BIOL 1010	Biology and the Citizen
ALL	ENGL 1010	Introduction to Writing
ALL	ENGL 2010	Intermediate Writing
CEE	GEOG 1000	Physical Geography
ALL	MATH 1050	College Algebra
ALL	MATH 1060	Trigonometry
ALL	GEN EDS	

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

No new courses are anticipated during the next five years. If new lower division courses are added to the first two years of the USU bachelor's degree programs, these courses will be integrated into the APE degree requirements.

## Appendix B: Program Schedule

Civil Engineering Undergraduate Program			
Course	Title	CR	Gen Ed Requirement Fulfillment
* CIL EXAM		0	CIL
MATH 1050	College Algebra	4	QL
MATH 1060	Trigonometry	2	
ENGL 1010	Introduction to Writing	3	CL1
* ENGL 2010	Intermediate Writing	3	CL2
* GEOG 1000	Physical Geography	3	BPS
BIOL 1010	Biology and the Citizen	3	BLS
	Breadth American Institutions	3	BAI
	Breadth Creative Arts	3	BCA
	Breadth Humanities	3	BHU
	Breadth Social Science	3	BSS
* CEE 2240	Engineering Surveying	3	
* CHEM 1210	Principles of Chemistry I	4	
* CHEM 1215	Principles of Chemistry Lab I	1	
* ENGR 1000	Introduction to Engineering Design	2	
* MATH 1210	Calculus I	4	QL
* ETE 2270	Computer Engineering Drafting	2	
* MATH 1220	Calculus II	4	QL
* PHYS 2210	General Physics - Science & Engineering I	4	QI
* ENGR 2010	Engineering Mechanics Statics	2	
* MATH 2210	Multivariable Calculus	3	QI
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI
* ENGR 2030	Engineering Mechanics Dynamics	3	
* ENGR 2140	Strength of Materials	2	
* MATH 2250	Linear Algebra & Differential Equations	4	QI
	Associate of Pre-Engineering	72	
* ENGR 2450	Engineering Numerical Methods	2	

Environmental Engineering Undergraduate Program			
Course	Title	CR	Gen Ed Requirement Fulfillment
* CIL EXAM		0	
MATH 1050	College Algebra	4	QL
MATH 1060	Trigonometry	2	
ENGL 1010	Intro to Writing	3	CL1
* ENGL 2010	Intermediate Writing	3	CL2
* GEOG 1000	Physical Geography	3	BPS
BIOL 1010	Biology and the Citizen	3	BLS
	Breadth American Institutions	3	BAI
	Breadth Creative Arts	3	BCA
	Breadth Humanities	3	BHU
	Breadth Social Science	3	BSS
* CEE 2240	Engineering Surveying	3	
* CHEM 1210	Principles of Chemistry I	4	
* CHEM 1215	Principles of Chemistry Lab I	1	
* ENGR 1000	Introduction to Engineering Design	2	
* MATH 1210	Calculus I	4	QL
* ETE 2270	Computer Engineering Drafting	2	
* MATH 1220	Calculus II	4	QL
* PHYS 2210	Elements of Mechanics	4	QI
* ENGR 2010	Engineering Mechanics Statics	2	
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI
* MAE 2300	Thermodynamics I	3	
* ENGR 2030	Engineering Mechanics Dynamics	3	
* ENGR 2140	Strength of Materials	2	
* MATH 2250	Linear Algebra & Differential Equations	4	QI
	Associate of Pre-Engineering	72	
* ENGR 2450	Engineering Numerical Methods	2	

\* Required for admission to Professional Engineering Program (PEP) with C- or better, 2.3 overall GPA and no more than 3 repeats

Items listed in red are available in Brigham City.

Credits listed in blue are not listed on the Environmental Engineering Suggested Schedule and are not a part of the total # of credits needed for Bachelors of Science.



Electrical Engineering Undergraduate Program			
Course	Title	CR	Gen Ed Requirement Fulfillment
* CIL EXAM		0	
	Breadth American Institutions	3	BAI
	Breadth Creative Arts	3	BCA
	Breadth Humanities	3	BHU
	Breadth Life Science	3	BLS
	Breadth Social Science	3	BSS
MATH 1050	College Algebra	4	QL
MATH 1060	Trigonometry	2	
ENGL 1010	Introduction to Writing	3	CL1
* ENGL 2010	Intermediate Writing	3	CL2
* CS 1400	Introduction of Computer Science - CS 1	3	
* ENGR 1000	Introduction to Engineering Design	2	
* MATH 1210	Calculus I	4	QL
* CS 1410	Introduction of Computer Science - CS 2	3	
* MATH 1220	Calculus II	4	QL
* PHYS 2210	General Physics - Science & Engineering I	4	QI
* ECE 2700	Digital Circuits	4	
* MATH 2210	Multivariable Calculus	3	QI
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI
* ECE 2250	Electrical Circuits	4	
* MATH 2250	Linear Algebra & Differential Equations	4	QI
	Associate of Pre-Engineering	66	

Computer Engineering Undergraduate Program			
Course	Title	CR	Gen Ed Requirement Fulfillment
* CIL EXAM		0	
	Breadth American Institutions	3	BAI
	Breadth Creative Arts	3	BCA
	Breadth Humanities	3	BHU
	Breadth Life Science	3	BLS
	Breadth Social Science	3	BSS
MATH 1050	College Algebra	4	QL
MATH 1060	Trigonometry	2	
ENGL 1010	Introduction to Writing	3	CL1
* ENGL 2010	Intermediate Writing	3	CL2
* CS 1400	Introduction of Computer Science - CS 1	3	
* ENGR 1000	Introduction to Engineering Design	2	
* MATH 1210	Calculus I	4	QL
* CS 1410	Introduction of Computer Science - CS 2	3	
* MATH 1220	Calculus II	4	QL
* PHYS 2210	General Physics - Science & Engineering I	4	QI
* ECE 2700	Digital Circuits	4	
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI
* CS 2420	Algorithms & Data Structures - CS 3	3	
* ECE 2250	Electrical Circuits	4	
* MATH 2250	Linear Algebra & Differential Equations	4	QI
	Associate of Pre-Engineering	66	

\* Required for admission to Professional Engineering Program (PEP) with C- or better, 2.8 overall GPA and no more than 3 repeats

Items listed in red are available in Brigham City.

Credits listed in blue are not listed on the Computer Engineering Suggested Schedule and are not a part of the total # of credits needed for Bachelors of Science.



Mechanical Engineering, Aerospace Option				
Course	Title	CR	Gen Ed Requirement Fulfillment	
* CIL EXAM		0		
	Breadth American Institutions	3	BAI	
	Breadth Creative Arts	3	BCA	
	Breadth Humanities	3	BHU	
	Breadth Life Science	3	BLS	
	Breadth Social Science	3	BSS	
MATH 1050	College Algebra	4	QL	
MATH 1060	Trigonometry	2		
ENGL 1010	Introduction to Writing	3	CL1	
* ENGL 2010	Intermediate Writing	3	CL2	
* MATH 1210	Calculus I	4	QL	
* CHEM 1210	Principles of Chemistry I	4		
* CHEM 1215	Principles of Chemistry Lab I	1		
* MATH 1220	Calculus II	4	QL	
* MAE 1200	Engineering Graphics	2		
* MAE 2650	Manufacturing Processes	3		
* PHYS 2210	General Physics - Science & Engineering I	4	QI	
* MATH 2210	Multivariable Calculus	3	QI	
* ENGR 2010	Engineering Mechanics Statics	2		
* MAE 2300	Thermodynamics I	3		
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI	
* MATH 2250	Linear Algebra & Differential Equations	4	QI	
* ENGR 2030	Engineering Mechanics Dynamics	3		
* ENGR 2140	Strength of Materials	2		
* ETE 2210	Electrical Engineering for Nonmajors	4		
* MAE 2160	Material Science	3		
	Associate of Pre-Engineering	77		

Mechanical Engineering, Manufacturing Option				
Course	Title	CR	Gen Ed Requirement Fulfillment	
* CIL EXAM		0		
	Breadth American Institutions	3	BAI	
	Breadth Creative Arts	3	BCA	
	Breadth Humanities	3	BHU	
	Breadth Life Science	3	BLS	
	Breadth Social Science	3	BSS	
MATH 1050	College Algebra	4	QL	
MATH 1060	Trigonometry	2		
ENGL 1010	Introduction to Writing	3	CL1	
* ENGL 2010	Intermediate Writing	3	CL2	
* CHEM 1210	Principles of Chemistry I	4		
* CHEM 1215	Principles of Chemistry Lab I	1		
* MATH 1210	Calculus I	4	QL	
* MAE 1200	Engineering Graphics	2		
* MAE 2650	Manufacturing Processes	3		
* MATH 1220	Calculus II	4	QL	
* ENGR 2010	Engineering Mechanics Statics	2		
* MATH 2210	Multivariable Calculus	3	QI	
* PHYS 2210	General Physics - Science & Engineering I	4	QI	
* ENGR 2030	Engineering Mechanics Dynamics	3		
* ENGR 2140	Strength of Materials	2		
* ETE 2210	Electrical Engineering for Nonmajors	4		
* MATH 2250	Linear Algebra & Differential Equations	4	QI	
* MAE 2160	Material Science	3		
* MAE 2300	Thermodynamics I	3		
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI	
	Associate of Pre-Engineering	77		

Mechanical Engineering, Computational Option				
Course	Title	CR	Gen Ed Requirement Fulfillment	
* CIL EXAM		0		
	Breadth American Institutions	3	BAI	
	Breadth Creative Arts	3	BCA	
	Breadth Humanities	3	BHU	
	Breadth Life Science	3	BLS	
	Breadth Social Science	3	BSS	
MATH 1050	College Algebra	4	QL	
MATH 1060	Trigonometry	2		
ENGL 1010	Introduction to Writing	3	CL1	
* ENGL 2010	Intermediate Writing	3	CL2	
* CHEM 1210	Principles of Chemistry I	4		
* CHEM 1215	Principles of Chemistry Lab I	1		
* MATH 1210	Calculus I	4	QL	
* MAE 1200	Engineering Graphics	2		
* MAE 2650	Manufacturing Processes	3		
* MATH 1220	Calculus II	4	QL	
* ENGR 2010	Engineering Mechanics Statics	2		
* MATH 2210	Multivariable Calculus	3	QI	
* PHYS 2210	General Physics - Science & Engineering I	4	QI	
* ENGR 2030	Engineering Mechanics Dynamics	3		
* ENGR 2140	Strength of Materials	2		
* ETE 2210	Electrical Engineering for Nonmajors	4		
* MATH 2250	Linear Algebra & Differential Equations	4	QI	
* MAE 2160	Material Science	3		
* MAE 2300	Thermodynamics I	3		
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI	
	Associate of Pre-Engineering	77		

Mechanical Engineering Undergraduate Program				
Course	Title	CR	Gen Ed Requirement Fulfillment	
* CIL EXAM		0	CIL	
	Breadth American Institutions	3	BAI	
	Breadth Creative Arts	3	BCA	
	Breadth Humanities	3	BHU	
	Breadth Life Science	3	BLS	
	Breadth Social Science	3	BSS	
MATH 1050	College Algebra	4	QL	
MATH 1060	Trigonometry	2		
ENGL 1010	Introduction to Writing	3	CL1	
* ENGL 2010	Intermediate Writing	3	CL2	
* CHEM 1210	Principles of Chemistry I	4		
* CHEM 1215	Principles of Chemistry Lab I	1		
* MATH 1210	Calculus I	4	QL	
* MAE 1200	Engineering Graphics	2		
* MAE 2650	Manufacturing Processes	3		
* MATH 1220	Calculus II	4	QL	
* PHYS 2210	General Physics - Science & Engineering I	4	QI	
* ENGR 2010	Engineering Mechanics Statics	2		
* MAE 2300	Thermodynamics I	3		
* MATH 2210	Multivariable Calculus	3	QI	
* PHYS 2220	General Physics - Science & Engineering II	4	BPS/QI	
* MATH 2250	Linear Algebra & Differential Equations	4	QI	
* ENGR 2030	Engineering Mechanics Dynamics	3		
* ENGR 2140	Strength of Materials	2		
* ETE 2210	Electrical Engineering for Nonmajors	4		
* MAE 2160	Material Science	3		
	Associate of Pre-Engineering	77		

\* Required for admission to Professional Engineering Program (PEP) with C- or better, 2.8 overall GPA and no more than 3 repeats

Items listed in red are available in Brigham City.

Credits listed in blue are not listed on the Computer Engineering Suggested Schedule and are not a part of the total # of credits needed for Bachelors of Science.

## **Appendix C: Faculty**

### **USU Brigham City:**

Engineering and Science  
Dr. Wade Goodridge  
Dr. Angela Minichiello

### **USU Uintah Basin:**

Engineering and Science  
Dr. David Sam

### **USU Tooele:**

One faculty member will be hired in the 2009-2010 AY.



January 7, 2010

MEMORANDUM

To: State Board of Regents  
From: William A. Sederburg  
Subject: General Consent Calendar

The Commissioner recommends approval of the following items on the Regents' General Consent Calendar:

- A. Minutes – Minutes of the Regular Board Meeting held December 11, 2009 at the Regents' Offices in Salt Lake City, Utah
- B. Grant Proposals
  - 1. University of Utah – Defense Advanced Research Projects Agency; "NEMS Ring Oscillators"; \$2,261,351. Massood Tabib-Azar, Principal Investigator.
  - 2. University of Utah – National Science Foundation; "Symmetry"; \$2,100,000. Thomas Henderson, Principal Investigator.
  - 3. University of Utah – National Science Foundation; "UCAN"; \$1,578,271. Cynthia Furse, Principal Investigator.
  - 4. University of Utah – National Science Foundation; "Renewable Energy Storage"; \$2,000,000. Michael Free, Principal Investigator.
  - 5. University of Utah – National Institutes of Health; "Galanin Therapy for Epilepsy"; \$5,117,069. H. Steve White, Principal Investigator.
  - 6. University of Utah – National Institutes of Health/National Cancer Institute; "Role of Selenoproteins"; \$1,881,250. Philip Moos, Principal Investigator.
  - 7. University of Utah – National Institutes of Health; "Small Molecular Scaffolds"; \$1,545,000. Kiberan Balagurunathan, Principal Investigator.
  - 8. University of Utah – National Institutes of Health; "Dynamics of Large-Scale Domain"; \$1,496,250. Donald K. Blumenthal II, Principal Investigator.

9. University of Utah – National Science Foundation; “Utah EPS Cor”; \$19,974,750. James Ehleringer, Principal Investigator.
10. University of Utah – National Institutes of Health; “Oxidized Purine Lesions in DNA”; \$1,905,094. Cynthia Burrows, Principal Investigator.
11. University of Utah – National Institutes of Health; “Designed Modular Nanoconstruct”; \$1,900,125. Ilya Zharov, PI.
12. University of Utah – National Institutes of Health; “Flagellar Morphogenesis”; \$1,868,750. Kelly T. Hughes, Principal Investigator.
13. University of Utah – National Institutes of Health/National Institute of General Medical Sciences; “Genetic Architecture - DOG”; \$1,496,250. Neil J. Vickers, Principal Investigator.
14. University of Utah – National Institutes of Health/National Institute of Diabetes and Digestive and Kidney Diseases; “Parental Involvement - Diabetes”; \$3,502,782. Cynthia Berg, Principal Investigator.
15. University of Utah – SAIC-Frederick Inc; “ST10-002”; \$2,990,735. Wallace Akerley, Principal Investigator.
16. University of Utah – National Institutes of Health/National Heart Lung and Blood Institute; “SLO2.1”; \$2,500,873. Michael C. Sanguinetti, Principal Investigator.
17. University of Utah – National Institutes of Health/National Heart Lung and Blood Institute; “Ryanodine Receptor Clusters”; \$1,881,250. John H. B. Bridge, Principal Investigator.
18. University of Utah – National Institutes of Health/National Cancer Institute; “APC and Retinoids in Zebrafish”; \$1,505,000. David A. Jones, Principal Investigator.
19. University of Utah – National Institutes of Health/National Heart Lung and Blood Institute; “Late Pre-Term Birth”; \$6,863,442. Robert M. Silver, Principal Investigator.
20. University of Utah – National Institutes of Health/National Center for Research Resources; “Moran C06 Construction Grant”; \$6,107,657. Randall J. Olson, Principal Investigator.
21. University of Utah – National Institutes of Health; “Family History CAD and Non-Inv”; \$3,555,426. Paul N. Hopkins, Principal Investigator.

22. University of Utah – National Institutes of Health; “Inner Ear Development”; \$3,318,653. Gary C. Schoenwolf, Principal Investigator.
23. University of Utah – National Institutes of Health; “Core Vision Research Grant”; \$2,851,467. Robert E. Marc, Principal Investigator.
24. University of Utah – National Institutes of Health/National Heart Lung and Blood Institute; “Prosta-glandin E”; \$2,641,345. Tianxin Yang, Principal Investigator.
25. University of Utah – National Institutes of Health/National Cancer Institute; “Breast Lesions”; \$2,477,986. Glen Morrell, Principal Investigator.
26. University of Utah – National Institutes of Health/National Human Genome Research Institute; “Impact of Prenatal Education”; \$2,320,213. Jeffrey R. Botkin, Principal Investigator.
27. University of Utah – National Institutes of Health; “Health Disparities in N.A. MT”; \$2,245,461. Stephen Alder, Principal Investigator.
28. University of Utah – National Institutes of Health/National Institute of General Medical Sciences; “PAS Kinase in Hepatic Lipid”; \$2,169,065. Jared P. Rutter, Principal Investigator.
29. University of Utah – Duke Clinical Research Institute; “PACTTE”; \$2,143,125. Josef Tomas Prchal, Principal Investigator.
30. University of Utah – Medical College of Georgia; “Endothelin and Sodium Balance”; \$2,036,045. Donald E. Kohan, Principal Investigator.
31. University of Utah – National Institutes of Health; “MRI Temperature Measurement”; \$1,972,313. Dennis L. Parker, Principal Investigator.
32. University of Utah – National Institutes of Health; “TCF3 in Spinal Progenitors”; \$1,881,250. Richard Dorsky, Principal Investigator.
33. University of Utah – National Institutes of Health/National Institute of General Medical Sciences; “Genetic Analysis of YFACT”; \$1,881,250. Timothy Formosa, Principal Investigator.
34. University of Utah – National Institutes of Health; “Iron Regulation of Gene Expres”; \$1,881,250. Elizabeth A. Leibold, Principal Investigator.

35. University of Utah – National Institutes of Health/National Institute on Deafness and Other Communication Disorders; "Hearing Loss"; \$1,881,250. Yong Wang, Principal Investigator.
36. University of Utah – National Institutes of Health; "Photoreceptor Proteins"; \$1,881,250. Yingbin Fu, Principal Investigator.
37. University of Utah – National Institutes of Health; "Endoderm and LR Asymmetry"; \$1,869,687. Yukio Saijoh, Principal Investigator.
38. University of Utah – National Institutes of Health; "DK043526"; \$1,868,750. Donald McClain, Principal Investigator.
39. University of Utah – National Institutes of Health; "NEK2"; \$1,868,750. Zhan Fenghuang, Principal Investigator.
40. University of Utah – National Institutes of Health; "FGF8 During Lung Development"; \$1,868,750. Anne M. Moon, Principal Investigator.
41. University of Utah – National Institutes of Health; "FAI Functional/Morphological"; \$1,838,630. Andrew Edward Anderson, Principal Investigator.
42. University of Utah – National Institutes of Health/National Institute of Child Health and Human Development; "Case Project"; \$1,726,958. Heather Todd Keenan, Principal Investigator.
43. University of Utah – National Institutes of Health/National Institute of Child Health and Human Development; "Chronic Disease Resubmission"; \$1,681,875. Sandra Hasstedt, Principal Investigator.
44. University of Utah – University of Colorado at Denver; "Vitamin D and Clinical Outcome"; \$1,204,000. Alfred K. Cheung, Principal Investigator.
45. University of Utah – National Highway Traffic Safety Administration; "Nemsis Tac"; \$1,200,000. Newell C. Mann, Principal Investigator.
46. University of Utah – National Institutes of Health; "Myalgia and Fatigue Receptors"; \$1,133,130. Alan R. Light, Principal Investigator.
47. University of Utah – National Institutes of Health/National Institute of Allergy and Infectious Diseases; "IGE Mediated Shrimp Allergy"; \$1,000,825. Lori A. Wagner, Principal Investigator.

48. University of Utah – National Institutes of Health; “Electron Microscopy Image”; \$2,398,411. Tolga Tasdizen, Principal Investigator.
49. University of Utah – University of Wisconsin-Madison; “Mapping the Human Brain”; \$1,330,667. Ross T. Whitaker, Principal Investigator.
50. University of Utah – National Science Foundation; “ND-Utah Consortium”; \$2,997,495. Julio Facelli, Principal Investigator.
51. University of Utah – National Institutes of Health/National Institute of Mental Health; “SAME and MDD”; \$1,728,350. Perry Franklin Renshaw, Principal Investigator.
52. Utah State University – National Institutes of Health; “Reprogramming Events Associated with Somatic Cell Nuclear Transfer”; \$1,260,000. Kenneth L. White, Principal Investigator.
53. Utah State University – National Science Foundation; “Contextual Research - Empirical: A Study of Formal Field Science Education”; \$1,434,083. James T. Dorward, Principal Investigator; Kimberly Lott and Gretchen Peacock, Co-Principal Investigators.
54. Utah State University – National Science Foundation; “Collaborative Research: HOTSPOT: The Snake River Scientific Drilling Project”; \$1,400,779. James W. Shervais, Principal Investigator.
55. Utah State University – U.S. Department of Energy; “Thermo-mechanical Properties Measurement at Micro Scale in Irradiated Environment using Piezo Electr”; \$1,215,359. Leila Ladani, Principal Investigator.
56. Utah State University – U.S. Department of Energy; “In Situ Health Monitoring of VHTR Materials and Structures using Remote Acoustic Wave Guides”; \$1,117,359. Leila Ladani, Principal Investigator.
57. Utah State University - National Polar Orbiting Operational Satellite System; “Proposal to Support Cross-track Infra-red Sounder (CRIS) and Advanced Technology Microwave Sounder (ATMS) Pre-launch Instrument Assessment and Environmental Data Record Attainment”; \$1,077,804. Gail Bingham and Chad Fish, Principal Investigators.

C. Grant Awards

1. University of Utah – U.S. Department of Energy; “Geothermal Raft River”; \$3,224,649. Joseph N. Moore, Principal Investigator.

2. University of Utah — U.S. Department of Energy/National Energy Technology Laboratory; "ARRA - Mid-continent Carbon"; \$2,590,177. Brian James McPherson, Principal Investigator.
3. University of Utah – National Institutes of Health/National Institute of Child Health and Human Development; "National Children's Study"; \$9,402,535. Edward B. Clark, Principal Investigator.
4. University of Utah – National Institutes of Health/National Heart Lung and Blood Institute; "Sprint"; \$1,723,230. Alfred K. Cheung, Principal Investigator.
5. University of Utah – National Institutes of Health/National Center for Research Resources; "University of Utah CTSA"; \$1,391,701. Donald McClain, Principal Investigator.
6. University of Utah – National Institutes of Health/National Institute of Child Health and Human Development; "EAGR Trial"; \$1,368,759. Robert M. Silver, Principal Investigator.
7. University of Utah – National Institutes of Health/National Institute of Child Health and Human Development; "CPCCRN"; \$1,200,000. J. Michael Dean, Principal Investigator.
8. University of Utah – National Institutes of Health/National Heart Lung and Blood Institute; "Vascular Access"; \$1,103,993. Alfred K. Cheung, Principal Investigator.
9. Utah State University – National Aeronautics and Space Administration; "Development of the Aerospike Rocket and Thruster"; \$1,226,042. Doran Baker, Principal Investigator; Stephen Whitmore, Co-Principal Investigator.

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William A. Sederburg, Commissioner

WAS:jc

Attachment

STATE BOARD OF REGENTS MEETING  
REGENTS' OFFICES, SALT LAKE CITY, UTAH  
DECEMBER 11, 2009

Contents of Minutes

Attendance .....	1
------------------	---

Reports of Board Committees

Academic, Career and Technical Education and Student Success (Programs) Committee

Weber State University – Master of Science Degree in Radiologic Sciences .....	3
--	---

Weber State University – Master of Professional Communication Degree .....	3
--	---

Consent Calendar .....	4
------------------------	---

1. University of Utah
  - A. Interdisciplinary Ecosystem and Global Change Center
  - B. University of Utah Sustainability Research Center
  - C. National Center for Voice and Speech
2. Utah State University – Bachelor of Science Degree in Conservation and Restoration Ecology – Three-Year Follow-up
3. College of Eastern Utah – Program Discontinuances
  - A. AAS Degree in Administrative Assistant/Information Processing Specialist
  - B. AAS Degree in Building Construction and Construction Management
  - C. AAS Degree in Computer Networking, Certificate of Completion in Microsoft Engineer
  - D. AAS Degree in Electronics
  - E. AAS and Certificate of Completion in Graphic Arts

Information Calendar .....	5
----------------------------	---

1. University of Utah
  - A. Expansion of current Biomedical Graduate Certificate; Name Change: Biomedical Graduate Certificate to Informatics Graduate Certificate
  - B. Program Review – Ethnic Studies
  - C. Program Review – International Studies
  - D. Emphases in Ceramics, Graphic Design, Painting and Drawing, Photography/Digital Imaging, Printmaking, Sculpture/Intermedia for BFA Degrees in Art and Art History
2. Utah State University – Program Reviews
  - A. Department of Accountancy
  - B. Department of Communicative Disorders and Deaf Education Graduate Program
  - C. Intensive English Language Institute
  - D. Jon M. Huntsman School of Business
3. Weber State University – Minor in Neuroscience

Finance, Facilities and Accountability Committee

1. Southern Utah University – Authorization to Seek Legislative Bonding for SUU Museum of Art	5
2. Salt Lake Community College – Approval to Pursue Refunding 1998 and 2001 Bonds	5
3. Salt Lake Community College – Peer Institutions List	5
4. Utah Valley University – Property Purchase Request	6
5. Consent Calendar	6
Weber State University – Purchase of Private Residence	

#### Community/Government Relations and Planning Committee

1. Committee Expectations	6
2. Community Stewardship Report	6
3. Strategic Goals Update	6
Utah State University - College of Eastern Utah	6
General Consent Calendar	9
Education Development Corporation of Utah (EDCUtah) Presentation	11
Report of the Commissioner	12
Meetings with Legislators	
Governor's Education Summit	
Associate Commissioner for Academic Affairs Search Committee	
UHEAA and UESP	
Women in Higher Education	
Dixie Continuity of Leadership	
Community College Task Force	
Mission-Based Funding Task Force	
Governor's Budget Recommendations	12
Retirement of Associate Commissioner Lucille Stoddard	13
Resolution of Appreciation	
Adjournment	14



STATE BOARD OF REGENTS MEETING  
REGENTS' OFFICES, SALT LAKE CITY, UTAH  
DECEMBER 11, 2009

Contents of Minutes

Attendance .....	1
Reports of Board Committees	
<u>Academic, Career and Technical Education and Student Success (Programs) Committee</u>	
Weber State University – Master of Science Degree in Radiologic Sciences .....	3
Weber State University – Master of Professional Communication Degree .....	3
Consent Calendar .....	4
1. University of Utah	
A. Interdisciplinary Ecosystem and Global Change Center	
B. University of Utah Sustainability Research Center	
C. National Center for Voice and Speech	
2. Utah State University – Bachelor of Science Degree in Conservation and Restoration Ecology – Three-Year Follow-up	
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Information Calendar .....	5
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C. Program Review – International Studies	
D. Emphases in Ceramics, Graphic Design, Painting and Drawing, Photography/Digital Imaging, Printmaking, Sculpture/Intermedia for BFA Degrees in Art and Art History	
2. Utah State University – Program Reviews	
A. Department of Accountancy	
B. Department of Communicative Disorders and Deaf Education Graduate Program	
C. Intensive English Language Institute	
D. Jon M. Huntsman School of Business	
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<u>Finance, Facilities and Accountability Committee</u>	

1. Southern Utah University – Authorization to Seek Legislative Bonding for SUU Museum of Art	5
2. Salt Lake Community College – Approval to Pursue Refunding 1998 and 2001 Bonds	5
3. Salt Lake Community College – Peer Institutions List	5
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5. Consent Calendar	6
Weber State University – Purchase of Private Residence	

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1. Committee Expectations	6
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General Consent Calendar	9
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Report of the Commissioner	12
Meetings with Legislators	
Governor's Education Summit	
Associate Commissioner for Academic Affairs Search Committee	
UHEAA and UESP	
Women in Higher Education	
Dixie Continuity of Leadership	
Community College Task Force	
Mission-Based Funding Task Force	
Governor's Budget Recommendations	12
Retirement of Associate Commissioner Lucille Stoddard	13
Resolution of Appreciation	
Adjournment	14

January 6, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Dixie State College–Associate of Applied Science in Clinical Laboratory Science–Action Item.

Issue

Dixie State College of Utah requests approval to offer an Associate of Applied Science Degree in Clinical Laboratory Science, beginning Fall Semester 2010. The program was approved by the Dixie State College Institutional Board of Trustees on September 18, 2009, and by the Regents' Program Review Committee on December 11, 2009.

Background

The proposed program at Dixie State College is designed to prepare medical laboratory technicians through the acquisition of a two-year Associate of Applied Science degree. The clinical laboratory professional is qualified by academic and applied science education to provide service and research in clinical laboratory science and related areas in rapidly changing and dynamic healthcare delivery systems. These professionals perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients.

The clinical laboratory professional has diverse and multi-level functions in the areas of analysis and clinical decision-making, information management, regulatory compliance, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed or performed. Such specialists possess skills for financial, operations, marketing, and human resource management of the clinical laboratory.

The need for medical laboratory technicians in the state of Utah has continued to grow through the last 20 years. The ability to recruit in the southern Utah area has been difficult, resulting in the use of high cost temporary professionals to fill these positions. Recruiting for an open position has taken from six to 18 months. The current retirement of staff is creating an increased number of openings. At Dixie

Regional Medical Center, it is estimated that by 2015, 26 positions will be open because of attrition due to retirement, a 65% loss of staff. According to *Jobs Rated Almanac: The Best and Worst Jobs* by Les Krantz, laboratory technicians are in the top 20 on the list of best jobs. *Medical Laboratory Observer* in April 2008 indicates the average vacancy rate for staff medical technologists has increased 50% since 2003.

#### Policy Issues

Other Utah System of Higher Education institutions have reviewed this proposal, have given input, and are generally supportive of this degree.

#### Commissioner's Recommendation

The Commissioner recommends that the Regents approve the Request to Offer an Associate of Applied Science in Clinical Laboratory Science at Dixie State College, effective Fall Semester, 2010.

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William A. Sederburg, Commissioner

WAS/GW  
Attachment

Academic, Career and Technical Education and Student Success Committee

Action Item

Request to Offer an Associate of Applied Science Degree

in Clinical Laboratory Science

Dixie State College

Prepared for  
William A. Sederburg  
By  
Gary Wixom

January 6, 2010

## SECTION I: The Request

Dixie State College of Utah requests approval to offer an Associate of Applied Science Degree in Clinical Laboratory Science. This will be effective September 2010. The program was approved by the institutional Board of Trustees on September 18, 2009.

## SECTION II: Program Description (MLT)

### Description

The field of Clinical Laboratory Science is both diversified and stratified. According to the American Society for Clinical Laboratory Science, "The clinical laboratory staff is a team of skilled professionals with education in a variety of scientific areas. The majority of laboratory testing is performed by Clinical Laboratory Scientists (Medical Technologists) with four years of education and Clinical (Medical) Laboratory Technicians with two years of education. Other individuals involved in clinical laboratory practice include physicians (pathologists), other scientists (chemists, microbiologists), laboratory assistants and phlebotomists."<sup>1</sup> The titles of Clinical Laboratory Technician and Medical Laboratory Technician are used interchangeably within the profession. This proposal will use the initial "MLT" where appropriate.

The proposed program at Dixie State College is designed to prepare medical laboratory technicians for the field through the acquisition of a two-year associate of applied science degree. The MLT associate of applied science degree also is the first half of a 2-plus-2 Medical Technologist baccalaureate degree program. The clinical laboratory professional is qualified by academic and applied science education to provide service and research in clinical laboratory science and related areas in rapidly changing and dynamic healthcare delivery systems. These professionals perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients. The clinical laboratory professional has diverse and multi-level functions in the areas of analysis and clinical decision-making, information management, regulatory compliance, education, and quality assurance/ performance improvement wherever laboratory testing is researched, developed or performed. Such specialists possess skills for financial, operations, marketing, and human resource management of the clinical laboratory. Clinical laboratory professionals practice independently and collaboratively, being responsible for their own actions, as defined by the profession. They have the requisite knowledge and skills to educate laboratory professionals, other health care professionals, and others in laboratory practice as well as the public.

The ability to relate to people, a capacity for calm and reasoned judgment and a demonstration of commitment to the patient are essential qualities. Communications skills extend to consultative interactions with members of the healthcare team, external relations, customer service and patient education. Laboratory professionals demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community.<sup>2</sup>

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<sup>1</sup> Consumer Laboratory Testing Information Page available at <http://www.ascls.org/labtesting/index.asp>

<sup>2</sup> National Accrediting Agency for Clinical Laboratory Sciences, *Guide to Accreditation for Clinical Laboratory Technician/Medical Laboratory Technician Programs*, Chicago, Illinois: National Accrediting Agency for Clinical Laboratory Sciences, (2007) p. III-4.

The MLT program will meet discipline-specific accreditation requirements of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), fully preparing students to successfully enter the profession at the completion of the program. Using both innovative and traditional strategies, this will be achieved by:

- a) General education coursework.
- b) Specific courses serving as prerequisites to program coursework.
- c) Theory courses founded in laboratory science.
- d) Laboratory classes conducted on campus.
- e) Clinical courses held in the field under the supervision of medical professionals.
- f) A cohort model to develop teaming expertise within the program.

### **Purpose of the Medical Technician Program**

The degree will prepare participants with the skills and tasks demanded by the field. At career entry, the medical laboratory technician will be able to perform routine clinical laboratory tests (such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular, and other emerging diagnostics) as the primary analyst making specimen oriented decisions on predetermined criteria, including a working knowledge of critical values. Communications skills will extend to frequent interactions with members of the healthcare team, external relations, customer service and patient education. The level of analysis ranges from waived and point of care testing to complex testing encompassing all major areas of the clinical laboratory. The medical laboratory technician will have diverse functions in areas of pre-analytical, analytical, and post-analytical processes. Such a professional will have responsibilities for information processing, training, and quality control monitoring wherever clinical laboratory testing is performed.<sup>3</sup> This conceptual framework and set of professional skills will be provided by the DSC program.

Geographically and professionally, there is a continuous need to provide trained and competent medical lab technicians both locally and beyond. This need and the changing demographics that drive it will be explained in greater detail in Section III. However, it should be noted here that approximately six years from the writing of this proposal, Intermountain Health Care in Washington County alone will retire over 65% of their medical lab technicians, creating a significant void to be filled. MLT programs in the state rapidly place their graduates in local and national markets. Dixie State College will contribute significantly to the stream of lab technicians entering the field.

### **Institutional Readiness**

The College now offers certificates, associate degrees, and baccalaureate degrees in practical nursing, registered nursing, and RN to BSN; certified nurse assistant (CNA); dental hygiene; medical radiography; surgical technology; phlebotomy; respiratory therapy and emergency services/paramedic programs. A physical therapist assistant program will begin spring 2010. This evolution of health science programs has produced an institutional infrastructure that remains prepared for expansion of new programs in the field of health sciences. The Medical Laboratory Technician Program is another step in Dixie State's pursuit of expanding its services to the healthcare professions locally and beyond.

Since 1995, Dixie State College has a history of providing quality health sciences programs. For example, the nursing program earned the highest pass rate among all programs in the state on the Registered Nurse Licensure Examination, with a collective pass rate of 96 percent in 2003, as reported by the Utah State Board

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<sup>3</sup> Ibid. p. III-4.

of Nursing. Since graduating its first class in 2000, DSC's dental hygiene program has now scored in the top 10 percent in the nation four of the past five years and in the top five percent three of those five years.<sup>4</sup>

The timing of the proposed MLT program is excellent since the new Russell L. Taylor Health Sciences Building was completed in the spring of 2008. It has sufficient facilities to provide classroom, laboratory space, and equipment for the program. The School of Science and Allied Health has the resources to support advising new and prospective students and to support the development and initiation of this program. A key component to the success of a new clinical practice program is the support of the local medical community and providers. The close and collegial working relationship between Dixie State and its medical associates has created a tapestry of collaboration for this degree. In turn, the program graduates will serve these establishments as the medical needs of the community continue to grow.

### **Faculty**

Presently, a nationwide search is underway for a qualified professional to be a shared director for the MLT and MT programs. This will be both an administrative and teaching position. Upon approval of the MLT proposal, a search will also be undertaken for a qualified fulltime tenure-track faculty member with a Master's Degree who will teach for both programs. Locally, there is an abundance of potential adjunct faculty with the background in clinical laboratory science needed to teach coursework. Intermountain Healthcare of Southern Utah accommodates a staff of medical laboratory technicians and a technologist who can teach selected courses at Dixie State. Many of these professionals will conduct the clinical experiences in the field for the program. A number of local physicians also qualify as adjunct faculty. They will be recruited as needed.

### **Staff**

The current administrative assistant to the Dean of Science and Allied Health will provide the necessary secretarial support for the program. The academic advisor for pre-professional, health sciences, and applied technology programs will also serve MLT program students.

### **Library and Laboratory Resources**

The years of healthcare initiatives conducted at Dixie State have produced a solid and growing foundation of library resources that serve each successive program undertaken. The Val A. Browning Library has extensive learning resources in Nursing and the Allied Health Sciences including books (virtual and electronic), online databases, DVDs and videotapes. Among these are full text articles including ProQuest Nursing and Allied Health Sources, MEDLINE, Clinical Pharmacology, Biomedical Reference Collection, Health Sources: Academic Addition, and others. Dixie Regional Medical Center also has a medical library that is available to Dixie State College students. These two sources will contribute to the scholarly work of the MLT program. Additional materials that specifically address the MLT curriculum will be added to the collection. These are listed in Appendix D along with the lab equipment to be purchased for the program and are accounted for in the budget referenced in Table 5.

### **Admission Requirements**

The standards established by Dixie State will be consistent across its health sciences offerings, holding the bar as high as possible to effectively meet the qualifications and preparation of students entering its programs. Academic performance in both general education coursework and in specific prerequisite courses is an important consideration for admission. Following are required criteria for admission to the MLT program:

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<sup>4</sup> See Dixie State College of Utah, *College Catalog*, (Saint George, Utah: Dixie State College of Utah, 2006).



- a) Submission of a complete program application on or before the deadline established by the department
- b) Cumulative GPA of 2.75 or higher in all college coursework taken
- c) Completion of a "C" or better in all program prerequisite courses
- d) Three letters of recommendation including at least one from an instructor in a prerequisite course
- e) The previous criteria must be met to qualify for an interview with the Selection Committee. Passing the interview will serve as the final criterion for entrance into the program.
- f) Completion of CLS 1110/1115
- g) Membership within a cohort group

Additional criteria to be considered for acceptance:

- Previous experience in healthcare
- Weighted GPA in specific prerequisite courses
- Clearance of both a drug screen and criminal background check
- Proof of selected immunizations

### **Student Advisement**

Presently, the college has an advisor for all of the health science programs with the exception of the nursing programs, which share their own advisor. The advisor for pre-professional, health sciences, and applied technology programs will also serve students in the MLT program. In addition, the program director and faculty will provide academic guidance and the college at large is served by advisors who assist students with general education and graduation requirements. The Division of Nursing and Allied Health works closely with all who advise its students.

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

The total number of credit hours required by the MLT program will be 70-71, one to two more than is specified by the Board of Regents for an AAS degree. Seventy hours will be needed because of our commitment to provide congruent learning experiences in all three arenas, classroom, laboratory, and clinic. DSC has planned for clinical experiences to be integrated throughout the program and will house them in the lab courses, which requires only one additional hour of credit. Care has been taken as noted from Appendix B that the number of credit hours required each semester would be manageable for the student.

### **External Review and Accreditation**

Medical Laboratory Science had its origins in the formation the American Society of Clinical Pathologists (ASCP) formed in 1922. In an effort to bring about a degree of standardization to the education of laboratory personnel, ASCP created the Board of Registry (BOR) in 1928 to certify individual laboratory technicians and later the Board of Schools (BOS) for the accreditation of educational programs. As the field became stratified, each specialty grew toward independence and autonomy. In 1973, as a result of pressure from the U.S. Office of Education and the National Commission on Accrediting, ASCP agreed to disband the BOS and turn over its functions to an independently operated and governed board, the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).<sup>5</sup>

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<sup>5</sup> See Frances A. Delwiche, *Mapping the Literature of Clinical Laboratory Science*, <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=164393>

Curricular guidelines for a medical laboratory technician program are determined by this accrediting arm of the medical laboratory sciences. NAACLS is an autonomous, nonprofit organization. ASCP and the American Society for Clinical Laboratory Science (ASCLS) are sponsoring organizations of NAACLS. The National Society for Histotechnology (NSH) and the Association of Genetic Technologists (AGT) are participating organizations. The American Association of Pathologists' Assistants (AAPA) is an affiliating organization. NAACLS is recognized by the Council for Higher Education Accreditation (CHEA). The proposed MLT program at Dixie has been developed in accordance with the standards as set down in the Guide to Accreditation for Clinical Laboratory Technician/ Medical Laboratory Technician Programs.<sup>6</sup>

Once underway, the new program will begin the process of seeking accreditation. It must make application to NAACLS no later than two months prior to graduating its first cohort in order for the process to be completed in time for graduates to take the ASCP registry exams. This will involve a self study/visitation process which will receive a five year award cycle upon proof of compliance. Once accredited, a progress report must be submitted every two years from that date. The tools and strategies to be employed by DSC in this procedure are found in Section IV of this proposal.

The use of advisory committees has helped steer the development and unfolding of the various health sciences programs that have evolved over the years here at Dixie State. Membership has included participants from the health sciences community, the public at large, and college faculty. Their work has resulted in a network of resources and professionalism that continues to raise the bar of excellence in the preparation of the next generation of health sciences professionals. An advisory committee will be established for the MLT program in order to provide community-wide interpretation of program needs; systematically assess and identify needs of the local and regional healthcare workforce; provide advice regarding curricular changes; assist in assessment of educational outcomes and continued program improvement; and assist in placing clinical students and graduates.

This proposal has been created by: 1.) David L. Loughmiller MBA, MT, (ASCP), SC, Medical Technologist and General Laboratory Supervisor at Dixie Regional Medical Center and CEO of The Scepter Media and Training Firm, and 2.) Douglas C. Godwin, Ph.D., The Scepter Media and Training Firm Director of Research and a former faculty member for the past 27 years of Texas A&M University and more recently, Dixie State College of Utah.

### **Projected Enrollment**

An examination of the ever expanding student interest in other healthcare programs at DSC and around the state suggests that there will be more than an adequate pool of students interested in the MLT program. Based upon the number of clinical lab placements available among our medical affiliates, we will accommodate 12 new students each fall semester. A screening process will be conducted and the most qualified will form a cohort, moving through the program together. Following is the enrollment plan for the first five years and the faculty/student ratios required for each.

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<sup>6</sup> See National Accrediting Agency for Clinical Laboratory Sciences, *Guide to Accreditation for Clinical Laboratory Technician/Medical Laboratory Technician Programs*, Chicago, Illinois: National Accrediting Agency for clinical Laboratory Sciences, (2007).

Table I: Projected Enrollment

Year	Student Headcount	# of Faculty	Student-to-Faculty Ratio	Accreditation Req'd Ratio
2010- 2011	12	2	6:1	Not applicable
2011- 2012	24	2	12:1	Not applicable
2012- 2013	24	2	12:1	Not applicable
2013- 2014	24	2	12:1	Not applicable
2014- 2015	24	2	12:1	Not applicable

### Section III: Need

#### Program Need

Clinical Laboratory Science is an area of healthcare that supports greater than 70% of all diagnostic testing. There are over 319,000 Clinical laboratory personnel in the United States and more throughout the world. A large percentage of these laboratory personnel were trained over 30 years ago and are fast approaching the age of retirement. As with other areas of healthcare, a significant shortage has occurred due to decreased preparation programs nationwide, focus on automation, and a move for consolidation of highly specialized procedures. It is estimated that by 2012, about 50% of all Clinical Laboratory Scientists will have left the workplace leaving an extreme need to train new technicians.

Todd Smith in *Advance Magazine* indicates that more physicians are requesting highly specialized analyses, items that in the past were considered low volume. In today's practice, the evaluation of nutritional status, genetic markers, and identification of infectious agents using complex techniques are processes that heretofore have been restricted to large referral centers. These technologies are making their way into the clinical laboratory settings in many hospitals and smaller central laboratories.<sup>7</sup> With the advent of automated processes and greater computerization of analytical procedures, the need for laboratory scientists well versed in many aspects of laboratory medicine is critical.

Weber State University and the University of Utah are currently the USHE institutions that offer degrees in the Clinical Laboratory Sciences. Medical establishments throughout the country heavily recruit many of the students graduating from these programs. Currently the Mayo Medical group actively recruits from Weber State and University of Utah graduates. Due to the magnitude of the shortage of accredited offerings nationwide, students are sought after by medical organizations upon admittance into their institutions' academic programs.

Dixie Regional Medical Center and other hospital laboratories throughout southern Utah, southern Nevada, and northern Arizona are at a disadvantage trying to recruit some of the students coming out of the schools on the Wasatch Front. Individuals residing in southern Utah must relocate to the Wasatch Front to study these areas of healthcare or choose a different line of work. David Loughmiller, Laboratory General Supervisor for Dixie Regional Medical Center, indicates many graduates in biology from schools in the southern part of the

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<sup>7</sup> T. Smith, "Automating the Hematology Lab", *Advance for Administrators of the Laboratory*, (Vol. 17, Issue 4, April 2008), p. 68.

state find it a challenge to get jobs in their field of study. Their training is not specific enough to meet the needs of healthcare and they end up moving out of the area to find employment. The MLT program will provide them with a marketable option.

### Labor Market Demand

The need for medical laboratory technicians in the state of Utah has continued to grow through the last 20 years. The ability to recruit in the southern Utah area has been difficult, resulting in the use of high cost temporary professionals to fill these positions. Recruiting for an open position has taken from 6 to 18 months. The current retirement of staff is creating an increased number of openings. At Dixie Regional Medical Center it is estimated that by 2015, twenty-six positions will be open as a result of attrition due to retirement, a 65% loss of staff. According to *Jobs Rated Almanac: The Best and Worst Jobs* by Les Krantz, laboratory technicians are on the top 20 on the list of best jobs.<sup>8</sup> *Medical Laboratory Observer* in April 2008, indicates the average vacancy rate for staff medical technologists has increased 50% since 2003.<sup>9</sup>

There are a number of agencies that provide projections for employment as a medical laboratory technician. The Utah Department of Workforce Services rates this profession as a 3-star occupation on a scale of 1 to 5 meaning that it has a moderate to strong employment outlook with low to moderate wages.<sup>10</sup> The Department of Labor projects a 15% increase in the need for medical lab technicians in the next 8 years (See Table 2).<sup>11</sup> It is estimated that there is a need for 16,500 clinical Laboratory personnel per year and only 5000 are being produced through institutions of higher learning.<sup>12</sup>

Table 2: MLT Growth Trends

Occupational Titles	Employment 2006	Projected Employment 2016	Change, 2006-16	
			Number	Percent
MLT, CLT	151,000	174,000	23,000	15%

### Student Demand

The trends in enrollment here at Dixie State and across the state seem to be the best indicators for student interest in the field of healthcare. The number of applicants for all healthcare programs at DSC exceeds the number of students that can be admitted. This is also true for other institutions of higher education in the state and those nearby. For example, current enrollments in the Introduction to Physical Therapy course at the College of Southern Nevada are 38 in the Internet course and 26 in the on-campus course. Over the past 4 years, first year enrollments in the physical therapist assistant program have resulted in full classes. Most recently, students enrolled in the program have traveled from Bullhead City, Arizona, Battle Mountain, and Mesquite, Nevada. The program has also received student inquiries from here in St. George.

<sup>8</sup> See L. Krantz, *Jobs Rated Almanac: the Best and Worst Jobs*, 6<sup>th</sup> Edition, (Ft. Lane, New Jersey: Barricade Books, 2002).

<sup>9</sup> Staff Writer, "Labs Are Vital: Industry Takes Aim at Lab Workforce Shortage", *Medical Laboratory Observer*, (April 2008) p. 42.

<sup>10</sup> The Utah Department of Workforce Services, <http://jobs.utah.gov> (accessed January 2009).

<sup>11</sup> See National Employment Matrix, *Clinical Laboratory Technologists and Technicians, 2006 and Projected to 2016*. Department of Labor Statistics. <http://www.bls.gov/oco/ocos096.htm>

<sup>12</sup> Staff Writer, *Advance Laboratory*, (King of Prussia, Pennsylvania, Dec. 2008) p. 35.

DSC's School of Science and Allied Health has a designated advisor to interview students who express an interest in this profession. There has been a consistent pool of over 200 students per year that have sought information and academic advising about the health sciences professions and the courses that would likely fulfill prerequisite requirements. Additionally, there are students who apply for the nursing program but cannot be admitted due to class size limits. Many of these applicants would meet prerequisite requirements for the MLT program and often have been more than willing to apply to a related program.

The key factor seems not to be student interest as much as providing the adequate laboratory and clinical experiences that require low instructor/student ratios. The creation of the new Russell Taylor Health Sciences Center along with the collaboration between Dixie State and community health services has moved DSC significantly forward in the ability to meet the increasing interest in the healthcare professions. The MLT program should be able to adequately accommodate 12 new students each year and 24 pursuing the degree at any time beginning with the second year.

### **Similar Programs**

Presently, Weber State University and the University of Utah are the USHE institutions that offer a program in Clinical Laboratory Science. Salt Lake Community College has discontinued their program, having accepted their final set of students in 2006. The proposed program at Dixie State will be similar to but unique from WSU's program. The similarity will permit students to matriculate between schools and from other programs when relocating without a significant loss of credit hours. The uniqueness emerges from the College's special use of affiliate resources to personalize the development of laboratory skills among its students.

This distinctiveness in curricular design is an important one. The clinical experiences occur throughout the program rather than becoming a single event at the end of the coursework. To plan field experiences that take place concurrently with classroom curriculum, local institutions must be willing to accommodate an ongoing flow of students. Community medical affiliates are enthusiastic participants. Such an approach provides a mentoring system for learners that guide the growth of professionalism simultaneously within three areas: the classroom, the laboratory, and the clinic.

Finally, Section III lays down an important foundation of need, justifying the creation of a MLT program here at DSC. Such a program is vital in meeting not only local employment requirements but those throughout the state and beyond. The evidence makes it difficult to overstate this position.

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

Because of the need for laboratory technicians, no USHE institution in the state will unduly compete in the placement of graduates beyond normal institutional competition. This is also true for applicants to their programs since the interest of the public in healthcare careers shows no sign of diminishing. The previous Dean of Business, Science, and Health held informal discussions with CLS program chairs at the University of Utah and Weber State University with regard to DSC beginning its own MLT and MT programs. As well, the Associate Dean of Nursing and Allied Health consulted with these same individuals through the laboratory personnel Committee of the Utah Graduate Medical Education Council.

As stated earlier, the need for a program in southern Utah is also important geographically. The DSC program should have no effect on enrollments at Weber State or the University of Utah because of its location in southern Utah. The population growth and trends in the Washington County demand a local expansion in educational opportunities. The need for such options was foreseen by the Board of Regents when first permitting Dixie State to become a college that provides baccalaureate degrees.

## Benefits

Much of what has been written in this proposal reveals many of the benefits that a MLT program will be to the College as it continues its role among other USHE institutions in the state. In response to community needs, the pursuit of this degree will be an ongoing service to the populace. As Dixie State continues to grow, the importance of its contributions to this county and the state will continue to grow proportionally.

## Consistency with the Institutional Mission

A key element of Dixie State College's Mission is to "transmit knowledge and skills primarily through education and training programs at the certificate and associate degree level, including applied technology education programs." As a result, DSC has taken steps to develop a core of healthcare professions programs. The proposed Associate of Applied Science degree in Medical Laboratory Technician is the college's response to meeting the southern Utah community need as well as meeting the DSC and USHE missions. The proposed AAS degree in Medical Laboratory Technology here at Dixie State is in a high demand profession and satisfies the role assignment for a Type II institution in concurrence with the mission of the Board of Regents. The MLT program meets these requirements by providing specialized, high-quality, and technical educational opportunities for students resulting in knowledgeable, competent, caring, ethical, and quality-oriented graduates.

## Section IV: Program Assessment

### Program Assessment

There has been a movement in institutions of higher education over the past four decades to enhance the pedagogical, assessment, and curriculum expertise in the professional preparation programs they offer. As the professions continue to refine their standards, they have gravitated to common principles of what now is known as "best practice." Many of these are generic educational strategies that address new discoveries in brain theory and how such theory translates into cognition and behavior. Learning has been divided into the cognitive, psychomotor and affective domains.

The standards addressing best practice set down by NAACLS require the creation of program goals and objectives along with assessment strategies that measure the attainment of them. Assessment is to focus on outcomes. For student performance, this entails both formative assessment of ongoing progress and summative assessment of exit mastery. The plan must include a mechanism for continually and systematically reviewing the effectiveness of the program to include survey and evaluation procedures that incorporate information from students, employers, faculty, graduates, formative and exit examinations, and accreditation reviews. The MLT Program at Dixie State will account for all such standards.

For assessment purposes, standardized Employer and Graduate Satisfaction Surveys are available from ASCP and will be utilized by the program. Graduate performance on credentialing examinations is available to the program from ASCP. It includes statistics comparing general graduate performance taken from many programs and is specific to content areas contained in the examination. The content areas refer to accreditation standards set down by ASCP.<sup>13</sup>

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<sup>13</sup> See National Accrediting Agency for Clinical Laboratory Sciences, *Guide to Accreditation for Clinical Laboratory Technician/Medical Laboratory Technician Programs*, Chicago, Illinois: National Accrediting Agency for clinical Laboratory Sciences, 2007).

Following is the overall goal of the MLT program. Table 3 presents the evaluation strategies to be utilized to access its attainment.

***Program Goal:** The MLT program is designed to (1) provide its students with the foundation of a liberal education and (2) prepare graduates to competently enter the workforce possessing the cognitive, psychomotor, and affective skills required by the profession.*

**Table 3: Program Standards and Appraisal Strategies**

DOMAIN	INTERNAL ASSESSMENT	EXTERNAL ASSESSMENT	OUTCOME/ ANALYSIS & REPORTING
Cognitive	<ul style="list-style-type: none"> <li>• Graduates performance on registry exams               <ul style="list-style-type: none"> <li>○ MLT (ASCP)</li> <li>○ CLT (NCA)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Employers Surveys- [satisfaction with grad. knowledge base]</li> <li>• Advisory Committee assessment input</li> <li>• Grades from clinical lab. experiences</li> <li>• Students will present a portfolio of their work for review by professionals from the field &amp; the faculty</li> </ul>	<ul style="list-style-type: none"> <li>• Reporting of analysis of pass rates on 3 registry exams</li> <li>• Reporting of analysis of employer feedback &amp; satisfaction</li> <li>• Summary of clinical performance</li> </ul>
Psychomotor	<ul style="list-style-type: none"> <li>• Graduates must demonstrate competency in all skills required by the curriculum</li> </ul>	<ul style="list-style-type: none"> <li>• Employers Surveys- [satisfaction with grad. competency in performing all skills required]</li> </ul>	<ul style="list-style-type: none"> <li>• The program will assess student competence on random selected skills prior to exiting the program.</li> <li>• Employers' responses will also be analyzed and both will be reported.</li> </ul>



<b>Affective</b>	<ul style="list-style-type: none"> <li>• Faculty will assess students' behaviors specific to communication skills, ethics, work habits, interpersonal relations and collaborative skills.</li> <li>• Student surveys- [Upon graduation, students will provide feedback about program.]</li> </ul>	<ul style="list-style-type: none"> <li>• Employer surveys- Satisfaction with:               <ol style="list-style-type: none"> <li>1) graduates ability to effectively interact with staff and colleagues, &amp;</li> <li>2) compliance with work expectations</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>• Affective findings will be analyzed and summarized prior to graduation.</li> <li>• Graduates' performance in the workplace will also be summarized and both findings will be reported.</li> </ul>
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### Educational Standards and Student Performance

NAACLS has established the following standards for the preparation of Medical Laboratory Technicians.<sup>14</sup> Several of these have been summarized previously.

#### A. Curricular Structure

Instruction must follow a plan which documents a structured curriculum composed of general education, basic sciences, mathematics, and professional courses including applied (clinical) education. The curriculum must include clearly written program goals and competencies and course syllabi which must include individual course goals and objectives.

The curriculum must include all the major subject areas currently offered in the contemporary clinical laboratory. Behavioral objectives which address cognitive, psychomotor, and affective domains must be provided for didactic and applied (clinical practice) aspects of the program and must include clinical significance and correlation. Course objectives must show progression to the level consistent with entry into the profession. The applied courses must be taught in a clinically equipped teaching laboratory on the college campus, in an affiliated clinical facility, or in both facilities sufficient for developing basic skills, understanding principles, and mastering the procedures involved.

#### B. Instructional Areas

The curriculum must include principles of:

1. Methodologies for all major areas currently practiced by a modern clinical laboratory, including problem solving and troubleshooting techniques;
2. Collecting, processing, and analyzing biological specimens and other substances;
3. Laboratory results capable of use in diagnosis and treatment;
4. Communications sufficient to serve the needs of patients and the public;

<sup>14</sup> Ibid pp. III- 10-11



5. The required competencies to participate in the orientation of new employees;
6. Quality assessment in the laboratory;
7. Laboratory safety and regulatory compliance;
8. Information processing in the clinical laboratory;
9. Ethical and professional conduct, and;
10. Significance of continued professional development.

### C. Learning Experiences

The learning experiences needed in the curriculum to develop and support entry level competencies must be properly sequenced and include instructional materials, classrooms, presentations, discussions, demonstrations, laboratory sessions, supervised practice and experience.

1. Student experiences must be educational and balanced so that all competencies can be achieved.
2. Student experiences at different clinical sites must be comparable to enable all students to achieve entry level competencies.
3. Policies and processes by which students may perform service work must be published and made known to all concerned in order to avoid practices in which students are substituted for regular staff. After demonstrating proficiency, students, with qualified supervision, may be permitted to perform procedures. Service work by students in clinical settings outside of academic hours must be noncompulsory.

### D. Evaluations

Written criteria for passing, failing, and progression in the program must be provided. These must be given to each student at the time of entry into the program. Evaluation systems must be related to the objectives and competencies described in the curriculum for both didactic and applied education components. They must be employed frequently enough to provide students and faculty with timely indications of the students' academic standing and progress and to serve as a reliable indicator of the effectiveness of instruction and course design.

Dixie State is prepared to meet these standards through planned experiences for its students. These will be housed in four modes of educational activity.

A. Structured Cohorts—Each semester, students entering the program are formed into a cohort. They will remain together throughout the program, allowing for relationships to form. This structure allows for team activity that cuts across courses where appropriate. The Cohort Model provides an ideal infrastructure to develop leadership, professionalism, and collaborative skills among the students.<sup>15</sup>

B. Didactic courses—In addition to the methods suggested in item C above, additional strategies will be employed such as team projects, simulations, role play, pairing strategies, study sessions, quizzes, exams,

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<sup>15</sup> See Peter R. Scholtes, Brian L. Joiner, Barbara J. Streibel, *The Team Handbook* [Third Edition], (Madison, Wisconsin: Oriel Incorporated, 2003).

task-conferencing and more. Care has been taken to sequence the coursework and space the offerings to build on prerequisite knowledge allowing time for adequate learning of the esoteric concepts and language of the profession.

C. Laboratory courses—The new medical facilities offer optimum space and equipment for the lab experiences that will be provided. These will be conducted by faculty and will address both conceptual understanding and skill acquisition.

D. Clinical experiences—A number of medical facilities in southern Utah will provide the clinical experiences for students. Working in collaboration, on-site clinical involvement will be woven into the coursework so that new concepts learned in class will be explored first in the campus labs and second in the field under the direction of a laboratory technologist.

E. Table 4 addresses the assessment strategies to be utilized in this program.

**Table 4: Student Formative and Summative Assessment**

DOMAIN	FORMATIVE ASSESSMENT	SUMMATIVE ASSESSMENT
<b>Cognitive</b>	<ul style="list-style-type: none"> <li>• Course examinations- pass = 74% or above</li> <li>• Laboratory projects- pass = 80% mastery or above</li> <li>• Clinical projects- pass = 100% mastery or above</li> </ul>	<ul style="list-style-type: none"> <li>• Capstone Performance Assessment <ul style="list-style-type: none"> <li>○ A "C" or above in each course</li> <li>○ Take the MLT &amp; CLT practice exams during the final semester and achieve a grade = to or higher than 5% below the national cut score</li> <li>○ Present a portfolio of work achieved in the program to local clinical professionals &amp; faculty</li> </ul> </li> </ul>
<b>Psychomotor</b>	<ul style="list-style-type: none"> <li>• Students must demonstrate competency in all skills practiced in the lab. (85% efficiency)</li> <li>• Students must demonstrate competency in skills performed in the clinical settings. (85% efficiency)</li> </ul>	<ul style="list-style-type: none"> <li>• Exit Exam—Students will be required to perform a set of randomly selected skills to demonstrate continuing competence.</li> <li>• Students will be required to re-demonstrate previously learned skills at any time during the program.</li> </ul>
<b>Affective</b>	<ul style="list-style-type: none"> <li>• Student grading rubrics for all courses (didactic, laboratory, and clinical practice) will include a section addressing professionalism, attitudes, and work habits.</li> <li>• Student evaluations in clinical courses will include a section on interpersonal skills, attitudes, work habits and</li> </ul>	<ul style="list-style-type: none"> <li>• A summary assessment, compiling affective data gathered throughout the student's program will be conducted during the final semester. Results will be factored into outcomes of the other two domains of learning. Findings will be compared to the employer survey data to help fine-tune the assessment process of</li> </ul>

	professionalism. • Faculty will conduct observations of student acquisition of collaborative skills during team and field activities.	the program.
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## Section V: Finance

Table 5

### Financial Analysis

Dixie State College MLT Program					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Students</b>					
Projected FTE Enrollment	12.0	24.0	24.0	24.0	24.0
Cost Per FTE	\$34,698.00	\$ 9,139.00	\$ 9,143.00	\$ 9,363.00	\$ 9,380.00
Student/Faculty Ratio	6 to 1	12 to 1	12 to 1	12 to 1	12 to 1
Projected Headcount	12.0	24.0	24.0	24.0	24.0
<b>Projected Tuition</b>					
Projected Gross Tuition	\$ 34,728.00	\$ 69,456.00	\$ 73,623.00	\$ 78,040.00	\$ 82,723.00
Tuition Allocated to Program	\$ 8,682.00	\$ 17,364.00	\$ 18,405.00	\$ 19,510.00	\$ 20,680.00
Student Lab Fees	\$ 3,600.00	\$ 7,200.00	\$ 7,200.00	\$ 7,200.00	\$ 7,200.00
<b>5 Year Budget Projection</b>					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Expense</b>					
Salaries & Wages	\$ 135,000.00	\$ 139,050.00	\$ 143,221.00	\$147,518.00	\$151,943.00
Benefits	\$ 56,375.00	\$ 57,286.00	\$ 58,224.00	\$ 59,191.00	\$ 60,187.00
Total Personnel					
Current Expense	\$ 3,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00
Travel		\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00
Capital	\$ 212,000.00	\$ 10,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
Library Expense	\$ 10,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
<b>Total Expense</b>	<b>\$ 416,375.00</b>	<b>\$ 219,336.00</b>	<b>\$ 219,445.00</b>	<b>\$224,709.00</b>	<b>\$225,130.00</b>
<b>Revenue</b>					
Legislative Appropriation	\$ 175,000.00	\$ 114,772.00	\$ 113,840.00	\$138,000.00	\$ 138,000.00
Grants (DRMC Donation)	\$ 80,000.00	\$ 80,000.00	\$ 80,000.00		
Reallocated Funds	\$ 149,093.00			\$ 59,999.00	\$ 59,250.00
Tuition Allocated to Program	\$ 8,682.00	\$ 17,364.00	\$ 18,405.00	\$ 19,510.00	\$ 20,680.00
Other (Lab Fees)	\$ 3,600.00	\$ 7,200.00	\$ 7,200.00	\$ 7,200.00	\$ 7,200.00

<b>Total Revenue</b>	\$416,375.00	\$ 219,336.00	\$ 219,445.00	\$224,709.00	\$ 225,130.00
<b>Difference</b>					
<b>Revenue-Expense</b>	\$ 0	0\$	0 \$	0\$	0\$
<b>Comments</b>					

#### **Funding Sources**

The program will be funded through state appropriation, tuition, reallocated funds, donation, and lab fees. The 2008 Utah State Legislature awarded \$400,000 ongoing Health Science initiative funding to DSC. Dixie Regional Medical Center will donate \$240,000 over three years to this program which will be used for equipment and accreditation expenses. The residual expense will come from cost savings and reallocation.

#### **Reallocation**

The MLT program will be supported partially through internal reallocation. The source for the reallocated funds will be a previously existing Health Sciences account created by a Dixie Regional Medical Center donation for instruction in the health sciences.

#### **Impact on Existing Budgets**

No other programs' base budgets will be affected by costs for the Medical Laboratory Technician Program.

## APPENDIX A

### Program Curriculum

Course Prefix and Number	Title	Credit Hours
Core Courses		
CLS 1110	Introduction to Clinical Laboratory Science	3
CLS 1115	Introduction to Clinical Laboratory Science Lab	1
CLS 1120	Principles of Clinical Hematology and Hemostasis	4
CLS 1125	Principles of Clinical Hematology and Hemostasis Lab	1
CLS 1155	Supervised Clinical Experience	1
CLS 2210	Principles of Clinical Chemistry I	4
CLS 2215	Principles of Clinical Chemistry I Lab	1
CLS 2310	Principles of Clinical Microbiology I	3
CLS 2315	Principles of Clinical Microbiology I Lab	1
CLS 2410	Principles of Clinical Chemistry II	4
CLS 2415	Principles of Clinical Chemistry II Lab	1
CLS 2510	Principles of Clinical Microbiology II	3
CLS 2515	Principles of Clinical Microbiology II Lab	1
CLS 2610	Principles of Clinical Immunohematology	3
CLS 2615	Principles of Clinical Immunohematology Lab	1
CLS 2715	Supervised Clinical Experience I	1
CLS 2815	Supervised Clinical Experience II	1
	Sub-total	34
General Education Courses		
ENGL 1010	Introduction to Writing	3
LIB 1010	Information Literacy	1
ENGL 2010	Intermediate Writing	3
COMM 2110	Interpersonal Communication	3
BIOL 1610/1615	Principles of Biology	5
BIOL 2420/2425	Human Physiology/Lab	4
BIOL 2060/2065	Introduction to Microbiology/Lab	4
MATH 1040 or	Introduction to Statistics or	3
MATH 1050	College Alg/Pre-Calculus	4
CHEM 1110/1115 and	Elem Gen/Organic Chemistry and	5
CHEM 1120/1125 or	Elem Organic/Bio Chemistry or	5
CHEM 1210/1215 and	Principles of Chemistry I and	5
CHEM 1220/1225	Principles of Chemistry II	5
	Sub-total	36-37
	Total Number of Credits	70-71

## MLT New Course Descriptions

### **CLS 1110 Introduction to Clinical Laboratory Science (3)**

Principles and applications to laboratory testing including safe practices for the laboratory practitioner; specimen quality assurance, phlebotomy, urinalysis, basic concepts in clinical immunology, and clinical approaches to immunological testing are introduced.

### **CLS 1115 Introduction to the Clinical Laboratory Science Laboratory (1)**

Laboratory sessions address the principles and applications to laboratory testing including safe practices for the laboratory practitioner, specimen quality assurance, phlebotomy, urinalysis, basic concepts in clinical immunology, and clinical approaches to immunological testing. Periodic sessions at a clinic will be conducted.

### **CLS 1120 Principles of Clinical Hematology and Hemostasis (4)**

Fundamental theories of hematopoiesis, routine laboratory evaluation of blood components using standard instrumentation and microscopic methods, including safety and quality control theories of hemostasis and introduction to abnormal hematology.

### **CLS 1125 Principles of Clinical Hematology and Hemostasis Laboratory (1)**

Microscopic and instrumental approach to routine evaluations of hematology and Hemostasis. Visitation to a clinic will be conducted.

### **CLS 1155 Supervised Clinical Experience (1)**

Off-campus supervised clinical experiences administered in conjunction with clinical faculty in DSC affiliated health care institutions. Prerequisite: CLS 1110, 1115, 1120 and 1125

### **CLS 2210 Principles of Clinical Chemistry I (4)**

Basic concepts and techniques in clinical chemistry and quality control utilizing manual and automated laboratory procedures. Emphasis on blood and body fluid assessments of carbohydrates, bilirubin, non-protein nitrogen testing and electrolyte acid/base balance. Prerequisite: Chem 1110, 1115 and Math 1040.

### **CLS 2215 Principles of Clinical Chemistry I Laboratory (1)**

Basic laboratory techniques in clinical chemistry and quality control using manual and automated procedures. The laboratory portion provides direct analytical interaction with the procedures. Provides concepts of basic laboratory mathematics and quality control in a practical setting.

### **CLS 2310 Principles of Clinical Microbiology I (3)**

This course provides an in-depth coverage of clinically significant bacteria including epidemiology, pathogenicity, and procedures for traditional laboratory identification.

### **CLS 2315 Principles of Clinical Microbiology I Laboratory (1)**

The laboratory provides practical identification of clinically significant bacteria. Specific procedures for identification are introduced and practiced.

### **CLS 2410 Principles of Clinical Chemistry II (3)**

Continuation of CLS 2210 with the introduction to methods for the assessment of proteins, lipids, enzymology,

therapeutic drug monitoring, toxicology and basic endocrinology. Prerequisite: CLS 2210.

**CLS 2415 Principles of Clinical Chemistry II Laboratory (1)**

The lab portion of this course provides specific practical applications to each of the assessment of proteins, lipids, enzymology, therapeutic drug monitoring, toxicology and basic endocrinology. Periodic clinical experiences will be conducted.

**CLS 2510 Principles of Clinical Microbiology II (3)**

This course is a continuation of CLS 2315 including, clinical mycology, virology, parasitology and miscellaneous clinical bacteria. Prerequisites: CLS 2315, BIOL 2060 and BIOL 2065.

**CLS 2515 Principles of Clinical Microbiology II Laboratory (1)**

The focus of the laboratory is to provide practical identification of clinically significant fungi, viruses and parasites. Both morphologic and serological determinations will be presented. Periodic visits to the clinic will be conducted.

**CLS 2610 Principles of Clinical Immunohematology (3)**

Lecture covering the theory and principles of Immunohematology relevant to blood group serology, antibody detection and identification, compatibility testing, component preparation and therapy in blood transfusion service, quality control parameters, donor screening and phlebotomy, transfusion reactions and hemolytic disease of the newborn. Prerequisite: CLS 1110.

**CLS 2615 Principles of Clinical Immunohematology Laboratory (1)**

Laboratory covering the practical aspects relevant to blood group serology, antibody detection and identification, compatibility testing and quality control parameters. Donor and component preparation, screening and phlebotomy will be handled in cooperation with the Red Cross Blood Services. Periodic sessions at a clinic will be conducted.

**CLS 2715 Supervised Clinical Experience I (1)**

Off-campus supervised clinical experiences administered in conjunction with clinical faculty in DSC affiliated health care institutions. Prerequisite: CLS 1110, 1115, 1120 and 1125.

**CLS 2815 Supervised Clinical Experience II (1)**

Off campus supervised clinical experiences administered in conjunction with clinical faculty in DSC affiliated health care institutions. Prerequisites: CLS 2210, 2215, 2310, 2315, 2410, 2415, 2510, 2515, 2610, and 2615.

## APPENDIX B

### Program Schedule for the MLT Degree

Course Number	Title	Credit Hours
<b>Cohort Semester I</b>		
CHEM 1110/1115 or CHEM 1210/1215	Elem/Gen/Organic Chemistry/Lab or Principles of Chemistry I	5 5
CLS 1110/1115	Introduction to Clinical Laboratory Science/Lab	4
BIOL 1610/1615	Principles of Biology/Lab	5
MATH 1040 or MATH 1050	Introduction to Statistics or College Alg/Pre-Calculus	3 4
	TOTAL CREDITS	17-18
<b>Cohort Semester II</b>		
CHEM 1120/1125 or CHEM 1220/1225	Elem Organic/Bio Chemistry/Lab or Principles of Chemistry II	5 5
CLS 1120/1125	Principles of Clinical Hematology and Hemostasis/Lab	5
BIOL 2420/2425	Human Physiology/Lab	4
ENGL 1010	Introduction to Writing	3
LIB 1010	Information Literacy	1
	TOTAL CREDITS	18
<b>Cohort Semester III</b>		
CLS 2210/2215	Principles of Clinical Chemistry I	5
CLS 2310/2315	Principles of Clinical Microbiology I	4
BIOL 2060/2065	Introduction to Microbiology/Lab	4
CLS 1155	Supervised Clinical Experience	1
ENGL 2010	Intermediate Writing	3
	TOTAL CREDITS	17
<b>Cohort Semester IV</b>		
CLS 2410/2415	Principles of Clinical Chemistry II	5
CLS 2510/2515	Principles of Clinical Microbiology II	4
CLS 2610/2615	Principles of Clinical Immunohematology	4
CLS 2715	Supervised Clinical Experience I	1
CLS 2815	Supervised Clinical Experience II	1
COMM 2110	Interpersonal Communication	3
	TOTAL CREDITS	18
	<b>TOTAL DEGREE CREDITS</b>	<b>70-71</b>



## APPENDIX C

### Faculty

At this writing, specific full time and adjunct MLT faculty have not been identified. As previously mentioned however, the community has a rich supply of physicians and clinical science professionals who are a potential source for adjunct instruction in the MLT program. The following is a list of current faculty at DSC who will be able to support the prerequisite education requirements of the MLT program:

Diane Albertini, MA, Associate Professor English  
Brad Barry, PhD, Professor of English  
Terre Burton, MA, Associate Professor of English and Humanities  
Timothy Bywater, PhD, Professor of English  
AmiJo Comeford, PhD, Assistant Professor of English  
Ross Decker, MA, Associate Professor of Mathematics  
David Feller, PhD, Professor of Chemistry  
Kristin Hunt, PhD, Assistant Professor of Communication  
Linda Jones, MA, MLS, Assistant Librarian  
Thomas McNeillis, MS, DO, Assistant Professor of Biology  
Bonnie Percival, MA, MLS, Associate Librarian  
Donald Warner, PhD, Assistant Professor of Biology  
Eric Young, MEd, Assistant Professor of Communication

## APPENDIX D

### Library & Laboratory Resources

#### Reference Material

Betty A. Forbes, Daniel F. Sahm, Alice S. Weissfeld, <i>Bailey &amp; Scott's, Diagnostic Microbiology</i> (Diagnostic Microbiology Bailey), 2007. ISBN 0323030653	\$100.00
Robert W Colman (Editor), Victor J Marder (Editor), Alexander W, <i>Clowes Hemostasis and Thrombosis: Basic Principles and Clinical Practice</i> , 2003. ISBN 0781749964	\$359.00
ASCP Board of Registry (Editor), Barbara M. Castleberry (Editor), Mary E., <i>Board of Registry Study Guide: Clinical Laboratory Certification</i> , 1996. ISBN 0891894160	\$50.00
Connie R. Mahon (Author), George Manuselis (Author), Donald C. Lehman, <i>Textbook of Diagnostic Microbiology</i> (Hardcover), 2006. ISBN 1416025812	\$99.00
Carl A. Burtis, Edward R. Ashwood, & David E. Bruns Tietz, <i>Fundamentals of Clinical Chemistry</i> , 6th Edition, 2007. ISBN 9780721638652	\$97.00
Bruns Tietz, David, <i>Textbook of Clinical Chemistry and Molecular Diagnostics</i> , 4 <sup>th</sup> Edition, 2008. ISBN 9780721601892	\$97.00
Christopher D. Hillyer (Author), Leslie E. Silberstein (Author), Paul M. Ness, <i>Blood Banking and Transfusion Medicine: Basic Principles and Practice</i> , 2006. ISBN 0443069816	\$199.00
Denise M. Harmening, <i>Clinical Hematology and Fundamentals of Hemostasis</i> , 2008. ISBN 0803617321	\$92.00
Denise M. Harmening, <i>Modern Blood Banking and Transfusion Practices</i> , 2005. ISBN 0803612486	\$83.00
Douglas C Tkachuk and Jan V Hirschmann, <i>Wintrobe's Atlas of Clinical Hematology</i> , 2006. ISBN 0781770238	\$215.00
Elmer W. Koneman, <i>Koneman's Color Atlas and Textbook of Diagnostic Microbiology</i> (Color), 2005. ISBN 0781730147	\$100.00
George F. Brooks, <i>Medical Microbiology</i> , 24th edition, 2007. ISBN 0071476660	\$50.00
Jeffery McCullough, <i>Transfusion Medicine</i> , 2006, ISBN 0443066485	\$72.00
John G. Webster (Editor), <i>Medical Instrumentation: Application and Design</i> (Paperback), 1997. ISBN 0471153680	\$100.00

John L. Carey III, MD; J. Philip McCoy Jr, PhD; David F. Keren, MD, <i>FASCP Flow Cytometry in Clinical Diagnosis</i> (4th edition), 2008. ISBN 9780891895480	\$155.00
John T. Sullivan, <i>A Color Atlas of Parasitology</i> , 7th Edition (Spiral-bound), 2007. ISBN 0966580761	\$44.00
Kathy D. Blaney & Paula R. Howard, <i>Basic and Applied Concepts of Immunohematology</i> , 2nd Edition, 2008. ISBN 9780323048057	\$61.00
Larry Roberts, Jr., John Janovy, P. Schmidt, <i>Foundations of Parasitology</i> (Hardcover), 2004. ISBN 0072348984	\$125.00
Lawrence A Kaplan, Amadeo J Pesce and Steven Kazmierczak, <i>Clinical Chemistry Theory, Analysis, Correlation</i> , 4th Edition, 2002 ISBN 9780323017169	\$100.00
Lorraine J. Doucette, <i>Mathematics for the Clinical Laboratory</i> (Paperback), 1997, ISBN 0721644589	\$45.00
Lynne Shore Garcia, <i>Diagnostic Medical Parasitology</i> (Hardcover), 2006 ISBN 1555813801	\$160.00
Marshall Lichtman, Ernest Beutler, Kenneth Williams, <i>Hematology</i> , Seventh Edition, 2005. ISBN 0070703973	\$215.00
Mary Louise Turgeon, <i>Immunology &amp; Serology in Laboratory Medicine (Immunology &amp; Serology)</i> , 2008. ISBN 0323043828	\$65.00
Nancy A. Brunzel, <i>Fundamentals of Urine and Body Fluids</i> , 2004 ISBN 0721601782	\$58.00
Patrick R., Ph.D. Murray, Ellen Jo Baron, James H. Jorgensen, et al., <i>Manual of Clinical Microbiology</i> (2 Volume Set) (Hardcover), 2007. ISBN 1555813712	\$209.00
Richard A. McPherson and Matthew R. Pincus, <i>Henry's Clinical Diagnosis and Management by Laboratory Methods</i> , 2006. ISBN 1416002871	\$140.00
Ruth E McCall (Author), Cathee M Tankersley, <i>Phlebotomy Essentials</i> (Paperback), 2007. ISBN 0781761387	\$58.00
Shauna Anderson, Susan Cockayne, <i>Clinical Chemistry: Concepts and Applications</i> , 2007. ISBN 1577665147	\$72.00
Shauna C Anderson and Keila B Poulsen, <i>Anderson's Atlas of Hematology</i> , 2003. ISBN 078172662X	\$63.00
Sister Laurine Graff, <i>A Handbook of Routine Urinalysis</i> , 1983. ISBN 0397521111	\$56.00

Susan King Strasinger, Marjorie Schaub Di Lorenzo, <i>Urinalysis and Body Fluids</i> (Paperback), 2008.	ISBN 080361697X	\$59.00
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William E. Dismukes (Editor), Peter G. Pappas (Editor), Jack D. Sobel (Editor), <i>Clinical Mycology</i> (Hardcover), 2003 ISBN 0195148096		\$155.00
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**Periodicals**

<i>American Journal of Clinical Pathology</i>	ASCP	ISSN 0002-9173	\$650.00
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<i>Blood</i>	American Society of Hematology	ISSN 1528-0020	\$1,220.00
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<i>Clinical Chemistry</i>	AACC	ISSN: 1530-8561	\$1,061.00
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<i>Journal of Analytical Toxicology</i>	Preston Publications	ISSN 0146-4760	\$630.00
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<i>Journal of Clinical Microbiology</i>	ASM		\$573.00
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<i>Laboratory Medicine</i>	ASCP	ISSN 0007-5027	\$115.00
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<i>Transfusion</i>	AABB	Online-ISSN: 1537-2995	\$639.00
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	<b>Total</b>	<b>\$8441.00</b>
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### Suggested Instrumentation for the MLT Program

Description	Quantity	Unit Price	Extended Price
Hematology Counter	1	\$20,000.00	\$ 20,000.00
Immuno Assay Analyzer	1	\$10,000.00	\$10,000.00
Chemistry Instrument	1	\$20,000.00	\$20,000.00
Coagulation Instrument	1	\$ 5,000.00	\$ 5,000.00
Microscopes	24	\$ 800.00	\$19,200.00
Electrophoresis chamber -Cellulose Acetate	1	\$ 1,300.00	\$ 1,300.00
Spectrophotometer	2	\$ 5,500.00	\$11,000.00
Centrifuge	3	\$ 4,000.00	\$12,000.00
Serofuge	2	\$ 3,100.00	\$ 6,200.00
Slide Stainer	1	\$ 3,000.00	\$ 3,000.00
Osmometer	1	\$ 5,000.00	\$ 5,000.00
Hemocytometer	3	\$ 320.00	\$ 960.00
Gas Chromatograph-FID/NPD	1	\$23,000.00	\$23,000.00
Incubator 37 C	2	\$ 3,000.00	\$ 6,000.00
Refrigerator	2	\$ 5,400.00	\$10,800.00
Incinerators	12	\$ 300.00	\$ 3,600.00
Freezer - 25C	2	\$ 4,960.00	\$9,920.00
Biological Hood	1	\$11,500.00	\$11,500.00
Chemical Hood	1	\$ 7,500.00	\$ 7,500.00
Heat Blocks	5	\$ 1,100.00	\$5,500.00
Safety Cabinet	1	\$ 2,000.00	\$ 2,000.00
Vortex Mixers	6	\$ 1,000.00	\$ 6,000.00
Pipettors	10	\$ 304.00	\$ 3,040.00
<b>Total</b>			<b>\$202,520.00</b>

## APPENDIX E

### Course Comparison between Dixie State and Weber State MLT Programs

#### Dixie State College MLT Courses

#### Weber State University MLT Courses

Course Number	Title	Cd. Hrs.	Course Number	Title	Cd. Hrs.
CLS 1110	Introduction to Clinical Laboratory Science	3	CLS 1113	Intro to Clinical Lab Practices	4
CLS 1115	Introduction to Clinical Laboratory Science Lab	1			
CLS 1120	Principles of Clinical Hematology and Hemostasis	4	CLS 1123	Principles of Clinical Hematology and Hemostasis	5
CLS 1125	Principles of Clinical Hematology and Hemostasis Lab	1			
CLS 1154	Supervised Clinical Experience I	1	CLS 1155	Supervised Clinical Experience	1
CLS 2210	Principles of Clinical Chemistry I	4	CLS 2211	Principles of Clinical Chemistry I	5
CLS 2215	Principles of Clinical Chemistry I Lab	1			
CLS 2310	Principles of Clinical Microbiology I	3	CLS 2212	Principles of Clinical Microbiology I	4
CLS 2315	Principles of Clinical Microbiology I Lab	1			
CLS 2410	Principles of Clinical Chemistry II	4	CLS 2213	Principles of Clinical Chemistry II	5
CLS 2415	Principles of Clinical Chemistry II Lab	1			
CLS 2510	Principles of Clinical Microbiology II	3	CLS 2214	Principles of Clinical Microbiology II	4
CLS 2515	Principles of Clinical Microbiology II Lab	1			
CLS 2610	Principles of Clinical Immunohematology	3	CLS 2215	Principles of Clinical Immunohematology	4
CLS 2615	Principles of Clinical Immunohematology Lab	1			
CLS 2715	Supervised Clinical Experience I	1	CLS 2256	Supervised Clinical Experience I	1
CLS 2815	Supervised Clinical Experience II	1	CLS 2257	Supervised Clinical Experience II	1

January 6, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Dixie State College–Associate of Applied Science in Operations Management–Action Item.

Issue

Officials at Dixie State College request approval to offer an Associate of Applied Science Degree in Operations Management, effective Fall Semester 2010. This program was approved by the Dixie State College Institutional Board of Trustees on September 18, 2009, and was approved by the Regents' Program Review Committee on November 18, 2009.

Background

Dixie State College proposes to expand its business-related programs by developing an Associate of Applied Science Degree in Operations Management. This AAS degree is designed to provide students with a strong applied foundation in the management of activities and processes directly associated with the conversion of inputs (materials, labor, and energy) into outputs (good and services). Operations management focuses on carefully managing the processes that produce and distribute products and services.<sup>1</sup> It encompasses a wide variety of activities, including strategic planning, new product or service development, production, distribution, work design, supply chain management, recycling and sustainability, customer service, storage, transportation, and logistics. The impetus is on efficiency and effectiveness.<sup>2</sup> With approximately 50% of all jobs being directly related to operations, the addition of this degree helps meet real and urgent business need.

The main purpose of an AAS degree in Operations at Dixie State College is to respond to the needs and demands of Washington County businesses, particularly in the manufacturing and service industries, to obtain or develop qualified operations managers. The AAS in Operations Management has been designed By Dixie State College (DSC) to build on a Manufacturing Technology Certificate that is being offered by the Dixie Applied Technology College (DXATC). A number of Manufacturing

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<sup>1</sup> McNamara, C., 2009.

<sup>2</sup> [http://managementhelp.org/ops\\_mgnt/ops\\_mgnt.htm](http://managementhelp.org/ops_mgnt/ops_mgnt.htm)

programs in the Washington County area have chosen employees to attend the Manufacturing Technology program at DXATC in order to gain additional skills. Students completing the Manufacturing Technology program would then have the opportunity to complete an AAS Degree in Operations Management at DSC and ultimately an emphasis in Operations Management in the proposed DSC Integrated Studies B.S. Degree.

#### Policy Issues

Other Utah System of Higher Education institutions have reviewed this proposal, have given input, and are generally supportive of Dixie State College offering this degree.

#### Commissioner's Recommendation

The Commissioner recommends that the Regents approve the Request to Offer an Associate of Applied Science in Operations Management at Dixie State College, effective Fall Semester, 2010.

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William A. Sederburg, Commissioner

WAS/GW  
Attachment



Academic, Career and Technical Education and Student Success Committee

Action Item

Request to Offer an Associate of Applied Science Degree

in Operations Management

Dixie State College

Prepared for  
William A. Sederburg  
By  
Gary Wixom

January 6, 2010

## Section I

Dixie State College of Utah requests approval to offer an Associate of Applied Science Degree in Operations Management, effective Fall Semester 2010. This program was approved by the Institutional Board of Trustees on 09/18/09.

## Section II: Program Description

**Complete Program Description:** Dixie State College proposes to expand its business-related programs by developing an Associate of Applied Science Degree in Operations Management. This AAS degree is designed to provide students with a strong applied foundation in the management of activities and processes directly associated with the conversion of inputs (materials, labor, and energy) into outputs (good and services). The most unique feature of Dixie State College's program will be the career ladder approach to education and training that is specifically designed to prepare non-management employees for supervisory and management positions. The degree is in response to expressed need and demand of local manufacturers and other industries, K-12 educators, the Dixie Applied Technology College, the Department of Workforce Services, and the community, including those responsible for encouraging economic development.

Operations management focuses on carefully managing the processes that produce and distribute products and services.<sup>3</sup> It encompasses a wide variety of activities, including strategic planning, new product or service development, production, distribution, work design, supply chain management, recycling and sustainability, customer service, storage, transportation, and logistics. The impetus is on efficiency and effectiveness.<sup>4</sup> With approximately 50% of all jobs being directly related to operations, the addition of this degree helps meet real and urgent business need.

The AAS in Operations Management will include 30 credit hours in core operations courses, 17 credit hours in general education courses, and 16 credit hours of electives. The program provides courses in operations management, quality control, safety, leadership, applied business finances; as well as courses specific to an emphasis area, such as manufacturing, construction or service operations. Students will be encouraged to continue on the education and career ladder track to a bachelor's degree. Elective courses in baccalaureate pre-requisites and business-related areas will be recommended.

The Dixie State College Associate of Applied Science in Operations provides four important elements:

1. An associate of applied science (AAS) degree with an emphasis in operations management.
2. A career ladder model of development and seamless educational progression that takes students from their current work to an associate of applied science, and then for those wishing to pursue further education, on to a bachelor's degree. Students will be able to acquire practical, applied management skills throughout the process. For students choosing to further their management education and credentials, it is anticipated that a baccalaureate degree in Integrated Studies with an emphasis in Operations Management will be developed at DSC.
3. Partnerships with local industry to provide education and training for outstanding incumbent workers, enabling them to progress to management level positions.

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<sup>3</sup> McNamara, C., 2009.

<sup>4</sup> [http://managementhelp.org/ops\\_mgnt/ops\\_mgnt.htm](http://managementhelp.org/ops_mgnt/ops_mgnt.htm)

4. Expansion of partnerships with Washington County School District and Dixie Applied Technology College to develop articulated technical management career pathways for grades 9-12 and ATC students interested in applied technical fields that can serve as stepping-stones to baccalaureate college degrees.

Education and training in Operations Management is designed to lead to employment or advancement to managerial positions in any organization concerned with efficient production of quality goods and services. The DSC program will also prepare students to work in specialized production and service fields such as planning, inventory control, quality control, lean manufacturing, and purchasing/supply management.

### **Purpose of Degree**

The main purpose of an AAS degree in Operations at Dixie State College is to respond to the needs and demands of Washington County businesses, particularly in the manufacturing and service industries, to obtain or develop qualified operations managers. In an effort to increase educational and training opportunities, support economic development, and expand operations management capacity in Southern Utah, Dixie State College proposes a program that will:

- Goal 1. Provide industry standard, applied operations management education and training;
- Goal 2. Provide a career ladder approach to operations management education, beginning at the applied management level and advancing to the baccalaureate level;
- Goal 3. Partner with local firms in providing industry responsive, practical, in-class and on-the job training and education related to operations management;
- Goal 4. Partner with the Washington County School District and the Dixie Applied Technology College to develop articulated career pathways to degree programs for students in grades 9-12 and at the ATC.

The anticipated outcomes are in line with the stated goals. Short-term outcomes are: to increase educational and training opportunities in Washington County; to increase partnerships with local industry; to increase future employment possibilities for middle, high school and ATC students with interests in operations management. Intermediate outcomes are: to satisfy local industry needs for managers that not only have industry-related technical skills, but also sophisticated operations management skills, and to provide a career ladder for employees working in technical fields. Long-term outcomes are: to increase economic development in Washington County by attracting businesses to an area that proactively supports industry with education, and to increase the productivity and global market competitiveness of local businesses.

### **Institutional Readiness**

Dixie State College has a long history of providing excellent technical and business management courses. DSC is a state designated provider of post-secondary technical education for Washington County. The success of the program is dependent on existing strong community support and partnerships. DSC has established extensive partnerships with local businesses, having developed workers and training to meet their needs. With the intent to strengthen its service, DSC plans to expand its business programs to include additional courses in operations-related specialties.

For the AAS in Operations Management, Dixie State College will offer the introductory operations courses, while also offering the option for a seamless transition from DXATC, with minimal redundancy of coursework, for those completing the DXATC manufacturing program. DSC will also promote continuation on the career and educational track for development of managers with technical and operations management skills. Based on its capacity and designated authority, DSC will award the related associate of applied science and bachelor's degrees. An anticipated Integrated Studies baccalaureate degree emphasis area in Operations Management will provide the necessary flexibility and practicality of a baccalaureate degree that suits clientele needs and the industry model of career development.

Dixie State College's AAS in Operations Management will be developed and supervised by the Dean of the Udvar-Hazy School of Business. This position is currently held by Dr. William Christensen. Dr. Christensen has a doctorate in Business Administration with a specialization in supply chain management, logistics, management and international business. He also has extensive experience working as an operations manager for several Fortune 500 companies and teaching operations management courses at Michigan State University, Oklahoma State University, and DSC. The Chair of the Business Department, Dr. Philip Lee, is also a veteran of business education and will be involved in developing the program's business management courses.

### **Faculty**

The students needing general education courses at DSC can be assimilated into regular general education classes. The operation management courses will be taught by existing faculty, as long as the teaching load can be sustained. One additional faculty position is made available for two years by a manufacturing training grant from the Department of Labor. As enrollments continue to increase, additional business faculty will be needed. Special technically related management courses in manufacturing may require DSC to contract with qualified adjuncts.

### **Staff**

Current secretarial staff from the Udvar-Hazy Business School will be able to fulfill office duties for the AAS in Operations Management program. With the addition of program students, the Business School's student advisors' workloads will be monitored to determine if additional advisement staff will be needed.

### **Library and Information Resources**

Dixie State College already has a bachelors in business administration for which it has fully developed library resources. Due to the pre-engineering and business courses already in place, the College also has sufficient materials to cover the general science, mathematics, and other lower division course needs of related specialty areas in manufacturing. DSC has a modest collection to support specific related topic information for operations management, mechanical engineering, human resources management, manufacturing, business law, safety, and business computer applications.

Students can access online library resources from home, work or on campus. There are ten-student computer labs on-campus with full internet capabilities. Available online databases in which students can access full text articles include Academic Source Premier, Business Source Premier, Science Citation Index, Web of Science, JSTOR, Global Search, Computer Source, LexisNexis Academic, *ProQuest* newspapers, *Salt Lake Tribune*, and *Vocational and Career Collection*. Most academic and professional literature related to operations management is included in the Business Source Premier and Academic Source Premier. Students are also able to borrow from other Utah libraries through Utah's Catalog.

The library liaison to the Business Department provides assistance for faculty in making new library acquisitions, orienting students to accessing databases, and developing discipline-specific reference handouts. Reference librarians are available online for students 24 hours a day, 7 days a week. The library budget for management-related resources will be periodically assessed and updated to include new relevant resources.

### **Admission Requirements**

Admission requirements for entering the AAS in Operations Management will be the same as those required to enter Dixie State College. Transcripts from high school and previously attended institutions of higher education, plus ACT or SAT test scores are required. There is no minimum GPA or SAT/ACT test score requirement. There is an admission application and fee.

### **Student Advisement**

In close collaboration with the local school district and applied technology college, students will be able to access advisement related to the AAS in Operations Management program from middle school counselors all the way through to Dixie State College (DSC) advisors and faculty. At DSC, each division has discipline-specific advisors who can provide detailed and current information to prospective and attending students. The School of Business also tracks and mentors declared business students.

### **Justification for Graduation Standards and Number of Credits**

The AAS degree in Operations requires 63 credits, which is within the 63 to 69-credit range of Regent policy R401.6.5. The credit hours also satisfy all the DSC general education requirements for an Associate of Applied Science degree. The program's required courses cover generally recognized areas of competency for operations management. Competencies were developed referencing the Department of Labor's advanced manufacturing competency model.

### **External Review and Accreditation**

DSC, the Department of Workforce Services, DXATC, outside industry trainers, and local manufacturing industry upper-level management were involved in program skill and competency identification and standards development. The competencies of the AAS in Operations Management were presented to the Department of Labor for its Community-based Job Training Grant in Advanced Manufacturing and approved, as receipt of the grant award of \$2,000,000 would indicate. The AAS in Operations Management also meets all of the Northwest Commission on Colleges and Universities' standards.

The program advisory committee includes: one DSC School of Business representative; the Director of Economic Development; one industry representative, currently the HR Director of Blue Bunny; a regional representative of Department of Workforce Services; the Director of the DXATC Manufacturing Training program; the Director of Custom Fit; the President of DXATC; and the President of SWATC.

### **Projected Enrollment**

Initially the program will admit an annual cohort of 20 to 25 students. Each cohort, typically working fulltime and attending college halftime, is expected to take approximately 10 semesters or 3 years to complete the AAS degree. For students transferring with 30 credits from DXATC, the AAS should take approximately 5 semesters or 2 years.

Year	Student Headcount	# Faculty	Student-to-Faculty Ratio	Accreditation Req'd Ratio
1	10	1 FTE	20:1	N/A
2	20	1 FTE	20:1	N/A
3	30	1.5 FTE	20:1	N/A
4	40	2 FTE	20:1	N/A
5	40	2 FTE	20:1	N/A

### Expansion or Extension of Existing Program

This program builds on the existing traditional business administration program at DSC, much like accounting or marketing. Although operations courses are currently offered as electives for business majors in the baccalaureate degree program, those courses are at the upper division level. The AAS degree in Operations will make operations management education and training available at the introductory and intermediate supervisory levels. The curriculum and pedagogical approach to this degree will be inquiry-based and applied. These features of the program are in response to local, as well as national, employer need and demand. The DSC Operations program also clearly develops or extends from the DXATC program in Advanced Manufacturing.

## Section III: Need

### Program Need

Since 1970, the population of Washington County has grown from 13,900 to 134,000.<sup>5</sup> Washington County, Utah, for the past decade, has been one of the fastest growing counties in the nation. In 2008, St. George was ranked the second fastest growing metropolitan area in the U.S., down from the previous year's number one ranking (March, 2008, US Census). St. George consistently ranks in the top ten on lists of the best places to live and it was recently ranked as the second best city in the nation for business.<sup>6</sup> Contributing factors to the region's exceptional attraction and growth are its temperate climate, low crime and pollution, beautiful scenery, recreational opportunities, redundant fiber optic voice and data communications, accessible interstate transportation, business-friendly government, and accredited technical and community/state colleges. Though the current recession has caused a slowdown of immigration, the county is still growing, and is projected to resume its exceptional growth rate when the recession is over. With population growth typically comes some measure of economic growth, with expansion of not only quantity, but types of businesses. Due to aggressive marketing, Washington County is experiencing an increase in the number of manufacturing businesses. Dixie State College must respond to increasing need and demand for highly skilled workers, particularly in technical and management areas.

<sup>5</sup> Utah Office of Planning and Budget, 2008

<sup>6</sup> Inc.com, July, 2008

## Labor Market Demand

In 2007, Washington County and State surveys were conducted, asking businesses about their employment and training needs.<sup>7</sup> Of those 345 upper-level managers surveyed, 78% for the State in total and 79% for Washington County, indicated that they had either a “somewhat hard” or “very hard” time finding qualified, skilled job applicants. The area of greatest training need indicated by both total statewide and Washington County respondents was for “professional development” which was defined as supervision, quality management and leadership training. The training level indicated was moderate to high need. The training area most likely to be outsourced by the total State (59%) respondents was ‘professional development’. For Washington County respondents, professional development training (67%) came in second behind computer skills training (70%) as the area most considered for outsourcing.

DXATC’s Custom Fit Training Director has identified manufacturing training of managers as a critical need presented to them by local manufacturing companies. In response they have developed a successful advanced manufacturing training program for local industry, for which DSC is the higher education partner. A \$2,000,000 grant awarded by the Department of Labor for this training program verifies the importance and realized need for such training.

In 2007, a leading glass manufacturer, newly established in Washington County, began to receive customized training from the Custom Fit Training arm of Dixie Applied Technology College. Encouraged by the quality of training, expertise and interest of DXATC, the company managers initiated negotiations to provide on-going, systematic training and continued education for its management capable employees. Over the past few months, other manufacturers in the area have also shown interest in the development of an advanced manufacturing skills training and education program, which will allow their star employees to advance. Of particular note by employers is the need to recruit and advance minority employees.

Advanced Manufacturing is identified by the Department of Labor as a high growth industry. The Employment and Training Administration (ETA) has, therefore invested over \$120 million in the advanced manufacturing industry in recent years. Dixie Applied Technology College and Dixie State College were awarded a \$2.16 million grant in February 2009, from the ETA to pursue development and implementation of an advanced manufacturing training and education program. A key feature of the Community-Based Job Training (CBJT) Grant that was awarded is the establishment of strong partnerships with local industry representatives. These partnerships have been established in the Southern Utah Five County area and thus far, the partnering companies have committed to leverage \$1,271,320.

The Department of Labor notes the following three reasons for establishing manufacturing training and education programs in our public colleges:

1. The manufacturing sector continues to account for 14 percent of U.S. GDP and 11 percent of total U.S. employment. Moreover, manufacturing firms fund 60 percent of the \$193 billion that the U.S. private sector invests annually in R&D. (U.S. Department of Commerce)
2. Manufacturing salaries and benefits average \$65,000, higher than the average for the total private sector. Two factors in particular attract workers to manufacturing: higher pay and benefits and opportunities for advanced education and training. (National Association of Manufacturers)

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<sup>7</sup> Bryant, 2008. Complete survey results are in Appendix E, page 30.

3. A 2005 survey of U.S. manufacturing employers found that 80 percent of respondents said that they had a serious problem finding qualified candidates for the highly technical world of modern manufacturing. (National Association of Manufacturers)

Appendix D includes letters supporting the need for such a program from Cabintec, Viracon, Blue Bunny, Utah Department of Workforce Services, Washington County Economic Development Council, and Dixie Applied Technology College.

### **Student Demand**

It is difficult to quantify the number of potential students for this program, but there are several indicators of interest among students and potential students. Construction-related businesses and the Southern Utah Builders Association state that they have a need for construction (operations) managers; they also state that they want management training for current employees. Local manufacturing companies for which manufacturing management training is being provided by the DXATC and DSC through a Department of Labor grant have waiting lists for program participation.

### **Similar Programs**

Virtually all of the four-year colleges and the universities in Utah have management certificates and degrees. Dixie State College is expanding its management training by developing an Associate of Applied Science Degree in Operations Management. Unique features of Dixie State College's program will be the operations emphasis and the career ladder approach for training that prepares non-management employees for supervisory and management positions. DXATC provides a program that emphasizes technical competency building in special skill fields such as advanced manufacturing. They also provide introductory level supervisory or management skills. Dixie State College will provide an AAS in Operations Management that includes introductory and intermediate operations management training, as well as general education.

Other USHE AAS degrees in manufacturing operations or business are:

- Weber State College offers an AAS degree in Manufacturing Engineering Technology, which emphasizes engineering technology, rather than operations management.
- Snow College has an AAS in business management, which is aimed at students who wish to start their own business, work in a family-owned business or in a small business.
- Utah Valley University and the College of Eastern Utah have general AAS degrees in business management or administration.
- Salt Lake Community College has a general AAS in Business Management, but it also offers a degree more in line with the proposal of Dixie State College: an AAS in Business Management/Production Operations and Supply Chain Emphasis. SLCC's Production Operations emphasis focuses on general management as well as production operations, supply chain, quality and lean principles required of production of goods and services, as will Dixie's program.

The justification of Dixie State College establishing an AAS in Operations Management program is fivefold:

- 1) DSC serves an area that has been and will be among the fastest growing areas in Utah and in the nation, both in population and in businesses.
- 2) There is a local need for operations managers that is not being met by other institutions of higher education.
- 3) The program is unique in its operations management focus.



- 4) The program establishes a unique collaboration and career ladder model with Dixie Applied Technology College, the local expert in technical education.
- 5) Dixie State College appreciates the importance of working with the Washington County schools and DXATC to educate, inform and broaden career opportunities for students interested and skilled in technical fields, particularly in those careers that are high demand and high pay.

### **Collaboration with and impact on other USHE institutions**

The AAS Operations degree was born of a cooperative effort between Dixie State College, the DXATC, and local businesses. The curriculum was established based on the expressed needs of local industry, as well as a review of similar programs in the region. The Salt Lake Community College program was particularly helpful in providing a template for the DSC proposal. Although no formal external academic review has been commissioned, the \$2 million Community-Based Job Training Grant that was obtained to assist with program development incorporated a rigorous review of the proposal.

An AAS in Operations Management program at Dixie State College will be founded on the value of collaboration with our local educational institutions, which will result in optimal education and training provided by the appropriate educational institutions at suitable times to meet the needs and abilities of interested students.

Due to the high demand for manufacturing managers, it is not foreseen that an operations management program at DSC will impact enrollment in other Utah institutions of Higher Education. Communication with other USHE institutions will be maintained so that favorable transfer of program courses is available to DSC students, as well as to students from other institutions into DSC's program.

### **Benefits**

Benefits are closely aligned with need for and justification of the AAS in Operations Management program. Besides responding to local and national need for operations managers with additional technical skills in manufacturing, it is perceived that the format of the program will establish an exemplary model of cooperation and coordination of technical educational programs. Students will be able to enter and exit at several professional levels with valuable competencies, certificates and degrees.

### **Consistency with Institutional Mission**

Providing students the opportunity to earn an AAS degree in Operations Management is consistent with the Dixie State College mission as a baccalaureate, associate dominant college.<sup>8</sup> With its roots as a community college, DSC has long maintained a strong collaborative relationship with its community. It has been a primary mover for economic development in the area. In 1995, Dixie State College was instrumental in establishing the Washington County Economic Development Council, which has since worked closely with established and potential area employers. Partnering with local businesses for management development is a further indication of the College's connections for community service and economic growth. DSC is recognized by the local community as the primary higher educational source, but the College acknowledges that increasing training and educational opportunities for incumbent workers and supplying highly skilled employees is a needed and important part of meeting its mission to serve its community with workforce development.

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<sup>8</sup> DSC Mission, 2005.

## Section IV: Program and Institutional Assessment

### Program Assessment

**Goals: College Education and Training Capacity Building in Operations.** In an effort to increase educational and training opportunities, support economic development, and expand operations management capacity in Southern Utah, Dixie State College proposes a program that will:

- Goal 1. Provide industry standard applied operations management education & training;
- Goal 2. Provide a career ladder approach to operations management education beginning at the applied technology level and advancing to the baccalaureate, management level;
- Goal 3. Partner with local firms in providing industry responsive, practical, in-class and on-the-job training and education related to management;
- Goal 4. Partner with the Washington County School District and Dixie Applied Technology College to develop articulated career pathways to degree programs for grades 9-12 students.

#### **Goal 1. Provide industry standard, applied operations management education & training.**

- a. Instructional Excellence. This measure identifies the breadth, depth and quality of the instruction students receive, as well as educational opportunities provided for students.

##### Measurement

- 1. Faculty expertise in subject
- 2. Faculty have required qualifications
- 3. The coursework is sufficient in quality, breadth and depth
- 4. Responsiveness of program to current industry standards and needs
- 5. Assess employer satisfaction with quality of educational product

- b. Assessment. This measure is based upon the program assessment plan, as well as the assessment plan for each course offered by the program.

##### Measurement

- 1. Existence of a assessment plan for program
- 2. Existence of a assessment plan for individual courses
- 3. Level at which assessment plan is followed
- 4. Evaluate evidence that assessment information is reviewed and used to make program improvements.

- c. Funding Support. This measure determines if the program receives sufficient funding to meet the needs of the program.

##### Measurement

- 1. Review department expenditures
- 2. Assess whether program requires funding to further its mission
- 3. Determine if program needs are in balance with other programs on campus
- 4. Assess leveraging of industry resources
- 5. Assess grant opportunities, application and award levels

**Goal 2. Provide a career ladder approach to operations management education, beginning at the applied technology level and advancing to the baccalaureate, management level.**

d. Quality of career ladder

Measurement

1. Assess development and maintenance of relevant career ladder
2. Assess components of career ladder for functionality and quality
3. Assess student satisfaction with program at all levels
4. Assess employer satisfaction with student product at all levels
5. Assess ease of entry and exit at all levels

**Goal 3. Partner with local firms in providing industry responsive, practical, in-class and on-the-job training and education related to management.**

e. Development of Partnerships

Measurement

1. Level of communication with industry members
2. Assess relationship with Utah Manufacturers Association
3. Determine if sufficient partnerships are developed to properly represent industry
4. Assess level of resource leveraging needed of industry partnerships

f. Quality of Industry Partnerships

Measurement

1. Determine if key local industry players are partners
2. Level of commitment of industry partners, such as paying employees' tuition for program, providing for internships, rewarding program graduates with higher salaries
3. Level of resource leveraging provided by industry partnerships
4. Level of expert advice and support for program development and content
5. Number and quality of internships and externships

**Goal 4. Partner with the Washington County School District and Dixie Applied Technology College to develop articulated career pathways to degree programs for grades 9-12 students.**

g. Quality of partnership with DXATC

Measurement

1. Assess effectiveness of communication between institutions and with students
2. Efficiency and effectiveness of program processes and policies, such as transfer of courses and credit
3. Assess waste, such as duplication of services and coursework
4. Assess student program transfer rates from DXATC to DSC and vice-versa

h. Quality of Partnerships with Washington County School District

Measurement

1. Assess development and maintenance of grades 9-12 career pathways
2. Assess partnership with school district and local high school CTE programs
3. Assess number, quality and success of grades 9-12 career promotion activities

4. Assess transition of students from high school to college programs

### **Other Assessments for Assuring a Quality Program**

- i. Advisement. This measure identifies the adequacy of program advisement for students.  
Measurement
  1. Availability of quality advisement at high schools, DSC and DXATC
  2. Completeness of knowledge and information dissemination of career ladder components at high schools, DSC and DXATC
  3. Availability of a lecturer/advisor and the advisor/student ratio
  4. Compare the student/advisor ratio with other departments/programs on campus
  5. Assess advising needs
  6. Assess faculty involvement in advising
- j. Student Orientation. This measure identifies the adequacy of the program's efforts to orient students to the discipline and program.  
Measurement
  1. The existence of an orientation plan for new students
  2. Assess operation of the plan
  3. Assess orientation effectiveness in meeting needs of new students
- k. Student Achievement. This measure identifies the appropriate balance between rigor and student achievement.  
Measurement
  1. Determine grade point averages for program courses and faculty
  2. Assess course and faculty rigor
  3. Assess student progress to degrees
  4. Assess student non-success rate (C grade or less) for courses and department
- l. Student Preparation. This measure identifies how well students are prepared for a course or for work in this department/program.  
Measurement
  1. Identify and analyze relevant correlating information for student success and non-success, such as ATC scores, preparatory course standing, etc.
  2. Examine features of courses with high student failure or low success rates
  3. Assess course pre-requisite requirements and definition of 'adequate preparation' for courses and program
- m. Student Retention. This measure identifies the rate at which students drop out of a program or from courses within a program.  
Measurement
  1. Existence of retention plan
  2. Compare initial and final course enrollments
  3. Assess retention rates
  4. Maintenance of follow-up statistics regarding transfer, drop-out rates
  5. Assess response to retention statistics

- n. Student Engagement. This measure identifies the extent to which students are active in the program  
Measurement
  - 1. Level of identification with cohort (if exists)
  - 2. Level of students' familiarity with other students and faculty
  - 3. Participation of students in extra-curricular program activities
- o. Facilities. This measure identifies the adequacy of facilities adequacy.  
Measurement
  - 1. Compare student numbers with existing facilities
  - 2. Compare existing facilities with accreditation recommendations for facilities
  - 3. Assess upkeep and adequacy of facilities
- p. Recruitment. This measure identifies effectiveness of recruitment practices and any potential barriers to recruitment.  
Measurement
  - 1. Identify recruitment numbers
  - 2. Identify student reasons for choosing and not choosing the program
  - 3. Assess recruitment interest, non-interest
  - 4. Identify recruitment barriers
  - 5. Existence and effectiveness of strategic planning for recruitment
- q. Post-Completion Opportunities. This measure identifies what students do after graduation from the program  
Measurement
  - 1. Educational Continuance Measurement - Percentage of graduates who go on to advanced education programs
  - 2. Employment, In Field Measurement - Percentage of graduates who are hired for employment within the field covered by the degree granted
  - 3. Employment, Out of Field Measurement - Percentage of graduates who are hired for degree requiring (or equivalent) employment outside the field covered by the degree granted
  - 4. Employment, None or Temporary Measurement - Identify those graduates who did not go to graduate school and wanted employment, but did not get hired or were hired in temporary positions
  - 5. Self-selected Unemployment Measurement - Identify those graduates who opt to not pursue graduate school or employment
- r. Economic Sufficiency. This measure identifies economic viability of the typical or average salary for employment provided by this degree.  
Measurement
  - 1. Compare salary averages of graduates employed in field with ETA common measures' average adult salary (above \$12,200 for 6 months)
  - 2. Compare salary averages of graduates employed in field with CIP salary ranges
- s. Alumni Loyalty. This measure identifies the amount of connection felt by program graduates to the college and/or the program.  
Measurement

1. Assess percentage of responses from department/program letters, surveys, etc.
2. Dollars donated from graduates of program
3. Number of unsolicited letters of appreciation or other contact from graduates
4. Number of children of graduates who attend DSC
5. Number of graduates who return for reunion

### **Formative Assessment**

The administration of Dixie State College will maintain continuing oversight of the AAS in operations management program, finances and personnel. Because of the pilot and response-to-industry nature of the program, ongoing communication and mentoring with participants and employers will provide formative feedback. As with all existing programs, on-going assessment of student progress will be maintained as is usual in the Business Division.

### **Summative Assessment**

In order to prepare for continuation of a quality program, summative assessment will take place at the end of the program's first years. The program will be assessed according to DSC institutional effectiveness ratings, which include evaluations of:

1. Number of participants
2. Student program continuation and completion rates
3. Value of competencies
4. Learning outcomes of participants
5. Pre- and post-assessment of participants' attitudes and knowledge
6. Quality of program content
7. Quality of program instruction
8. Value-added business assessments by participants
9. Value-added business assessments by employers
10. Level of outreach to under-represented populations
11. Number of referrals to program by participants
12. Participant job placement or job advancement rates
13. Finances
14. Personnel

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

#### **Competencies for an Associate of Applied Science Degree in Operations**

#### **Management Practices and Principles**

Operations and project management  
 Procurement and supply chain management  
 Planning and scheduling  
 Cost analysis, estimating and control

Quality Management  
 Customer and stakeholder service  
 Human resource management  
 Health and safety

#### **Business Principles and Practices**

Business and employment law  
 Economics  
 Applied management accounting  
 Business computer proficiency

Business communications  
 Basic statistics  
 Ethics

### Basic Workplace Supervisory Skills

Verbal and written communications  
Human relations  
Mathematical computation  
Team dynamics  
Time management  
Problem solving

Critical thinking  
Decision-making  
Conflict resolution  
Presentation  
Leadership

## Section V: Finance

### Budget

Financial Analysis					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Students</b>					
Projected FTE Enrollment	10	20	30	40	40
Cost per FTE (est. 3% annual	\$3,030	\$3,121	\$3,246	\$3,376	\$3,511
Student/Faculty Ratio	20:1	20:1	20:1	20:1	20:1
Projected Headcount	20	40	60	80	80
<b>Projected Tuition</b>					
Gross Tuition (\$2,640/1FTE)	\$26,400	\$52,800	\$79,200	\$105,600	\$105,600
Tuition to Program (est. 31%)	\$8,184	\$16,368	\$24,552	\$32,736	\$32,736
<b>5-Year Budget Projection</b>					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Expense</b>					
Salaries & Wages	\$85,000	\$100,000	\$120,000	\$230,000	\$240,000
Benefits	\$30,000	\$35,000	\$42,000	\$80,500	\$84,000
Total Personnel	\$115,000	\$135,000	\$162,000	\$310,500	\$324,000
Current Expense	\$5,000	\$5,000	\$5,000	\$10,000	\$10,000
Travel	\$2,000	\$2,000	\$2,000	\$4,000	\$4,000
Capital	\$0	\$0	\$0	\$0	\$0
Library Expense	\$0	\$0	\$0	\$0	\$0
Total Expense	\$122,000	\$142,000	\$169,000	\$324,500	\$338,000
<b>Revenue</b>					
Legislative Appropriations	\$0	\$58,125	\$121,500	\$232,875	\$243,000
Grants & Contracts	\$115,000	\$57,500	\$0	\$0	\$0
Donations	\$0	\$0	\$0	\$0	\$0
Reallocations	\$0	\$0	\$7,792	\$38,681	\$42,056
Tuition to Program	\$8,184	\$16,368	\$24,552	\$32,736	\$32,736
Fees (\$505.20/1FTE)	\$5,052	\$10,104	\$15,156	\$20,208	\$20,208
Total Revenue	\$128,236	\$142,097	\$161,208	\$285,819	\$295,944
Difference					
Revenue-Expense	\$6,236	\$97	\$0	\$0	\$0
<b>Budget Comments</b>					
DSC does not allocate tuition revenues directly to any program.					

### **Funding Sources**

The program will be funded through state appropriations, tuition/fees, and, initially, through a Department of Labor (DOL) grant. The DOL grant greatly assists by funding one FTE of additional faculty for the first two development years. The grant-funding year is January through December, therefore, the first half year of funding before classes are offered will be used to hire faculty to develop curricula. Grant funding is also providing equipment for two-distance learning send/receive classroom set-ups and training/supporting faculty in creating online courses for the program. The major costs associated with this program are related to instruction, with most of the infrastructure already in place. Several skilled adjuncts have already been identified and employed to teach existing operations courses at DSC (e.g., MGMT3600 Operations Management and MGMT4000 Purchasing and Supply Management) and a broader and deeper list of instructors is being prepared. Of course, in a time of normal budget availability and in keeping with accreditation guidelines an additional full-time operations faculty would be hired. However, given the dire lack of funding, but also considering the urgent and real need of students and industry, DSC will make do with existing and community resources in order to get this program started. As the program grows and as the state and national economies improve, additional state allocations for dedicated full-time faculty will be justified and required.

### **Reallocations**

The needed reallocations for the third, fourth and fifth budget years, totaling \$83,529, will come from the gross revenue of the institution. In the third year, \$6333 will come from reallocation of revenue from the first two years of the program. This amount is part of the \$83,529 reallocation moneys.

### **Impact on Existing Budgets**

No other programs' base budgets will be affected by costs for this proposed program.



## Appendix A: Program Curriculum

Course Prefix & Number	Course Title	Credit Hours
<b>Core Courses (18 cr.)</b>		
OPER 1010	Quality Systems & Processes I	3
OPER 2010	Quality Systems & Processes II	3
OPER 1020	Safety and OSHA Compliance I	3
OPER 2020	Safety and OSHA Compliance II	3
OPER 2070	Leadership, Supervision, & Resource	3
OPER 2080	Operational Management	3
	Sub-Total	18
<b>Choose One Specialized Technical Area (12 cr.)</b>		
Manufacturing Management	12	
MAN 1010	Manufacturing Processes I	3
MAN 2010	Manufacturing Processes II	3
MAN 1020	Industrial Maintenance I	3
MAN 2020	Industrial Maintenance II	3
	Sub-Total	12
<b>Required General Education Courses (17 cr.)</b>		
MATH 1010	Intermediate Algebra	3
CIS 1200	Computer Literacy	3
ENGL 1010	Introduction to Writing	3
LIB 1010	Information Literacy	1
ENGL 2010	Intermediate Writing – Special Topics	3
BUS 1060	Pre-employment Seminar	1
BUS 1370	Human Relations	3
	Sub-Total	17
<b>Elective Courses (16 cr.) – any course designated 1000 or above</b>		
If a student is planning of pursuing a higher degree, it is recommended that they take the required		
Social Science (3 cr.)	ECON 1010 recommended	
American Institutions (3 cr.)		
MATH 1050 or above (4 cr.)	College Algebra/Pre-Calculus	
Life Science (3 cr.)		
Physical Science (3 cr.)		
Fine Arts or Communications (3 cr.)		
Literature or Humanities (3 cr.)		
	Sub-Total	16
<b>Tracks/Options – N/A</b>		
	Total Number of Credits	63

## Course Descriptions

### **CIS 1200, Computer Literacy (3 credits)**

This course is designed to provide basic computer instruction to complete the computer information literacy requirement as well as the general education computer requirement at Dixie State College. Upon successful completion of the course, students should be able to use computer technology to access, create, analyze, process and deliver information. Hands-on instruction is used to develop those skills through the study of computer concepts, operating systems, e-mail, word processing, spreadsheet, and presentation software. This is also the beginning computer course for CIS and Business majors. The course is a self-paced course that provides flexibility for students to set their own daily schedule to meet section deadlines, however, the student should plan to spend 6-9 hours per week to meet course requirements.

### **BUS 1060, Pre-employment Seminar (3 credits)**

A pre-employment seminar is offered each semester to assist Dixie College students make a successful transition from school to work. The seminar focuses on developing effective job search techniques, job winning resumes and interviews, and career advancement skills. 1 lecture hour per week.

### **BUS 1370, Human Relations (3 credits)**

Focus on the interdependent traits that influence human behavior on and off the job. Assists students in developing interpersonal skills through self-evaluation, methods of conflict resolution, behavioral concepts, effective communication principles, etc. Combines a concern for human relations in the workplace with personal growth and career success. 3 lecture hours per week.

## **Courses for AAS in Operations Management**

### **OPER 1010, Quality Systems and Processes I (3 credits)**

Provides an introductory knowledge of the use of quality systems and processes in manufacturing, including an overview of the ISO 2008 and total quality management (TQM) systems. The course covers standards in evaluating quality and reducing variance in manufacturing products with related experiences focusing on Six Sigma leadership and working toward Greenbelt Six Sigma status for each student. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

### **OPER 2010, Quality Systems and Processes II (3 credits)**

Provides an intermediate knowledge of the use of quality systems and processes in manufacturing. The course continues development of the ISO 2008 and TQM systems and further develops the Six Sigma standards in evaluating quality and reducing variance in manufacturing products. Advanced experiences focusing on Six Sigma leadership and attainment of Greenbelt Six Sigma status for each student. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

### **OPER 1020, Safety and OSHA Compliance I (3 credits)**

Provides a general knowledge of correct safety practices in the workplace, focusing on the characteristics of an effective safety culture, management commitment to safety, defining a value system, OSHA voluntary guidelines for safety management, management leadership and employee commitment to effective safety practices. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

**OPER 2020, Safety and OSHA Compliance II (3 credits)**

Provides an advanced knowledge of correct safety practices in the workplace with a continued focus on the characteristics of an effective safety culture, including assigning safety responsibilities, behavior-based safety processes, developing a hazard inventory and a hazard protection and control system. Students will learn to conduct effective incident investigations, medical surveillance programs, assessments of safety and training needs, job hazard analysis, and effective measurements of safety status. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

**OPER 2070, Leadership, Supervision and Resource Management (3 credits)**

Provides a focus on management leadership, including development of accountability, high performing organizations, customer oriented results, shared power, higher involvement, establishing a corporate vision, situational leadership, self leadership, partnering for performance and leading change. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

**OPER 2080, Operational Management (3 credits)**

Provides an intermediate level knowledge on managing operations in manufacturing, construction and transportation. Topics include understanding competitiveness, strategy, productivity, forecasting products, service design, reliability, decision theory, process selection, facility layout, linear programming, learning curves, supply chain management (SCM), inventory management, scheduling and overall project management. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

**Courses for AAS in Operations Management for the Specialized Technical Area of Manufacturing****MAN 1010, Manufacturing Processes I (3 credits)**

Provides a general understanding of, and experiences with, commonly used manufacturing techniques including thermal mass-reducing, chemical reducing, consolidation and deformation processes. The course also contains content on the use of lean manufacturing processes and introduction to the Six Sigma standard in evaluating quality. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

**MAN 2010, Manufacturing Processes II (3 credits)**

Provides a general understanding of, and experiences with, commonly used manufacturing techniques including mechanical, thermal and chemical joining processes, annealing (softening), hardening, surface preparation and surface coating processes. The course also contains content on the use of lean manufacturing processes and Six Sigma standards. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

**MAN 1020, Industrial Maintenance I (3 credits)**

Provides a general understanding of, and experiences with, commonly used industrial maintenance techniques including basic maintenance principles, service and repair principles, electrical systems, electronics and programming controllers. The course also contains content on the use of total productive maintenance (TPM) and continues to develop the Six Sigma standard in evaluating quality. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

**MAN 2020, Industrial Maintenance II (3 credits)**

Provides a general understanding of, and experiences with, commonly used industrial maintenance techniques including refrigeration systems, boiler systems, heating, air conditioning and ventilation systems, mechanical systems, fluid power systems, and troubleshooting techniques. The course also contains content on the use of total productive maintenance (TPM) and continues to develop the Six Sigma standard in evaluating quality. The course includes lectures, site visits, laboratory work and supervised on-the-job training experiences.

### Specialized Technical Areas

The College has future plans for other specialized technical areas of operations management.

## Appendix B: Program Schedule

### Proposed Course Sequence for Required Courses

Course Prefix & Number	Title	Credit Hours
First Semester		
OPER 1010	Quality Systems and Processes I	3
OPER 1020	Safety and OSHA Compliance I	3
Engl 1010		3
Lib 1010		1
MATH 1010 or higher		3
CIS 1200		3
	Sub-total	16
Second Semester		
OPER 2010	Quality Systems and Processes II	3
OPER 2020	Safety and OSHA Compliance II	3
Engl 2010		3
BUS 1370	Human Relations	3
Elective		3
	Sub-total	15
Third Semester		
MAN 1010	Manufacturing Processes I	3
MAN 1020	Industrial Maintenance I	3
OPER 2070	Leadership, Supervision and Resource Management	3
Electives		7
	Sub-total	16
Fourth Semester		
MAN 2010	Manufacturing Processes II	3
MAN 2020	Industrial Maintenance II	3
OPER 2080	Operational Management	3
BUS 1060		1
Electives		6
	Sub-total	16
	Total	63

## Appendix C: Faculty

**William Christensen** - Program Supervisor – Dean of the Udvar-Hazy School of Business

### Education

Ph.D. in Business Administration, Oklahoma State University, 2000.

Ph.D. candidate (ABD) in Supply Chain and Logistics Management, Michigan State University  
California State University, Hayward

M.B.A. Management Sciences, 1981.

B.A., East Asian Studies, 1979.

### Career Highlights

Dixie State College of Utah, Dean of the *Udvar-Hazy School of Business* – Strategy, Operations, Statistics (2007-present).

Dixie State College of Utah, *Business Professor* – Strategy, Operations, Statistics (2001-present).

MindFlow Technologies, *Director of Solutions Delivery* – linear programming software application for analyzing complex decisions.

Arthur Andersen, LLP *Business consulting*

Whirlpool Corporation, *International Buyer*

### Key Publications & Presentations

W. Christensen, R. Germain, L. Birou, "Variance vs. Average: Supply Chain Lead-Time as a Predictor of Financial Performance," *Supply Chain Management: An International Journal* (August 2007).

"Knowledge Management," with Laura Birou, Northwest Supply Management Association, "Bridging the Northwest Supply Chain," Portland, Oregon, February 2004.

W. Christensen, R. Germain, L. Birou, "Build-to-Order and Just-in-Time as Predictors of Applied Supply Chain Knowledge and Performance," *Journal of Operations Management* (July 2005).

R. Germain, C. Dröge, and W. Christensen, "The Mediating Role of Knowledge in the Relationship of Context with Performance," *Journal of Operations Management* (July 2001).

**Philip Lee** – Business Department Chair - Program Co-Supervisor

Ed.D., Higher Ed. Administration, Northern Arizona University, 2001

M.S., Marketing/Distributive Ed., Utah State University, 1984

B.S., Business Administration/Business Education Composite, 1979

### **Selected Business Faculty:**

#### **Verl Anderson**

DBA, Business Administration, Arizona State University, 1985

M.S., Library Science in Systems Management, Brigham Young University, 1973

B.S., Business Administration, Brigham Young University, 1969

#### **Kevin S. Barrett**

Ph.D., Accounting, Virginia Tech, 1991

M.B.A., Accounting, Indiana University, 1986

B.S., Accounting, Utah State University, 1982

**Debra L. Bryant**

Ph.D., Higher Ed. Administration, Cognate in Business Management, University of Nebraska, Lincoln, 2008

M.S.S., Human Resource Administration, 1991

B.A., Psychology, Simon Fraser University, 1980

**Robert Huddleston**

Ph.D., Voc. Ed./Higher Ed. Administration, Colorado State University, 1981

M.A., Business Education, Northern Arizona University, 1975

B.S., Business Administration, Northern Arizona University, 1971

**Nate Staheli**

MACC, Accounting, Southern Utah University, 1996

B.S., Accounting, Southern Utah University, 1995

C.P.A., 1996

**William O. Stratton**

Ph.D., Accounting, Claremont Graduate University, 1977

M.S.B.A., Quantitative Methods (Business), Boston University, 1970

B.S., Meteorology, Pennsylvania State University, 1968

B.S., Statistics, Mathematics, Florida State University, 1966

**Adjunct Faculty with Industry & Operations Management Expertise****Steve Carwell**

B.S. in Electrical Engineering, DeVry University, 1977

Owner of Jadestone Consulting

20 years of executive manufacturing experience

**Vic Hockett**

B.S. Industrial Technology, Southern Illinois University, College of Engineering

Owner of DWC Management Consulting

10 years experience in manufacturing and safety management

**Jordan Tracy**

B.S. Computer Information Technology, Dixie State College

Six Sigma Blackbelt

January 6, 2010

MEMORANDUM

TO: Utah Board of Regents

FROM: William A. Sederburg

SUBJECT: Dixie State College of Utah – BA/BA in Psychology – Action Item

Issue

Dixie State College of Utah requests approval to offer BA and BS degrees in Psychology, effective as soon as two full time tenure-track faculty are hired. This program was approved by the institutional Board of Trustees on February 9, 2009.

Background

The Bachelor of Arts and Bachelor of Science degrees in Psychology will offer students a common core of Psychology courses in three main topical areas representing the broad spectrum of modern Psychology: Social/Developmental, Behavioral Neuroscience/Cognitive, and Clinical-Counseling/Applied. The core courses are essential components of all three topical areas. This program intends to develop graduates who have the knowledge and skills required to: enter the workforce upon graduation; pursue advanced study in psychology or a closely related behavioral science discipline; pursue degrees in law, medicine, business, or numerous other professional fields; and more generally, to gain valuable insight into their own and others' behavior.

The Psychology program will require two additional full-time faculty. Ideally, the program would need to add one new full-time, tenure-track faculty member in each of the first three years of the program to meet projected enrollments with a reasonable student-to-faculty ratio. In view of the economic realities, however, the program will look for Ph.D.-prepared faculty and partnerships with the University of Utah to meet the instructor demands until such time as funding is available for full-time faculty hires. (The Commissioner's office learned that the funding is in place to hire two doctorally-prepared full-time faculty.) The proposed program will require a lecturer/advisor position to both teach and advise Psychology majors and additional clerical/secretarial staff. In addition, the current Browning Library electronic and print holdings must be augmented to support the proposed Psychology curriculum. Admission requirements reflect an open admission institution and students must have a C- or better in their prerequisite Psychology courses to enter the proposed program.

The proposal cites national sources and College data that support interest in Psychology as a popular academic offering. Dixie State is the only baccalaureate institution in the USHE without a Psychology degree. Student FTE is projected to begin at 70 and climb to 120 over five years.

#### Policy Issues

To start the proposed Psychology baccalaureate programs, Dixie State College of Utah will need to hire two full-time, doctorally-prepared, tenure-track faculty. The College appears to have the funds to hire two new faculty. USHE institutions are supportive of the program.

No other policy issues were raised.

#### Commissioner's Recommendation

The Commissioner recommends the Regents review the request by Dixie State College of Utah to offer the Bachelor of Arts and Bachelor of Science in Psychology, raise questions, and approve the request contingent upon hiring two additional full-time, tenure-track faculty.

---

William A. Sederburg, Commissioner

WAS/PCS  
Attachment



Academic, Career and Technical Education, and Student Success Committee

Action Item

Request to Offer the BA/BS in Psychology

Dixie State College of Utah

Prepared for:  
William A. Sederburg  
by  
Phyllis C. Safman

January 6, 2010

## **SECTION I: The Request**

Dixie State College of Utah requests approval to offer BA and BS degrees in Psychology, effective Fall semester 2010. This program was approved by the institutional Board of Trustees on February 9, 2009.

## **SECTION II: Program Description**

### **Complete Program Description**

The Bachelor of Arts and Bachelor of Science degrees in Psychology will offer students a common core of Psychology courses and advanced courses in three main topical areas representing the broad spectrum of modern Psychology: Social/Developmental, Behavioral Neuroscience/Cognitive, and Clinical-Counseling/Applied. The core courses are essential components of all three topical areas. While the specific student learning goals and outcomes associated with the Psychology program are detailed elsewhere in this proposal, in short, this program intends to develop graduates who have the knowledge and skills required to: enter the workforce upon graduation; pursue advanced study in psychology or a closely related behavioral science discipline; pursue degrees in law, medicine, business, or numerous other professional fields; and more generally, to gain valuable insight into their own and others' behavior.

### **Purpose of Degree**

DSC's dual mission includes "[offering] baccalaureate programs in high demand areas and in core or foundational areas consistent with four-year colleges" (DSC Mission Statement, approved 2005). DSC intends to seek approval for several baccalaureate degrees in core or foundational academic areas that are traditional at nearly every baccalaureate-granting institution of higher education in the nation. The Psychology degree will help the college accomplish this mission.

The Psychology faculty have drafted the following program mission statement (2008):

**The Psychology Program at Dixie State College is committed to:** Developing students who value the search for knowledge by means of scientific methods and research and to providing students with the knowledge and skills to do so.

- Developing students who appreciate and understand that behavior results from a complex interaction between physiological systems, genetic influences, experiential and environmental factors and social forces.
- Developing students whose understanding of Psychology reflects an integration of a variety of theoretical perspectives.
- Developing students who understand the principles of Psychology within a broad liberal arts perspective.
- Developing students who appreciate the power of applied Psychology to foster physical, psychological, and communal well-being

- Inspiring students to act ethically as scholars and as future practitioners of Psychology.
- Inspiring students to value and to use critical thinking as students, scholars, consumers of media, and targets of influence.
- Inspiring students to commit themselves to a lifetime pursuit of knowledge and understanding.

### **Institutional Readiness**

With eight years of steady and sustained development as a baccalaureate institution, DSC's infrastructure and institutional environment are now fully ready to respond to southern Utah's burgeoning demand for a more varied offering of baccalaureate programs. During those years the institution has devoted resources and attention to developing infrastructure, including baccalaureate-appropriate student services, appropriate policies, and enhanced library services.

### **Faculty**

The Psychology program will require several additional faculty. Ideally, the program would need to add one new full-time, tenure track faculty member in each of the first three years of the program to meet projected enrollments with a reasonable student-to-faculty ratio. In view of the economic realities, however, the program will look for Ph.D.-prepared faculty and partnerships with the University of Utah to meet the instructor demands until such time as funding is available for full-time faculty hires. At the time of this writing, DSC has three (3) full time psychology faculty, all of whom hold terminal degrees, and one half-time lecturer-advisor who is a Professor Emeritus, recently retired from her position as a full-time Psychology Department faculty member. With the proposed new hires, the number of full-time, tenure track faculty would eventually be six, which would limit the need for part-time, non-tenure contract faculty to three or four. It was recently learned that funding is in place to hire two doctorally-prepared full-time, tenure track faculty.

Current full-time faculty:

- Robert Carlson, Ph.D. Cognitive Psychology, University of California at Irvine (1998).
- John T. Jones, Ph.D. Social-personality Psychology, State University of New York at Buffalo (2003).
- Danelle Larsen-Rife, Ph.D. Human Development, University of California, Davis, (2006).

In filling future Psychology faculty positions, the College seeks to complement current faculty expertise. Thus, the College is recruiting faculty with identifiable academic backgrounds and teaching abilities in the following areas: (a) Behavioral Neuroscience, (b) Clinical/Counseling Psychology, and (c) Developmental Psychology (For further details, see Appendix C).

### **Staff**

The proposed program will require additional clerical/secretarial staff from the beginning. One half-time administrative assistant who could assist with departmental clerical duties would likely be sufficient in the first two years of the program (to begin July 1, 2010). As the program grows, additional support staff will be added.

## **Library and Information Resources**

DSC is well aware that library resources are an integral part of program development, and the Browning Library continues to expand appropriate collections for current baccalaureate offerings. As DSC's baccalaureate mission becomes more dominant, the library is expanding its overall collections.

A keyword search of the DSC library for Psychology provides a list of 4,636 books, 181 media titles, 427 full text electronic journals, as well as a variety of subject dictionaries and encyclopedias. (See Appendix G for a listing of DSC Library Databases and dictionaries in Psychology.) The current Browning Library electronic and print holdings must be augmented to support the proposed Psychology curriculum. Most lacking are two databases, Psych Articles and Psych Books. Also, the monographic and periodical database collections will be expanded to include major academic works and journals representing psychology's core sub-disciplines (Clinical, Developmental, Cognitive, Behavioral Neuroscience, and Social-Personality). These will be funded initially and continued year to year (see finance section below).

## **Admission Requirements**

Students admitted to the Psychology major must be in good standing with the College. While the prerequisite structure of the curriculum requires that students successfully complete foundational courses before they can enroll in advanced courses, students will be admitted as majors at any point after they have completed Psychology 1010 (General Psychology) with a C- or better. In order to be accepted into the program, transfer students must have completed Psychology 1010 (or an equivalent introductory Psychology course) with a C- or better and have at least a 2.5 overall GPA.

The DSC Psychology program admission requirements were developed after close examination of other USHE institutional requirements, which vary widely. For instance, Utah State University requires that a student complete three (3) Psychology courses with a GPA of 3.0 or better (General Psychology, Analysis of Behavior with Lab, and Psychological Statistics). The University of Utah has a three-tier acceptance structure. Pre-majors include any student who officially declares an intention to major in Psychology. To qualify for intermediate major status, students must complete 10 semester hours (at a college or university) including Psychology 1010 (with a "C" or better) and have a cumulative GPA of 2.8 or higher. To qualify for full major status in Psychology, students must complete Psychology 3000 (Statistical Methods in Psychology) and 3010 (Research Methods in Psychology), each with a grade of C or better, and have a U of U cumulative grade point average of 2.8 or better (with at least 10 hours taken at the U). Finally, Weber State University has an open admission process with a seamless entry for students interested in majoring in Psychology.

The proposed admissions criteria are designed to serve Dixie State College students' needs while avoiding obstacles that may restrict and delay students' study in psychology. Requirements that would be inconsistent with DSC's mission as an open enrollment institution would unnecessarily delay student progress, often forcing them to complete 4 ½ to 5 years of study to reach graduation as they struggle to qualify for entrance to the Psychology program. Thus, the admission

requirements detailed in the first paragraph of this section have been intentionally created to meet student needs and assist in their rapid progress toward degree completion.

### **Student Advisement**

Given the small number of Psychology faculty, this degree will require a lecture-advisor position to coordinate the academic advisement of Psychology majors (to begin July 1, 2010). Every Psychology major will initiate advisement with the lecture-advisor. In addition, each major will also be assigned a faculty mentor who will also play a critical role in guiding students toward their educational goals.

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

The proposed Psychology degrees require 117 credit hours, falling within USHE guidelines.

### **External Review and Accreditation**

Dixie State College retained the services of Dr. David Strayer, Chair of the Undergraduate Committee, Department of Psychology, University of Utah, to review its Psychology proposals. Dr. Strayer lauded the program's "well rounded and comprehensive" curriculum and the proposals' "balance of required writing and research elements" as well as the inclusion of a capstone course requirement. In addition, he pointed to some faculty and credit equivalency issues that prompted the program authors to further refine the proposal. Dr. Strayer's complete evaluation and the program's response are available upon request. Accreditation of this new program will be incorporated into the institution's established accreditation process with all appropriate evaluations and measures to ensure rigor and excellence.

**Projected Enrollment:** Nationwide data, as well as College level data (described in detail under "Need"), suggest that Psychology will be among the most popular majors at the college. Projected enrollment for the program is detailed in the chart under *Market Demand* below. Following are projected student FTEs and faculty FTEs for the proposed baccalaureate programs:

Year	Student FTE	# of Faculty	Mean FTE-to-Faculty Ratio	Accreditation Req'd Ratio
1	70	4	18:1	None
2	90	5	18:1	None
3	100	6	17:1	None
4	110	6	18:1	None
5	120	6	20:1	None

## SECTION III: Need

### Program Need

A Psychology program should be initiated because it is a foundational degree that is nearly universally offered at baccalaureate institutions in the United States, and students have expressed the need for a liberal arts baccalaureate offering at DSC, especially Psychology.

### Market Demand

Washington County is among the fastest-growing metropolitan areas in Utah and over the first five years of the proposed degree (2010-2015), Washington County's population is projected to grow by 25 percent (to nearly 200,000).<sup>1</sup> Non-farm annual job growth in Washington County is 10.2 percent, second-highest in the state behind only Tooele County at 11.5 percent. This is well above the statewide average of 4.0 percent and the national average of just under 3 percent for the year 2005. Dixie State College is the sole state institution of higher education in the county and will be increasingly counted upon to provide the trained and educated workers that growth will require. Graduates of the Psychology program will be well positioned to meet many of these needs.

*Utah Occupations in Demand:* The Utah Department of Workforce Services (DWS) reports data by occupations that show projections for Utah job opportunities (employment estimates, annual openings) in each of the recognized occupation categories. In the category Clinical, Counseling, and School Psychologists, DWS projects a growth rate of 42.3 percent over a ten-year period from 2004–2014. In the category "Educational, Vocational, and School Counselors," DWS projects a growth rate of 29 percent over the same period. In the category "Mental Health Counselors," the projected growth rate is 40 percent between 2004-2014. Finally, in the category of "Substance Abuse and Behavioral Disorders Counselors," DWS projects a growth rate of nearly 52 percent between 2004-2014.<sup>2</sup>

### Student Demand

Because a Psychology degree provides high demand skills, and because it is an entry baccalaureate for many graduate and professional programs, 71 of DSC's new students in 2007 declared a Psychology major, despite the fact that the College has offered no Psychology degree. Among other attributes, the attractiveness of Psychology as both an applied profession and as an undergraduate foundation for graduate and professional studies makes it popular among students nationwide. In fact, nationally, Psychology is ranked as the third-most-popular baccalaureate degree offering in colleges and universities, behind only business and education<sup>4</sup>. This is especially impressive given that Psychology is a single degree rather than a constellation of fields, as are business and education.

### Similar Programs

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<sup>1</sup> Source: Utah Governor's Office of Planning and Budget

<sup>2</sup> Source: Utah Department of Workforce Services; Occupational Projections 2004–2014

Psychology is widely recognized as a “core or foundational area consistent with four-year colleges” (*DSC Mission Statement*); it is an academic program that is offered at nearly every baccalaureate-granting institution in the nation. Among Utah’s baccalaureate-granting institutions, Dixie State is the only school that does not offer a Psychology major.

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

As noted, all USHE baccalaureate institutions offer degrees in Psychology. Such degrees are the substance of the academy; they are essential to the academic enterprise and central to the instructional mission of a baccalaureate institution. Core or foundational degrees form the nucleus of the instructional mission, and DSC has endeavored to develop its unique version of these programs, consistent with its own institutional vision and mission.

Collaboration with other USHE institutions has been ongoing. Primarily this has happened through participation and discussion with representatives of each USHE institution at the annual Major’s meeting. The author of the current proposal has attended this meeting for each of the last four years. As a result of this interaction (as well as an extensive review of each USHE Psychology program via the internet), the current Psychology program proposal is consistent with the high standards established by sister programs in the state.

Further, in November of 2007, Dr. John Jones, Dixie College Assistant Professor of Psychology and Addison Everett, Chair of the Department of Humanities and Social Sciences at Dixie College met with Dr. Charles Wright, University of Utah’s Associate Vice President of Academic Affairs and Undergraduate Studies. In the meeting, the development of a collaborative relationship with the University of Utah Psychology Department was discussed, as were Dixie’s plans for developing a stand-alone degree in Psychology. Dr. Wright’s questions and suggestions during that meeting have had a positive impact on the development of the current proposal, especially in the development of the core curriculum. This meeting was in addition to the evaluation by Dr. David Strayer, Chair of the Undergraduate Committee, Department of Psychology, University of Utah.

Finally, Dixie State acknowledges that Southern Utah University, the USHE institution closest to DSC, has a notable Psychology program. However, Washington County supplies only 7 percent of SUU’s freshman class and only 9.5 percent of SUU’s total student body<sup>3</sup>. By contrast, 70 percent of DSC’s freshman class comes from Washington County. There is no evidence that recent expansion of degree offerings at DSC has had a negative impact on SUU’s enrollments, and given the data about enrollment trends at the two institutions, it is not expected that the addition of a Psychology degree at DSC will adversely affect SUU’s student population.

### **Benefits to DSC and to the USHE**

Baccalaureate completion rates in Utah are declining, and one probable contributor is access. Washington County students are hindered by the costs of traveling to another institution for baccalaureate completion. Approving the proposed degrees will improve access for the growing population of southwest Utah. Also, the degree will allow DSC to further develop its baccalaureate mission and provide a number of educated employees for regional and local employers. The availability of this program will increase enrollment and retention; students currently interested in a

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<sup>3</sup> <http://www.suu.edu/general/ir/fact06/enrollmentstats.pdf>

Psychology degree either delay enrollment or are forced look elsewhere, but with the implementation of this degree, the dilemma will vanish.

### **Consistency with Institutional Mission**

As explained above, one of DSC's missions is to offer baccalaureate degrees in "high demand areas and in core or foundational areas." Psychology certainly meets these criteria. The National Center for Educational Statistics reports that for the academic year 2004-2005 (the latest for which data were available at the time of preparation of this proposal), there were 85,614 bachelor's degrees awarded in Psychology.<sup>4</sup> Such high rankings go back decades. In fact, Psychology has been among the top five most popular majors since 1970, moving into the fourth position (overtaking English) in 1975, and moving into the third position (overtaking Biological and Medical Sciences) in 1985. Psychology has shown a 16.25 percent growth rate in 2000/2001, the year Dixie State College began offering four-year degrees.

Further, Dixie State's mission includes an ongoing commitment to workforce development. Present educational opportunities in Washington County are clearly inadequate to prepare an educated workforce that will support the economic future of the region and provide individuals with opportunities for personal development and engaged citizenship. Citizens in southwest Utah need immediate opportunities to earn bachelor's degrees, immediate in both place and time. The Psychology degree proposal is one important component in response to the urgent local need for accessible and comprehensive higher education opportunities. Access to a full selection of foundation degree programs is the first step in a strategy that will require an aggressive public relations program aimed at persuading an education-deficient population to attend college.

## **SECTION IV: Student and Program Assessment**

### **Student Assessment**

Assessment is a cornerstone of the proposed Psychology program. The Psychology academic curriculum is organized around four learning goals that represent knowledge, skills, and values consistent with the science and application of Psychology. Each broad learning goal is accompanied by multiple specific learning outcomes. These learning outcomes are organized in a developmental framework with three levels: (a) Basic (knowledge and skills that students should acquire in the introductory Psychology course); (b) Developing (knowledge and skills that should emerge as students progress through lower and upper-division courses in the Psychology curriculum); and (c) Advanced (knowledge and skill levels consonant with students nearing the end of the Psychology program). From a cognitive perspective, "Basic" represents retention and comprehension, "Developing" represents application and analysis, and "Advanced" is associated with evaluation and creation (Appendix D).

These specific outcomes will be the primary focus of student assessment, as they represent what the faculty intend for students to know, or be able to do, as a result of their education and training in the Psychology program. The Psychology faculty will use multiple assessment tools to gauge the

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<sup>4</sup> Source: National Center for Educational Statistics,  
[http://nces.ed.gov/programs/digest/d06/tables/dt06\\_254.asp](http://nces.ed.gov/programs/digest/d06/tables/dt06_254.asp)



extent to which students are achieving these proposed learning outcomes in individual courses. This requires that each course in the Psychology curriculum be aligned with specific learning outcomes for that course (and to list these in the course syllabus). Faculty then have a responsibility to both the student and the program to assess the degree to which these learning outcomes have been achieved, and then to use this feedback to make improvements as needed. This continuous approach to assessment will allow faculty to more specifically direct the continual progression of students toward attaining the standards expected of them, and thus to target interventions and curricular adjustments more directly and effectively.

The program's second means of student assessment will be achieved through the required Senior Capstone courses (either PSY 4910 or PSY 4999), which are intended to allow students, through either an independent research project (PSY 4910) or a major review paper (PSY 4999), to demonstrate and integrate the knowledge, skills, and values they have attained through the course of their studies. The final projects in each of the capstone courses will represent valuable qualitative assessment tools of program learning goals/outcomes.

### **Program Assessment**

The Department of Psychology Senior Survey (Appendix E) will be distributed to all graduating seniors a few weeks before graduation during the Senior Seminar course; a high response rate is expected. The survey will query students about their experiences as Psychology majors, using both rating scale items and open ended questions. Departmental members will conduct a statistical analysis of the rating scale items and a content analysis of the open ended questions. A report summarizing the results will be written.

Using the results: Departmental faculty will produce an annual report based on the feedback collected. Faculty then will make recommendations addressing issues that arise from the assessment of the undergraduate experiences of Psychology majors. Changes will be implemented in a timely fashion.

In addition, each department at DSC goes through a program review process prescribed in Board of Regent and College policies. This review includes assessment of facilities, teaching resources, curricular design, and academic achievement of learning objectives. Each department is reviewed on a five-year rotation, and the Psychology program is due for review in 2012-13. At that time, the baccalaureate program will come under examination as per the program review policy.

### **Expected Standards of Performance**

By the time students graduate from the program, faculty will expect them to have achieved all of the learning outcomes. These standards were adapted from two sources: *Guidelines for the Undergraduate Psychology Major* published by the American Psychological Association, and *Teaching, Learning, and Assessing in a Developmentally Coherent Curriculum*, a product of the Task Force on Strengthening the Teaching and Learning of Undergraduate Psychological Sciences appointed by the American Psychological Association's Board of Educational Affairs.

## SECTION V: Finance

**Budget:** Following is the proposed budget for the degrees.<sup>5</sup>

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Students</b>					
Projected FTE Enrollment	70	90	100	110	120
Cost Per FTE	\$1,964.29	\$2,410.80	\$2,987.07	\$2,793.66	\$2,64363
Student/Faculty Ratio	18:1	18:1	17:1	18:1	20:1
Projected Headcount	79	101	109	120	131
<b>Projected Tuition</b>					
Gross Tuition	\$110,565	\$142,155	\$157,950	\$170,160	\$189,540
Tuition to Program	\$27,641.25	\$35,538.75	\$39,487.5	\$42,540	\$47,385
<b>5 Year Budget Projection</b>					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Expense</b>					
Salaries & Wages	\$88,000 <sup>6</sup>	\$149,080	\$212,297	\$219,727	\$227,417
Benefits	\$25,500	\$43,392	\$61,910	\$64,076	\$66,318
Total Personnel	\$113,500	\$192,472	\$274,207	\$283,803	\$293,735
Current Expense	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Travel	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
Capital	\$10,500	\$11,000	\$11,500	\$13,000	\$14,900
Library Expense	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Total Expense	\$149,500	\$234,972	\$311,707	\$321,303	\$335,235
<b>Revenue</b>					

<sup>5</sup> Assumes an average individual faculty salary of \$58,000 and salary increases of 3.5 percent.

<sup>6</sup> Includes 1 full-time faculty and 1 full-time lecture-advisor.

	Year 1	Year 2	Year 3	Year 4	Year 5
Legislative Appropriation	\$121,859	\$193,434	\$272,220	\$278,760	\$283,850
Grants	\$0	\$0	\$0	\$0	\$0
Reallocation	\$0	\$0	\$0	\$0	\$0
Tuition to Program	\$27,641.25	\$35,538.75	\$39,487.5	\$42,540	\$47,385
Total Revenue	\$149,500	\$234,972	\$311,707	\$321,303	\$335,235
Difference					
Revenue-Expense	\$0 -	\$0 -	\$0 -	\$0 -	\$0 -
Comments					

**Funding Sources:** The funding for the proposed degrees will come from institutional funds from state allocations and new tuition revenue, depending on future budgetary conditions. External funding sources will be vigorously pursued as conditions allow.

**Reallocation:** No current reallocation of program funds is planned.

**Impact on Existing Budgets:** No other programs will be affected by this program.

## Appendix A Psychology Program Curriculum

Psychology students have two options – a Bachelor of Arts degree or a Bachelor of Science degree in Psychology. Each of these Psychology degrees will give students a broad, liberal arts foundation that will serve them well as citizens, employees, or as graduate students in Psychology, Counseling, Social Work, or other professional areas. The proposed BS degree will have five basic curricular components: (a) lower-division, general education courses (other than Psychology 1010, 29 credits); (b) Psychology Major core courses (19 credits); (c) Psychology research area courses (18 credits); (d) Psychology elective courses (12 credits); and (e) non-Psychology elective courses (42 credits for the BS and 26 for the BA). The proposed BA degree will have a sixth curricular component: (f) foreign language courses (16 credits). These curricular requirements are illustrated in the following tables:

### REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN PSYCHOLOGY:

<b>General Education Requirement</b> – complete the general education requirements listed in the Associate of Science or Associate of Art degrees, or the equivalent (in addition to Psychology 1010).		
<b>TOTAL GENERAL EDUCATION CREDITS BEYOND PSYCHOLOGY 1010:</b>	<b>29</b>	
<b>Psychology Major Core Courses</b> – complete each of the following core courses	<b>Credits</b>	<b>Prerequisites and Notes</b>
• PSY 1010, General Psychology	3	
• PSY 2050, Introduction to Writing for the Behavioral Sciences: APA Style	2	PSY 1010 and ENGL 1010
• PSY 3000, Statistical Methods in Psychology/ Psychology Lab	4	PSY 1010 and MATH 1040 or higher
• PSY 3010, Research Methods in Psychology/ Psychology Lab	4	PSY 1010 and PSY 3000
• PSY 4000, History of Psychology	3	PSY 1010 and completion of at least 90 credits
• PSY 4910, Capstone Research in Psychology	3	Psychology Major and completion of at least 90 credits
<b>TOTAL PSYCHOLOGY MAJOR CORE CREDITS</b>	<b>19</b>	
<b>Psychology Research Area Courses</b> – complete the following	<b>Credits</b>	<b>Prerequisites and Notes</b>

<u>Take two</u> social/developmental psychology courses selected from the following:		
• PSY 3200, Development in Infancy and Early Childhood	3	PSY 1010; PSY 1100 or FCS 1500
• PSY 3220, Childhood and Adolescent Development	3	PSY 1010; PSY 1100 or FCS 1500
• PSY 3230, Adult Development and Aging	3	PSY 1010; PSY 1100 or FCS 1500
• PSY 3410, Introduction to Social Psychology	3	PSY 1010
• PSY 3700, Personality Theory	3	PSY 1010
<u>Take two</u> biological/cognitive psychology courses selected from the following:		
• PSY 3120, Cognitive Psychology	3	PSY 1010
• PSY 3710, Physiological Psychology	3	PSY 1010 and either BIOL 1010 or 1610
• PSY 4140, Cognitive Neuroscience	3	PSY 3010 required; PSY 3120 and PSY 3711 recommended
• PSY 4150, Sensation and Perception	3	PSY 3120
• PSY 4160, Attention and Consciousness	3	PSY 3120
<u>Take two</u> clinical/applied psychology courses selected from the following:		
• PSY 3400, Psychology of Abnormal Behavior	3	PSY 1010
• PSY 3420, Organizational Behavior	3	PSY 3410
• PSY 3460, Health Psychology	3	PSY 1010
• PSY 4440, Addiction	3	PSY 3400 or 3460
• PSY 4300, Introduction to Counseling and Psychotherapy	3	PSY 3400 and at least 60 credits
• PSY 4305, Counseling and Psychotherapy Lab	1	Must be taken with PSY 4300
<b>TOTAL PSYCHOLOGY RESEARCH AREA CREDITS</b>	<b>18</b>	
<b>Psychology Electives</b> - Students must take 12 additional credits in psychology. At least nine (9) of these credits must be at the upper division level.	<b>Credits</b>	<b>Prerequisites and Notes</b>
<b>TOTAL PSYCHOLOGY ELECTIVE CREDITS</b>	<b>9</b>	Area concentration course credit beyond the 18 required above will count toward psychology elective credit
<b>Additional Electives</b> - Student must take 42 additional credits from any area	<b>Credits</b>	<b>Prerequisites and Notes</b>

<b>ADDITIONAL ELECTIVES</b>	<b>42</b>	It is recommended that students pursue electives in diverse disciplines
<b>TOTAL CREDITS REQUIRED FOR DEGREE</b>	<b>117</b>	

#### REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN PSYCHOLOGY:

<b>General Education Requirement</b> – complete the general education requirements listed in the Associate of Science or Associate of Art degrees, or the equivalent (in addition to Psychology 1010).		
<b>TOTAL GENERAL EDUCATION CREDITS BEYOND PSYCHOLOGY 1010:</b>	<b>29</b>	
<b>Psychology Major Core Courses</b> – complete each of the following core courses	<b>Credits</b>	<b>Prerequisites and Notes</b>
• PSY 1010, General Psychology	3	
• PSY 2050, Introduction to Writing for the Behavioral Sciences: APA Style	2	PSY 1010 and ENGL 1010
• PSY 3000, Statistical Methods in Psychology/ Psychology Lab	4	PSY 1010 and MATH 1040 or higher
• PSY 3010, Research Methods in Psychology/ Psychology Lab	4	PSY 1010 and PSY 3000
• PSY 4000, History of Psychology	3	PSY 1010 and completion of at least 90 credits
• PSY 4910, Capstone Research in Psychology OR • PSY 4920, Capstone Seminar in Psychology	3	Psychology Major and completion of at least 90 credits
<b>TOTAL PSYCHOLOGY MAJOR CORE CREDITS</b>	<b>19</b>	
<b>Psychology Research Area Courses</b> – complete the following courses	<b>Credits</b>	<b>Prerequisites and Notes</b>
<u>Take two</u> social/developmental psychology courses selected from the following:		
• PSY 3200, Development in Infancy and Early	3	PSY 1010; PSY 1100 or FCS 1500

Childhood		
• PSY 3220, Childhood and Adolescent Development	3	PSY 1010; PSY 1100 or FCS 1500
• PSY 3230, Adult Development and Aging	3	PSY 1010; PSY 1100 or FCS 1500
• PSY 3410, Introduction to Social Psychology	3	PSY 1010
• PSY 3700, Personality Theory	3	PSY 1010
<u>Take two</u> biological/cognitive psychology courses selected from the following:		
• PSY 3120, Cognitive Psychology	3	PSY 1010
• PSY 3710, Physiological Psychology	3	PSY 1010 and either BIOL 1010 or 1610
• PSY 4140, Cognitive Neuroscience	3	PSY 3010 required; PSY 3120 and PSY 3711 recommended
• PSY 4150, Sensation and Perception	3	PSY 3120
• PSY 4160, Attention and Consciousness	3	PSY 3120
<u>Take two</u> clinical/applied psychology courses selected from the following:		
• PSY 3400, Psychology of Abnormal Behavior	3	PSY 1010
• PSY 3460, Health Psychology	3	PSY 1010
• PSY 3420, Organizational Behavior	3	PSY 3410
• PSY 4440, Addiction	3	PSY 3400 or 3460
• PSY 4300, Introduction to Counseling and Psychotherapy	3	PSY 3400 and at least 60 credits
• PSY 4305, Counseling and Psychotherapy Lab	1	Must be taken with PSY 4300
<b>TOTAL PSYCHOLOGY RESEARCH AREA CREDITS</b>	<b>18</b>	
<b>Psychology Electives</b> - Students must take 12 additional credits in psychology. At least nine (9) of these credits must be at the upper division level.	<b>Credits</b>	<b>Prerequisites and Notes</b>
<b>TOTAL PSYCHOLOGY ELECTIVE CREDITS</b>	<b>9</b>	Area concentration course credit beyond the 18 required above will count toward psychology elective credit.
<b>Foreign Language Courses</b>	<b>Credits</b>	<b>Prerequisites and Notes</b>
Complete four courses (first- and second-year, or more advanced) in any one foreign language with a written language (excluding ASL), or receive at least 16 credits by examination for advanced fluency in a foreign language.	<b>16</b>	This requirement applies to students receiving the Bachelor of Arts degree. Students receiving the Bachelor of Science Degree

		need not complete this requirement.
<b>Additional Electives</b> - Student must take 26 additional credits from any area	<b>Credits</b>	<b>Prerequisites and Notes</b>
<b>ADDITIONAL ELECTIVES</b>	<b>26</b>	It is recommended that students pursue electives in diverse disciplines.
<b>TOTAL CREDITS REQUIRED FOR DEGREE</b>	<b>117</b>	

***BS/BA Psychology Degree Credits Summary***

	<b>BS</b>	<b>BA</b>
General Education beyond PSY 1010	29	29
Psychology Core	19	19
Psychology Research Area	18	18
Psychology Electives	9	9
Other Electives	42	26
Foreign Language	0	16
<b>Total Credits</b>	<b>117</b>	<b>117</b>



**Appendix A (continued)**  
**New Courses to be Added in the Next Five Years (course descriptions appear below)**

Course Number	Course Title	Credit Hours
2050	Introduction to Writing for the Behavioral Sciences: APA Style	2
2210	Psychology of Personal Growth	3
2430	Stress Management	3
2480	Substance Abuse: Prevention	3
3200	Development in Infancy and Childhood	3
3220	Psychology of Adolescence and Emerging Adulthood	3
3230	Adult Development and Aging	3
3420	Organizational Behavior	3
3460	Health Psychology	3
4000	History of Psychology	3
4140	Cognitive Neuroscience	3
4150	Sensation and Perception	3
4160	Attention and Consciousness	3
4200	Psychology of Morality	3
4210	Hearts and Minds: Persuasion, Propaganda, and Deception	3
4300	Introduction to Counseling and Psychotherapy	3
4305	Counseling and Psychotherapy Lab	1
4440	Addiction	3
4800	Psychology Practicum	0.05 - 3.0
4910	Capstone Research in Psychology	3
4920	Capstone Seminar in Psychology	3

**All Program Courses: Course Descriptions**

**PSY 1010, General Psychology**

Required of Psychology majors and recommended for students in all disciplines who are interested in the fundamental scientific principles of behavior. The student will study learning, motivation, emotion, personality, mental disorders, treatment alternatives and other related subjects as part of the course. Critical thinking will be explored in examining these aspects of behavior. Students will have frequent examinations and quizzes as part of the course requirements. This course satisfies general education requirements in the social sciences area. *3 lecture hours per week.*

**PSY 1100, Human Development Across the Lifespan**

For all students who are interested in knowing how and why people change through the course of a lifetime. Covers biological, cognitive, and social changes from prenatal development to late adulthood. Studies scientific methods of collecting and interpreting data, analyzes developmental events from various perspectives, and focuses on applying this knowledge to one's own development. Utilizes textbook reading, tests, quizzes, and

journal writing. Satisfies general education requirements in the social science area. *3 lecture hours per week.*

#### PSY 2050, Introduction to Writing for the Behavioral Sciences: APA Style

Required of Psychology majors and recommended for students in all disciplines interested in understanding and more effectively using APA writing style. An introduction to the effective use and application of APA style for research projects, technical papers, and expository writing in the psychological and behavioral sciences. Prerequisites: PSY 1010, ENGL 1010. *2 lecture hours per week.*

#### PSY 2210, Psychology of Personal Growth

For all students who have a desire to increase self-awareness, understanding, and personal growth. Includes information on social influences, stress, health issues, communication, relationships, and challenges associated with marriage, child rearing, work, and aging. Uses textbook readings, group discussions, and journal writing to explore past and present decisions and to make future choices to promote personal growth toward self-actualization and fulfillment. An elective course in psychology, although Psychology 1010 is recommended as a prerequisite. *3 lecture hours per week.*

#### PSY 2430, Stress Management

For students of all disciplines who wish to learn more about the stress response. Sources of stress, physiological and psychological responses to stress and other components of stress will be investigated. Students will be given relaxation training through several alternative approaches. Grading is based on levels of criteria being met from examinations from the text, completion of self-appraisals, self-exploration through written exercises. An elective credit course in psychology. *3 lecture hours per week.*

#### PSY 2480, Substance Abuse: Prevention

For students of all disciplines wishing to expand their awareness of the effects of drugs on the human body, to learn more about local, state, and federal laws regulating the use of drugs and alcohol, to become acquainted with information which identifies and describes characteristics of users, and to recognize healthy lifestyles as a viable alternative to substance abuse. Course requires reading, in-class oral presentation, and examinations from the textbook. An elective course in psychology. *3 lecture hours per week.*

#### PSY 2800, Human Sexuality

The purpose of this course is to provide a basic understanding of the academic and scientific study of human sexuality. Human sexuality is examined from multiple perspectives, ranging from the biological through psychological, as well as cultural, medical, ethical and legal issues. The course is intended to provide an in-depth, college-level understanding of the foundations of human sexuality. *3 lecture hours per week.*

#### PSY 3000, Statistical Methods in Psychology

Includes an introduction to and application of statistical methods to psychological research. Students will 1) design and measure psychological constructs, 2) select, compute, and interpret descriptive and inferential statistics, 3) use computer technology to facilitate statistical analyses, 4) accurately represent the results of statistical analyses, and 5) critically analyze methodological and statistical arguments. Prerequisites: PSY 1010 and Math 1040 or higher. Lab required. *3 lecture hours and 2 lab hours per week.*

#### PSY 3010, Research Methods in Psychology

Includes an introduction to the research process; deductive and inductive reasoning in science, the nature of theory, hypothesis testing and the use of empirical data; scientific knowledge and its applications. Naturalistic, case study, correlation, and experimental research methods in Psychology will be examined. Prerequisites: PSY 1010 and PSY 3000. Lab required. *3 lecture hours and 2 lab hours per week.*

#### PSY 3120, Cognitive Psychology

Introduction to basic principles of human and non-human cognition. Topics include perception, categorization, attention, memory, knowledge representation, judgment and decision making, and problem solving. Prerequisites: PSY 1010. *3 lecture hours per week.*

#### PSY 3200, Development in Infancy and Childhood

A review of theory and research on prenatal development, pregnancy and birth, infant's sensory and motor capabilities, brain development, and attachment, children's understanding of their physical and social world, pretense and theory of mind, language and reasoning, self-concept, parent-child and peer relations, self-control and morality. Viewed from biological, cognitive and social-cultural perspectives. One observation period, to be arranged. Prerequisites: PSY 1010, and either PSY 1100 or FCS 1500. *3 lecture hours per week.*

#### PSY 3220, Psychology of Adolescence and Emerging Adulthood

Exploring adolescents' developing identity, psychosocial and cultural adjustment and their needs for acceptance, autonomy, and intimacy in light of the major physical, cognitive, and cultural changes of this phase. Prerequisites: PSY 1010, and either PSY 1100 or FCS 1500. *3 lecture hours per week.*

#### PSY 3230, Adult Development and Aging

The study of adult lives from a life-span perspective. In addition to the psychology of aging we will investigate societal influences on aging. Topics include theories of the life-cycle, identity formation, the experience of growing older, personality stability, and psychological adjustment to the myths and realities of age. Prerequisites: PSY 1010, and either PSY 1100 or FCS 1500. *3 lecture hours per week.*

#### PSY 3400, Psychology of Abnormal Behavior

An advanced course for students of all disciplines who wish to study the nature of mental

disorders. Particularly important for students majoring in psychology, criminal justice, or education. We will cover several DSM IV diagnostic categories with clinical descriptions, risk factors, causes, and treatment strategies. Course requires college reading level skills and will require library research. Prerequisite: PSY 1010. *3 lecture hours per week.*

#### PSY 3410, Social Psychology

The scientific study of how individuals' thoughts, feelings, and behaviors are influenced by other people. Topic areas include identity, social perception, attitudes, persuasion, conformity and obedience, stereotypes and prejudice, group conflict, aggression and violence, helping behavior, and interpersonal relationships. Prerequisite: PSY 1010. *3 lecture hours per week.*

#### PSY 3420, Organizational Behavior

The application of social-personality theory and research findings to understanding, predicting, and managing human behavior in organizations, from small groups to multinational corporations. Prerequisite: 3410. *3 lecture hours per week.*

#### PSY 3460, Health Psychology

Health psychology examines the relationship between psychosocial factors and health. This course will provide a broad overview using the basic concepts, theories, methods, and applications of health psychology. We will critically examine state-of-the-art research as well as current gaps in knowledge to explore topics including: definitions of health and illness; stress and coping; health behaviors; how the mind influences specific physical health conditions and vice versa; patient-practitioner relations, and health promotion. Emphasis will be placed on the ways psychological factors interact with the social, cultural, economic, and environmental contexts of health. Prerequisite: PSY 1010. *3 lecture hours per week.*

#### PSY 3700, Personality Theory

Building on established personality theories, the course offers students the opportunity for expanded self-understanding and understanding of others. Primary focus is on presentation and discussion of diverse theoretical views of personality and personality development. Prerequisite: PSY 1010. *3 lecture hours per week.*

#### PSY 3710, Physiological Psychology

Introduction to how the structure and function of the brain and the nervous system relate to specific psychological processes and overt behaviors including cognitive functions, sensory and motor systems, emotions, regulatory behaviors, reproductive behaviors, and psychopathology. PSY 3000 and PSY 3010 recommended. Prerequisite: PSY 1010, BIOL 1010 or 1610. *3 lecture hours per week.*

#### PSY 4000, History of Psychology

Required of Psychology majors. An examination of the philosophical issues which have troubled psychology as a science, such as determinism and free will, conscious and

unconscious processes, the possibility and efficacy of self-knowledge, behaviorism vs. mentalism, and the relation of mind and brain. Prerequisite: PSY 1010 and the completion of at least 90 credits.

#### PSY 4140, Cognitive Neuroscience

Cognitive neuroscience uses neuroimaging techniques such as PET and fMRI to examine issues related to the mind/brain. This course covers such topics as perception and encoding, cerebral lateralization and specialization, the control of action, executive function, and the problem of consciousness. Prerequisites: PSY 3010 required, PSY 3120 and 3711 recommended. *3 lecture hours per week.*

#### PSY 4150, Sensation and Perception

The anatomical and physiological bases of sensation will be reviewed. Moreover, traditional and contemporary theories of perception will be considered. Students will be expected to do laboratory work illustrating basic concepts of sensory and perceptual functions. Prerequisite: PSY 3120. *3 lecture hours per week.*

#### PSY 4160, Attention and Consciousness

Introduction to the theories and mechanisms of attentional selection in perceptual processes. Topics include classical theories of selective attention, modern neuro-cognitive models, and the relationship between attention and time. Discussion of the definitions of consciousness, the relationship between attention and consciousness, and the search for the neural correlates of visual awareness and volition, and the various kinds of impairments of consciousness and attention as described in clinical cases. Prerequisite: PSY 3120. *3 lecture hours per week.*

#### PSY 4200, Psychology of Morality

This course will apply current psychological research to explore how and why morality influences our judgments and actions. We will place a specific emphasis on the relative roles of evolved emotions and of principled reasoning in these processes. We will incorporate evidence and argument from the fields of evolutionary biology, philosophy, anthropology, social neuroscience, and social psychology to explore the effects of moral thinking and feeling on topics such as economic and legal decision making, political affiliation, helping behavior, aggression and social deviance. Prerequisite: Psychology 1010 and the completion of at least 60 credits. *3 lecture hours per week.*

#### PSY 4210, Hearts and Minds: Persuasion, Propaganda, and Deception

An examination of the psychology of influence, including theoretical foundations and practical applications. This course will focus on influence attempts across the ethical spectrum and across several contexts, including interpersonal relationships, political and governmental organizations, corporations, mass media, cults, and religious organizations. Prerequisite: PSY 3410 and the completion of at least 60 credits. *3 lecture hours per week.*

#### PSY 4300, Introduction to Counseling and Psychotherapy

This course is designed to familiarize students with theories of counseling and psychotherapy, with an emphasis on the major models within the field. Theories will be critically evaluated, contrasted, and applied to a range of psychological problems and diverse populations. Discussions will also explore the historical background and developmental precipitants of each theory as well as the multicultural strengths and weaknesses of each counseling approach. Opportunity is provided to practice and refine counseling skills. This course is highly recommended for students interested in pursuing a counseling related profession. Prerequisite: PSY 3400, and the completion of at least 60 credits. Lab required. *3 lecture hours per week.*

#### PSY 4305, Counseling and Psychotherapy Lab

This lab is designed to provide students direct exposure to the major models of counseling and psychotherapy as they are currently practiced. Provides students with the opportunity to practice and refine basic counseling skills. This course is highly recommended for students interested in pursuing counseling-related professions. Co-requisite: PSY 4300. *2 lab hours per week.*

#### PSY 4440, Addiction

This course provides students with the opportunity to explore the many issues related to the various forms and processes of addiction. The course will focus on etiological, assessment, treatment, and legal issues with regard to addiction. Students will also have the opportunity to learn about social and community resources designed to aid recovery. Prerequisite: PSY 3400 or 3420. *3 lecture hours per week.*

#### PSY 4800, Psychology Practicum

Students work regional agencies by observing or participating in professional activities under appropriate supervision. Prerequisite: Permission of instructor. *2-6 contact hours per week.*

#### PSY 4910, Capstone Research in Psychology

As a capstone, this course requires students to access the information and skills learned throughout their undergraduate studies, especially in the courses listed as core courses and area concentration courses. As a laboratory, it requires students to use their knowledge and skills to conduct an independent research study to further develop and consolidate their understanding of psychology as a science. Prerequisites: Psychology Major and completion of at least 90 credits. *3 lecture hours per week.*

#### PSY 4920, Capstone Seminar in Psychology

Students write an APA-style review paper about an area of psychology in which they have

an occupational interest, engage in a collaborative research project, and create a professional planning portfolio containing the documents necessary for them to enter the workforce or gain admittance to graduate school. (This course does not satisfy the capstone requirement for a Bachelor of Science). Prerequisites: Psychology Major and completion of at least 90 credits. *3 lecture hours per week.*

## Appendix B

### Psychology Course Rotation

Course	Fall	Spring	Summer
PSY 1010 General Psychology*	x	x	x
PSY 1100 Human Development Across the Lifespan	x	x	x
PSY 1430 Stress Management	x		
PSY 1480 Substance Abuse: Prevention	x		
PSY 2050 Introduction to Writing for the Behavioral Sciences*	x	x	
PSY 2210 Psychology of Personal Growth		x	
PSY 3000 Statistical Methods in Psychology w/Lab*	x		
PSY 3010 Research Methods in Psychology w/Lab*		x	
PSY 3120 Cognitive Psychology		x	
PSY 3210 Development in Infancy and Childhood	x		
PSY 3220 Psychology of Adolescence and Emerging Adulthood		Every other	
PSY 3230 Adult Development and Aging		Every other	
PSY 3400 Psychology of Abnormal Behavior		x	
PSY 3410 Social Psychology	x		
PSY 3420 Organizational Behavior	Every other		
Course	Fall	Spring	Summer
PSY 3460 Health Psychology	x		
PSY 3700 Personality Theory		x	
PSY 3710 Physiological Psychology	x		
PSY 4000 History of Psychology*		x	
PSY 4140 Cognitive Neuroscience	Every other		
PSY 4150 Sensation and Perception		Every other	



PSY 4160 Attention and Consciousness		Every other	
PSY 4200 Psychology of Morality	Every other		
PSY 4210 Hearts and Minds: Persuasion, Propaganda, and Deception	Every other		
PSY 4300 Introduction to Counseling and Psychotherapy w/Lab		X	
PSY 4440 Addiction		X	
PSY 4800 Psychology Practicum	X	X	X
PSY 4910 Capstone Research in Psychology*	X	X	
PSY 4920 Capstone Seminar in Psychology*	X	X	

\* Core Requirements

## Appendix B: Hypothetical Program Schedule, Baccalaureate of Science in Psychology

Semester 1	
Course	Credits
PSY 1010, General Psychology	3
MATH 1040, Introduction to Statistics	3
ENGL 1010, Beginning Writing	3
LIB 1010, Information Literacy	1
ART 1010, Introduction to Art	3
PEHR 1088, Fitness Center I	1
SS 1001, Orientation to the Social and Behavioral Sciences	1
Total	15

Semester 2	
Course	Credits
PSY 1100, Human Development Across the Lifespan	3
ENGL 2010, Intermediate Writing	3
HIST 1700, American Institutions	3
CIS 1200, Computer Information Literacy	3
BIOL 1610, Principles of Biology I	4
Total	16

Semester 3	
Course	Credits
PSY 2050, Introduction to Writing for the Behavioral Sciences: APA Style	2
PSY 3000, Statistical Methods in Psychology and Lab	4
BIOL 1620, Principles of Biology II	3
BIOL 1625, Principles of Biology II Lab	1

PHIL 1000, Introduction to Philosophy	3
HIST 3670, Slavery and the American Republic	3
Total	16

Semester 4	
Course	Credits
PSY 3010, Research Methods in Psychology and Lab	4
PSY 3220, Child and Adolescent Development	3
PSY 3400, Psychology of Abnormal Behavior	3
BIOL 2030, Principles of Genetics	4
Total	14

Semester 5	
Course	Credits
PSY 3460, Health Psychology	3
PSY 3710, Physiological Psychology	3
ENGL 3260, Major American Authors	3
BIOL 2420, Human Physiology	3
BIOL 2425, Human Physiology Lab	1
GEO 1050, Geology of the National Parks	4
Total	17

Semester 6	
Course	Credits
PSY 3410, Social Psychology	3
Upper Division Psychology Elective	3
BIOL 3010, Biological Evolution	3

ART 2210, Introduction to Oil Painting	3
PEHR 1450, Chinese Kung Fu	1
Total	13

Semester 7	
Course	Credits
PSY 4140, Cognitive Neuroscience	3
HIST 3730, The American Civil War and Reconstruction	3
FIN 1750, Personal Finance	3
COMM 2110, Interpersonal Communication	3
PEHR 1530, Primitive Survival Skills	1
Total	13

Semester 8	
Course	Credits
PSY 4910, Capstone Research in Psychology	3
PSY 4000, History of Psychology	3
Upper Division Psychology Elective	3
PHIL 3510, Professional Ethics	3
PEHR 1527, Intro to Climbing	1
Total	13

**Total Credits = 117**

## Appendix B: Hypothetical Program Schedule, Baccalaureate of Arts in Psychology

Semester 1	
Course	Credits
PSY 1010, General Psychology	3
MATH 1040, Introduction to Statistics	3
ENGL 1010, Beginning Writing	3
LIB 1010, Information Literacy	1
CIS 1200, Computer Information Literacy	3
FREN 1010, Beginning French I	4
Total	17

Semester 2	
Course	Credits
PSY 1100, Human Development Across the Lifespan	3
ENGL 2010, Intermediate Writing	3
HIST 1700, American Institutions	3
BIOL 1610, Principles of Biology I	4
FREN 1020, Beginning French II	4
Total	17

Semester 3	
Course	Credits
PSY 2050, Introduction to Writing for the Behavioral Sciences: APA Style	2
PSY 3000, Statistical Methods in Psychology/ Psychology Lab	4
BIOL 1620, Principles of Biology II	3
BIOL 1625, Principles of Biology II Lab	1

French 2010, Intermediate French I	4
Total	14

Semester 4	
Course	Credits
PSY 3010, Research Methods in Psychology/ Psychology Lab	4
PSY 3220, Child and Adolescent Development	3
BIOL 2030, Principles of Genetics	4
FREN 2020, Intermediate French II	4
Total	15

Semester 5	
Course	Credits
PSY 3460, Health Psychology	3
PSY 3710, Physiological Psychology	3
ENGL 3260, Major American Authors	3
ART 1010, Introduction to Art	3
HIST 3670, Slavery and the American Republic	3
Total	15

Semester 6	
Course	Credits
PSY 3410, Social Psychology	3
Upper Division Psychology Elective	3
BIOL 3010, Biological Evolution	3
ART 2210, Introduction to Oil Painting	3

PHIL 1000, Introduction to Philosophy	3
Total	15

Semester 7	
Course	Credits
PSY 4140, Cognitive Neuroscience	3
PSY 4000, History of Psychology	3
PSY 3400, Psychology of Abnormal Behavior	3
COMM 2110, Interpersonal Communication	3
Total	12

Semester 8	
Course	Credits
PSY 4920, Capstone Seminar in Psychology	3
Upper Division Psychology Elective	3
GEO 1050, Geology of the National Parks	4
HIST 3730, The American Civil War and Reconstruction	3
Total	13

Total Credits = 118

**Appendix C**  
**Psychology Faculty Credentials**

<b>Faculty</b>	<b>Degree</b>	<b>Area</b>	<b>Institution Awarding Highest Degree/Year</b>	<b>Years Teaching Higher Ed</b>	<b>Research / Publication Areas</b>
Robert Carlson	PhD	Cognitive Psychology	University of California, Davis	6	
John Jones	PhD	Social and Personality Psychology	State University of New York, Buffalo	5	Interpersonal Relationships, Violence and Aggression, Psychology of Morality
Dannelle Larsen-Rife	PhD	Developmental Psychology	University of California, Davis	11	Relationships, Family, Parenting, Child Development, Interpersonal Communication
Kathleen Pope (Lecturer/Advisor) .5 FTE instruction	MS	Counseling and Psychology	Utah State University	25	

**Adjunct Faculty**

<b>Faculty</b>	<b>Degree</b>	<b>Area</b>	<b>Institution Awarding Highest Degree/Year</b>	<b>Years Teaching Higher Ed</b>
Nolan Ashman	M.A.	Educational Psychology	Utah State University	48
William Endsley	Ph.D.	Instructional Psychology	Brigham Young	
Colin Metzger	M.S.	Psychology	Utah State University	10
Kathleen Pope	MS	Counseling and Psychology	Utah State University	25
Russ Talbot	M.Ed.	Edl Psychology	Brigham Young	



Appendix D  
Departmental Learning Goals and Outcomes

LEARNING GOAL 1: KNOWLEDGE BASE OF PSYCHOLOGY Demonstrate familiarity with the major concepts, theoretical perspectives, and historical trends in psychology.			
	LEARNING OUTCOMES		
General Outcome Area	BASIC LEVEL <i>retention and comprehension</i>	DEVELOPING LEVEL <i>analysis and application</i>	ADVANCED LEVEL <i>evaluation and creation</i>
1.1 Nature of psychology	a. Define psychology as the science that studies behavior and mental processes and the profession that applies that science	b. Distinguish the similarities and differences between the professional and scientific communities in psychology	c. Evaluate the influence of context in evolving definitions of psychology
1.2 Relationship of psychology to Science	a. Explain how psychology meets the criteria of science.	b. Analyze how psychological research reflects scientific principles.	c. Evaluate psychological science as a means of understanding behavior and mental processes.
1.3 Structure of psychology	a. List and explain the major research and applied subfields of psychology	b. Differentiate subfields in relation to specific research topics and/or behavioral concerns	c. Speculate about psychology's continuing evolution and refinement of subfields
1.4 Relationship of psychology to other disciplines	a. Identify the connections between psychology and other disciplines	b. Compare and contrast the assumptions, methods, and choice of problems of psychology with those of other disciplines	c. Integrate knowledge derived from psychological science with that of other disciplines
1.5 Objectives of psychology	a. Identify and explain the primary objectives of psychology	b. Compare and contrast the primary objectives of psychology	c. Evaluate the strengths and limitations of the primary objectives of psychology
1.6 Historic perspectives in psychology	a. Describe the key eras of the major schools of thought in the history of psychology (including their founders, assumptions, explanatory concepts and methods	b. Compare and contrast historical perspectives	c. Assess the relative importance of the major schools of thought in the history of psychology  d. Defend a historical perspective

General Outcome Area	BASIC LEVEL <i>retention and comprehension</i>	DEVELOPING LEVEL <i>analysis and application</i>	ADVANCED LEVEL <i>evaluation and creation</i>
<b>1.7 Contemporary perspectives in psychology</b> <ul style="list-style-type: none"> <li>• behavioral</li> <li>• biological</li> <li>• cognitive</li> <li>• evolutionary</li> <li>• humanistic</li> <li>• psychodynamic</li> <li>• sociocultural</li> </ul>	<b>a. Identify</b> and describe the major contemporary perspectives of psychology	<b>b. Compare</b> and contrast the assumptions, methods, and other elements of major contemporary perspectives in psychology	<b>c. Evaluate</b> the utility and effectiveness of contemporary psychological perspectives  <b>d. Describe</b> how each perspective applies its findings to promote human welfare
<b>1.8 Main themes of psychology</b> <ul style="list-style-type: none"> <li>• heredity and environment</li> <li>• stability and change</li> <li>• free will vs. determinism</li> <li>• mind-body problem</li> </ul>	<b>a. Identify</b> the overarching themes of psychology	<b>b. Apply</b> the overarching themes of psychology in explaining specific behaviors  <b>c. Debate</b> the merits of each side of the overarching themes of psychology	<b>d. Evaluate</b> the appropriateness of scientific explanations of behavior and mental processes from the standpoint of its overarching themes
<b>1.9 Content domains of psychology</b> <ul style="list-style-type: none"> <li>• cognitive</li> <li>• social and personality</li> <li>• developmental</li> <li>• biological</li> <li>• clinical</li> </ul>	<b>a. Identify</b> and explain basic concepts, theory, and research represented in the general content domains	<b>b. Apply</b> and analyze concepts, theory, and research in the general content domains	<b>c. Evaluate</b> and synthesize concepts, theory, and research in the general content domains
<b>1.10 Role of ethics</b>	<b>a. Describe</b> relevant ethical issues, as addressed by the APA code of ethics	<b>b. Apply</b> relevant ethical principles, as addressed by the APA code of ethics	<b>c. Evaluate</b> policies and procedures related to psychology research and practice using APA ethical principles
<b>1.11 Career opportunities</b>	<b>a. Identify</b> careers associated with psychology at the bachelor's, master's, and doctoral levels	<b>b. Compare</b> and contrast the credentials, skills, and experiences required for a career in psychology	<b>c. Create</b> an appropriate career plan related to individualized goals

<b>LEARNING GOAL 2: RESEARCH METHODS IN PSYCHOLOGY</b> <b>Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.</b>			
	LEARNING OUTCOMES		
General Outcome Area	<b>BASIC LEVEL</b> <i>retention and comprehension</i>	<b>DEVELOPING LEVEL</b> <i>analysis and application</i>	<b>ADVANCED LEVEL</b> <i>evaluation and creation</i>
2.1 Scientific method	a. <b>Describe</b> the basic characteristics of the scientific method in psychology	b. <b>Analyze</b> how primary behavioral research adheres to scientific principles	c. <b>Design</b> research that adheres to the principles of scientific method
2.2 General research strategies	a. <b>Describe</b> various general research strategies, including advantages and disadvantages of use  b. <b>Distinguish</b> the nature of designs that permit causal inferences from those that do not	c. <b>Select</b> and <b>apply</b> general research strategies to address appropriate kinds of research questions  d. <b>Categorize</b> research articles that employ methods permitting causal and non-causal inferences	e. <b>Evaluate</b> effectiveness of a general research strategy in addressing a research question
2.3 Correlation	a. <b>Define</b> correlation	b. <b>Interpret</b> meaning of correlational findings	c. <b>Speculate</b> about and evaluate the significance of correlational findings
2.4 Experimentation	a. <b>Describe</b> the role of controlled comparison in justifying a cause-effect claim  b. <b>Describe</b> experimental design strategies to address research questions	c. <b>Compare</b> and <b>contrast</b> different experimental research methods used by psychologists	d. <b>Design</b> appropriate experiments to maximize internal and external validity and reduce the existence of alternative explanations
2.5 Correlation vs. Experimentation	a. <b>Explain</b> the difference between correlation and causation	b. <b>Match</b> research questions to appropriate method	c. <b>Evaluate</b> whether a specific research method warrants a cause-effect conclusion

General Outcome Area	BASIC LEVEL <i>retention and comprehension</i>	DEVELOPING LEVEL <i>analysis and application</i>	ADVANCED LEVEL <i>evaluation and creation</i>
2.6 Research elements	a. <b>Define</b> hypotheses, variables, and operational definitions	b. <b>Deduce</b> hypotheses, variables, and operational definitions from research articles and scenarios	c. <b>Formulate</b> testable research hypotheses, based on operational definitions of variables
2.7 Participant selection and assignment	a. <b>Describe</b> rationale for choosing and assigning specific group of participants	b. <b>Analyze</b> potential influence of participant variables	c. <b>Design</b> appropriate controlled conditions to minimize their effects, including random assignment
2.8 Design quality (internal validity)	a. <b>Define</b> validity and <b>describe</b> conditions that enhance valid findings	b. <b>Analyze</b> conditions that will enhance or detract from validity of conclusions	c. <b>Evaluate</b> the validity of conclusions derived from psychology research
2.9 Generalization (external validity)	a. <b>Describe</b> the relationship of research design to generalizability of results	b. <b>Analyze</b> the generalizability of research findings based on strengths or weaknesses of research design	c. <b>Generalize</b> research conclusions appropriately based on the parameters of particular research methods
2.10 Reporting research findings	a. <b>Identify</b> the basic components of APA style	b. <b>Explain</b> (in writing) the methods, results and conclusions of a data collection project	c. <b>Write</b> all sections of a research report and a review type paper applying APA style
2.11 Research ethics	a. <b>Describe</b> the basic principles of the APA code of ethics for research with human and animal participants, including the role of an IRB	b. <b>Adhere</b> to the APA code of ethics in the treatment of human and nonhuman participants in the design, data collection, interpretation, and reporting of psychological research	c. <b>Evaluate</b> the contributions and constraints entailed in adherence to APA code of ethics and make appropriate adjustments in design  d. <b>Complete</b> an IRB application
2.12 Sociocultural context and diversity	a. <b>Identify</b> variations in behavior related to sociocultural differences	b. <b>Apply</b> sociocultural framework to research strategies and conclusions	c. <b>Incorporate</b> sociocultural factors in development of research questions, design, data collection, analysis, and interpretation
2.13 Database skills	a. <b>Identify</b> and <b>locate</b> relevant journals and databases in psychology	b. <b>Develop</b> and <b>adjust</b> search strategies to represent adequate range of research	c. <b>Create</b> efficient and effective search strategies to address research questions

General Outcome Area	BASIC LEVEL <i>retention and comprehension</i>	DEVELOPING LEVEL <i>analysis and application</i>	ADVANCED LEVEL <i>evaluation and creation</i>
2.14 Statistical skills	<b>a. Describe</b> the differences between descriptive and inferential statistical analysis  <b>b. Define</b> statistical significance and its role in interpreting research findings	<b>c. Analyze</b> and <b>interpret</b> simple statistics from research results and in journal articles  <b>d. Distinguish</b> between statistical and practical significance	<b>e. Evaluate</b> statistical power in results by addressing effect size and confidence intervals  <b>f. Speculate</b> about the implications of using the conventions of statistical significance in interpreting results
2.15 Limits of scientific reasoning and evidence	<b>a. State</b> how evidence is contextual and tentative	<b>b. Discuss</b> the reasons why empirical findings and conclusions may change or require adjustment	<b>c. Justify</b> the evolving nature of scientific findings

LEARNING GOAL 3: CRITICAL THINKING SKILLS IN PSYCHOLOGY Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.			
	LEARNING OUTCOMES		
General Outcome Area	BASIC LEVEL <i>retention and comprehension</i>	DEVELOPING LEVEL <i>analysis and application</i>	ADVANCED LEVEL <i>evaluation and creation</i>
3.1 Use of evidence in psychology	<b>a. Discern</b> difference between personal views and scientific evidence in understanding behavior	<b>b. Collect</b> and <b>use</b> scientific evidence in drawing conclusions and in practice	<b>c. Evaluate</b> the quality, objectivity, and credibility of evidence of research findings in drawing conclusions and in practice
3.2 Association skills	<b>a. State</b> connections between diverse facts and theories	<b>b. Relate</b> connections between diverse facts and theories  <b>c. Apply</b> diverse facts and theories	<b>d. Assess</b> the quality of connections made between diverse facts and theories

		over a wide range of contexts	
3.3 Argumentation skills	a. <b>Identify</b> arguments based largely on anecdotal evidence and personal experience	b. <b>Deduce</b> contradictory and oversimplified arguments based on a growing knowledge of the available facts and theories	c. <b>Develop</b> sound, integrated arguments based on scientific reasoning and empirical evidence
3.4 Detection of errors in psychological reasoning	a. <b>Identify</b> common fallacies and poorly supported assertions regarding behavior	b. <b>Deduce</b> contradictory and oversimplified arguments based on a growing knowledge of the available facts and theories	c. <b>Develop</b> sound, integrated arguments based on scientific reasoning and empirical evidence
3.5 Questioning skills	a. <b>Explain</b> the appropriateness and relevance of questions with direction and guidance	b. <b>Differentiate</b> independently between ill-defined and well-defined questions	c. <b>Evaluate</b> and <b>modify</b> questions to eliminate ambiguity throughout the process of scientific inquiry
General Outcome Area	<b>BASIC LEVEL</b> <i>retention and comprehension</i>	<b>DEVELOPING LEVEL</b> <i>analysis and application</i>	<b>ADVANCED LEVEL</b> <i>evaluation and creation</i>
3.6 Creativity	a. <b>Describe</b> elements of creativity and its role in solving psychological problems	b. <b>Apply</b> alternative strategies to known protocols	c. <b>Generate</b> novel insights about the psychology of humans and nonhumans
3.7 Problem solving	a. <b>Define</b> the stages of problem solving	b. <b>Apply</b> problem solving strategy to develop solutions to problems in diverse contexts	c. <b>Appraise</b> the quality of solutions  d. <b>Select</b> optimal strategy from multiple alternatives
3.8 Skepticism	a. <b>Define</b> skepticism and its role in psychological thinking	b. <b>Distinguish</b> between scientific and pseudo-scientific explanations of human behavior and <b>compare</b> their relative value	c. <b>Maintain</b> rigorous standards related to quality of scientific evidence in support of a behavioral claim

<b>LEARNING GOAL 4: APPLICATION OF PSYCHOLOGY</b> Understand and apply psychological principles to personal, social, and organizational issues.			
	LEARNING OUTCOMES		
General Outcome Area	<b>BASIC LEVEL</b> <i>retention and comprehension</i>	<b>DEVELOPING LEVEL</b> <i>analysis and application</i>	<b>ADVANCED LEVEL</b> <i>evaluation and creation</i>
4.1 Healthy lifestyle	a. <b>Describe</b> elements of healthy lifestyle	b. <b>Analyze</b> a specific personal lifestyle and examine strengths and weaknesses	c. <b>Evaluate</b> courses of action that could produce more beneficial outcomes
4.2 Abnormal behavior	a. <b>Summarize</b> the criteria of abnormality	b. <b>Apply</b> criteria of abnormality to a given set of symptoms or characteristics	c. <b>Evaluate</b> the significance of symptoms in the sociocultural context
4.3 Positive psychology	a. <b>Summarize</b> the emerging field of positive psychology	b. <b>Compare</b> and <b>contrast</b> the abnormal and positive approach to promoting psychological well-being	c. <b>Evaluate</b> the potential of the positive psychology movement as an applied area in psychology
4.4 Psychological interventions	a. <b>Describe</b> common characteristics of a psychological approach to solving problems	b. <b>Predict</b> outcomes from the application of a psychological intervention	c. <b>Evaluate</b> the quality of a psychological intervention taking into account the sociocultural context
4.5 Potential for change	a. <b>List</b> ways that psychological principles can facilitate personal, social, and organizational change	b. <b>Apply</b> a psychological principle to facilitate positive change in a personal, social, or organizational behavior	c. <b>Evaluate</b> the power of psychological strategies to promote change
4.6 Applied areas in psychology (i.e. clinical, counseling, and industrial/organizational)	a. <b>Identify</b> major applied areas in psychology	b. <b>Link</b> applied areas to an appropriate psychological career	c. <b>Determine</b> whether an applied specialty can produce a solution for a given psychological problem
4.7 Personal application	a. <b>Identify</b> psychological principles that have been influential in your own life	b. <b>Analyze</b> your own behavior, emotional experiences, and personal characteristics according to psychological concepts and theories	c. <b>Evaluate</b> how what you know about psychology may be used to improve your own life

Adapted from *APA guidelines for the undergraduate psychology major* (American Psychological Association, 2007), and from *Teaching, learning, and assessing in a developmentally coherent curriculum* (Task Force on Strengthening the Teaching and Learning of Undergraduate Psychological Science, 2007).

**Appendix E**  
**Dixie State College Department of Psychology Senior Survey**

**BACKGROUND**

1. In total, how many semesters has it taken you to complete the requirements for a bachelor's degree?

☐ 6   ☐ 9   ☐ 12  
☐ 7   ☐ 10   ☐ 13 or more  
☐ 8   ☐ 11

2. How many semesters have you been enrolled at Dixie State College (DSC)?

☐ 1   ☐ 5   ☐ 9  
☐ 2   ☐ 6   ☐ 10  
☐ 3   ☐ 7   ☐ 11  
☐ 4   ☐ 8   ☐ 12 or more

3. For how many semesters were you a Psychology major at DSC?

☐ 1   ☐ 5   ☐ 9  
☐ 2   ☐ 6   ☐ 10  
☐ 3   ☐ 7   ☐ 11  
☐ 4   ☐ 8   ☐ 12 or more

4. If you transferred to DSC, where did you transfer from?

\_\_\_\_\_

5. What do you expect your cumulative grade point average to be at graduation?

☐ 2.0-2.49   ☐ 2.5-2.99  
☐ 3.0-3.49   ☐ 3.5-4.0

6. What do you expect your psychology grade point average to be at graduation?

☐ 2.0-2.49   ☐ 2.5-2.99  
☐ 3.0-3.49   ☐ 3.5-4.0

7. Do you plan to attend graduate or professional school sometime after graduation?

☐ Yes   ☐ No

7.a If yes: In what field?

☐ Psychology   ☐ Social Work  
☐ Law School   ☐ Human Resources/Industrial Relations  
☐ Medical School   ☐ Business School  
☐ Other (please specify \_\_\_\_\_)

7.b If attending graduate school in Psychology, what area are you specializing in?

☐ Biological   ☐ Industrial/Organizational  
☐ Clinical   ☐ Personality  
☐ Cognitive   ☐ Social



\_\_\_ Developmental    \_\_\_ Quantitative  
\_\_\_ Other (please specify \_\_\_\_\_)

7.c Will you be attending graduate school next year or the following year?

\_\_\_ Yes    \_\_\_ No

7.d Where you will be attending graduate school?

I will be attending \_\_\_\_\_

### ACADEMIC

8. How many Psychology courses did you take at DSC? \_\_\_\_\_

9. How much do you feel that you learned as a Psychology major?

A Great Deal	Quite A Bit	Some	Not Very Much
1	2	3	4
5	6	7	

10. How many students were enrolled in the smallest psychology class you had at DSC (excluding labs and discussion sections)?

\_\_\_ less than 10    \_\_\_ 31-40

\_\_\_ 11-20    \_\_\_ 41-50

\_\_\_ 21-30    \_\_\_ 51-75

11. In some large lecture courses, it can be difficult to ask questions about course material. What were your experiences in your large psychology lecture courses? (check all that apply)

\_\_\_ I didn't have questions

\_\_\_ I asked in class

\_\_\_ I talked with the professor after class or during office hours

\_\_\_ I e-mailed questions to the professor

\_\_\_ I was not usually able to have my questions answered

12. Given a choice, would you rather have the Psychology Department use teaching funds to hire faculty to teach very small sections (20 students each) of 1000/2000 level courses for freshmen, or hire faculty to teach very small sections of 3000/4000 level advanced courses for juniors and seniors?

Greatly Prefer Smaller 1000/2000 Level Courses	Somewhat Prefer Smaller 1000/2000 Level Courses	Somewhat Prefer Small 3000/4000 Level Courses	Greatly Prefer Small 3000/4000 Level Courses
1	2	3	4
5	6	7	

13. Were there any psychology courses that you wanted to take but were unable to do so because they were full/closed?

\_\_\_ Yes    \_\_\_ No

13.a If yes, please list them in the space below. You may use the course number or titles.

14. How many psychology courses have you taken that required a term paper or had a similar writing requirement?

☐ All    ☐ Most    ☐ About half    ☐ Some    ☐ None

### ADVISING

15. During each year, about how times did you meet with your academic advisor from the Psychology Department?

☐ 1    ☐ 3  
☐ 2    ☐ 4 or more

16. Listed below are topics frequently discussed in advising sessions. Check all topics discussed by your Psychology Department academic advisor.

- ☐ Explanation of Psychology major
- ☐ Discussion of options within the major
- ☐ Review of graduation requirements
- ☐ Check of progress toward graduation
- ☐ Graduate school preparation
- ☐ Graduate school application procedures
- ☐ Career options in psychology
- ☐ Career exploration outside of psychology
- ☐ Identification and/or referral to other psychology faculty for research experience or to answer questions
- ☐ Referral to other offices on campus
- ☐ Assistance in solving administrative problems
- ☐ Personal issues

17. Please use the rating scale shown below to rate your experiences during the advising process.

- | Excellent   | Good                     | Adequate                 | Poor                     |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1   | 2                        | 3                        | 4                        | 5                        | 6                        | 7                        |
| <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Advisor's knowledge or expertise             |                          |                          |                          |                          |                          |                          |
| <input type="checkbox"/> Advisor's willingness to help                |                          |                          |                          |                          |                          |                          |
| <input type="checkbox"/> Sufficient time to meet with the advisor     |                          |                          |                          |                          |                          |                          |
| <input type="checkbox"/> Overall satisfaction with the advisor's help |                          |                          |                          |                          |                          |                          |

18. Was it possible for you to get an advising appointment within a reasonable amount of time?

☐ Yes    ☐ No

19.a If no, please check all of the following statements that apply:

- ☐ I used first-come/first-served advising.
- ☐ I choose not to meet with an advisor.
- ☐ I tried to use first-come/first served but had to wait too long.

20. Listed below are some psychology advising office publications and services. Please rate their usefulness using the scale shown below.

	Excellent	Good	Adequate	Poor			
	1	2	3	4	5	6	7
___ Undergraduate handbook							
___ Careers in Psychology							
___ Applying to Graduate School							
___ Lists of suggested support courses							
___ List of approved general education courses							

21. What additions or changes would you suggest for improving the advising services of the Department of Psychology?

#### SUMMARY

22. What were your best academic experiences as a DSC Psychology major?

23. What were your worst academic experiences as a DSC Psychology major?

24. Please feel free to identify any DSC Psychology Department faculty and staff who made a significant contribution to your educational experience. In what way did the individual(s) make the impact?

Adapted from *Undergraduate Outcomes Assessment Plan* (Department of Psychology, University of Illinois Urbana-Champaign, 2007).

January 6, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Salt Lake Community College–Associate of Applied Science Degree in Energy Management–Action Item.

Issue

Officials at Salt Lake Community College (SLCC) request approval to offer an Associate of Applied Science Degree in Energy Management, effective Summer Semester 2010. This program was approved by the Salt Lake Community College Institutional Board of Trustees 13 January 2010, and was approved by the Regents' Program Review Committee on December 11, 2009.

Background

The proposed Energy Management program is designed to prepare students for careers in the fast-growing field of energy management, including employment as energy auditor, energy rater, energy consultant, home performance consultant, building performance consultant, home energy rater, resource conservation manager or sustainability manager. Students will explore buildings and building systems; equipment management and maintenance; heating, ventilation and air conditioning systems; lighting systems; energy control systems; weatherization; energy analysis and calculations; and alternative energy sources. Students will apply basic skills learned to recommend greater energy efficiency and energy cost saving measures.

The growing global demand for energy and the accompanying increase in energy costs have changed attitudes regarding energy use, waste and conservation. Until recently, the cheap price of energy did not justify significant capital investment in efficiency. Current costs, concerns about national security and the country's dependence on foreign energy, and awareness of our impact on the environment are causing residential, commercial, industrial and governmental energy users to reconsider conservation options, which in the past may not have been cost effective. This interest is now driving demand for people with the knowledge to evaluate energy usage, recommend efficiency improvements, determine

cost of improvements and calculate the return on investment. The Energy Management program is designed to prepare students for careers promoting efficient use of energy resources.

According to the National Council for Workforce Education, "Green jobs in clean energy sectors span a variety of skills, educational backgrounds, and occupations." However, many of the jobs that are currently, or predicted to be, in demand are "middle-skilled" jobs that require more than a high school diploma but less than a bachelor's degree.

The proposed Energy Management Degree will fill this need. The national projected growth (2006-2016) for this employment sector is much faster than average (21% or higher), with a median wage of \$28.81 per hour or \$59,920 annually.

#### Policy Issues

Other Utah System of Higher Education institutions have reviewed this proposal, have given input, and are supportive of Salt Lake Community College offering this degree.

#### Commissioner's Recommendation

The Commissioner recommends that the Regents approve the Request to Offer an Associate of Applied Science Degree in Energy Management, effective Summer Semester, 2010.

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William A. Sederburg, Commissioner

WAS/GW  
Attachment

Academic, Career and Technical Education and Student Success Committee

Action Item

Request to Offer an Associate of Applied Science in Energy Management

Salt Lake Community College

Prepared for  
William A. Sederburg  
By  
Gary Wixom

January 6, 2010

## **SECTION I: The Request**

Salt Lake Community College requests approval to offer an Associate of Applied Science Degree in Energy Management effective Summer Semester 2010. This program has been approved by the institutional Board of Trustees on 13 January 2010.

## **SECTION II: Program Description**

### **Complete Program Description**

The Energy Management AAS degree is the result of a collaborative effort between the School of Professional & Economic Development and the School of Science, Mathematics and Engineering. It is sponsored by the School of Science, Mathematics and Engineering and coordinated through the School of Professional & Economic Development due to the specialized delivery of the program. The proposed degree is consistent with the College mission to offer "associate degrees, certificate programs, career and technical education, developmental education, transfer education, and workforce training to prepare individuals for career opportunities and an enriched lifetime of learning and growing". It also supports the College goal "to serve the needs of community and government agencies, business and industry and other employers". The proposed degree is developed in partnership with Rocky Mountain Power and Questar Gas, and other key industry employers for graduating students.

The Energy Management program is designed to prepare students for careers in the fast-growing field of energy management, including employment titles of energy auditor, energy rater, energy consultant, home performance consultant, building performance consultant, home energy rater, resource conservation manager or sustainability manager. Students will explore buildings and buildings systems; equipment management and maintenance; heating, ventilation and air conditioning systems; lighting systems; energy control systems; weatherization; energy analysis and calculations; and alternative energy sources. Students will apply basic skills learned to recommend greater energy efficiency and energy cost saving measures.

The proposed program is offered as an accelerated degree, allowing students to complete the two-year program in approximately 16 months as students complete courses in seven, 10-week blocks. In addition, the option to offer the traditional two-year program following the regular academic calendar is included in the program schedule. It is anticipated a new cohort will start every 8-9 months. Successful students will be prepared for entry-level employment in this emerging field. This is a comprehensive program which provides students with practical hands-on experience. Students will be required to participate in an internship experience where they will gain relevant field experience, which integrates theory and practice. This environment will also give students the opportunity to develop skills, explore career options and network with professionals and employers in the industry.

### **Purpose of Degree**

The growing global demand for energy and the accompanying increase in energy costs has changed attitudes regarding energy use, waste and conservation. Until recently, the cheap price of energy did not justify significant capital investment in efficiency. Current costs, concerns about national security and the country's dependence on foreign energy, and awareness of our impact on the environment are causing residential, commercial, industrial and governmental energy users to reconsider conservation options, which in the past may not have been cost effective. This interest is now driving demand for people with the

knowledge to evaluate energy usage, recommend efficiency improvements, determine cost of improvements and calculate the return on investment. The Energy Management program is designed to prepare students for careers promoting efficient use of energy resources.

### **Institutional Readiness**

Upon approval, the program will reside in the School of Science, Mathematics and Engineering as part of the Division of Engineering-Related Technologies. It is comparable in nature and rigor to other AAS degrees within this division. The existing administrative structure is capable of supporting the new program without adversely impacting other existing programs.

### **Faculty**

The Energy Management degree involves an interdisciplinary approach, requiring a wide range of technical skills in a rapidly changing industry. As a result, a pool of adjunct faculty will be utilized to meet the program's specialized training needs. A full-time faculty position will be requested as part of SLCC's 2010-11 budget process. Both full-time and adjunct faculty members will be expected to meet industry professional standards as well as that of the College for teaching. Ongoing professional development will also be expected, including participation in at least one national meeting per year by the lead faculty member to keep the department current within the profession. Additionally, all faculty members will teach the curriculum in which they are most proficient to optimize the benefit of their professional expertise to students.

Students using the appropriate SLCC assessment system will evaluate all faculty members. The evaluation will examine teaching practices from the student perspective and highlight faculty's strengths and weaknesses. In addition, faculty peer review will be used to evaluate faculty members. SLCC administrators and the College training office will work with any faculty in need of assistance.

### **Staff**

It is anticipated that the Division of Engineering-Related Technologies in the School of Science, Mathematics and Engineering will administer this program. Existing administrative, secretarial, clerical and advising staff within the Division and the School are adequate to manage the program. No additional administrative or secretarial/clerical help is expected.

### **Library and Information Resources**

Existing library resources are adequate to meet the needs of the program. Salt Lake Community College's Markosian Library currently provides support for the Energy Management program with approximately 200 books and other media on energy management, renewable energy, energy efficiency, environmental technology, lighting and energy controls. Additional reference materials will be ordered to upgrade and expand this collection.

### **Admissions Requirements**

Admission is consistent with general SLCC admission procedures and guidelines. In addition, students must meet the following program pre-requisites:

- MATH 0990 with C or better or appropriate placement score;
- WRTG 0990 with C or better or appropriate placement score;
- Basic proficiency in MS Excel.



### **Student Advisement**

Students will have the opportunity to consult with an academic advisor as needed and will also be encouraged to meet with Energy Management faculty for further advising needs throughout their program.

### **Justification for Graduation Standards and Number of Credits**

Energy Management is a new and growing area of study. Lane Community College (LCC) in Eugene, Oregon developed one of the few AAS degrees in Energy Management and has received national recognition for its program. SLCC's program, to the degree possible, will mirror LCC's program. Requirements for the AAS degree in Energy Management follows the guidelines outlined in the SLCC General Catalog for AAS degrees. In order to receive an AAS degree, students need to complete a total of 63-69 credit hours including 13-19 credits in General Education Distribution areas which include BS, FA, HU, PS, SS or ID; Composition (EN); Quantitative Studies (QS); Communication (CM); and Human Relations (HR). The Energy Management AAS degree requires a total of 67 credit hours for graduation which falls within the State Board of Regents policy parameters for AAS degrees.

### **External Review and Accreditation**

Roger Ebbage, Director of Energy Programs at Northwest Energy Education Institute of Lane Community College, assisted with the program development, including equipment and facilities needs. In addition, Chris Helmers, Rocky Mountain Power; Lori Hansen, Rocky Mountain Power; and Mark Case, President of ETC Group, LLC; all practicing energy managers from the industry, served as consultants.

The Program Advisory Committee (PAC) met several times during the development period to evaluate the proposed program, including a DACUM meeting. The PAC will continue to meet annually to evaluate the appropriateness of the competencies defined. In addition, they will help evaluate the effectiveness of internships, identify ways to improve the program and identify additional resources and instructors as needed. SLCC Energy Management PAC consists of the following individuals:

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ETC Group  
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## Projected Enrollment

Year	Student Headcount	# of Faculty	Student-to-Faculty Ratio	Accreditation Req'd Ratio
1	41	2	21-1	NA
2	77	3	26-1	NA
3	140	4	35-1	N/A
4	160	4	40-1	N/A
5	120	3	40-1	N/A

### SECTION III: Need

#### Program Need

The United States is facing many challenges today, one of which is energy. As energy demand grows, energy security and independence, air quality, and human impact on the climate are growing concerns to the nation. Increasing energy efficiency is one of the most cost-effective and quickest methods to address this dilemma. However, in Utah and across much of the nation, a shortage of trained energy management professionals prepared to do the work exists.

The following paragraphs support the need for the proposed degree in Utah. Although the Western Energy Training Center (WeTC) is training future workers to support the mining and extraction segment of the energy sector, USHE institutions do not offer a program to support the energy management need.

The National Council for Workforce Education and the Academy for Educational Development printed a publication titled "Going Green: The Vital Role of Community Colleges in Building a Sustainable Future and Green Workforce". (April 2009) The publication states "According to the National Renewable Energy Lab, the major barriers to a more rapid adoption of renewable energy and energy efficiency are not financial, legal, technical, or ideological. One big problem is simply that green employers can't find enough trained, green-collar workers to do all the jobs."

The Association of Energy Engineers (AEE) surveyed its members and published the results in a report titled "Relevant Trends, Opportunities, Projections and Resources" (2009). Survey results report, "There is a growing demand for energy efficiency, green collar and renewable energy professionals." Additionally, 41% plan to retire in the next ten years; 72% feel industry will experience greater shortage of qualified energy efficiency and renewable energy professionals over the next five years; and 70% feel training for "Green Jobs" at a national and state level should be implemented to address the job shortages that are impairing growth in green industries, including energy efficiency.

The American Recovery and Reinvestment Act of 2009 (ARRA) includes \$61.3 billion supporting energy grant programs, including building a clean energy future, creating jobs, and reinvesting in public buildings. According to the Alliance to Save Energy, "the energy efficiency measures will create 100,000 or more new energy jobs in the next two years." ([www.ase.org](http://www.ase.org))

At a local level, energy efficiency has been recognized as a high priority for Utah. In 2006, Governor Jon Huntsman, Jr. signed an Executive Order establishing the goal to increase energy efficiency in Utah by 20% by 2015. In addition to reducing energy demand, meeting this goal has a positive economic impact for Utah's businesses and consumers, resulting in a net economic benefit of over \$7 billion. It also has a positive impact on job creation for Utah; for every \$1 million spent on energy efficiency 15 new jobs will be created. Additionally, the State Energy Policy, originally adopted by the Utah State Legislature in 2006 affirms the need for training and education programs for the State of Utah: "Utah will promote training and education programs focused on developing a comprehensive understanding of energy, including programs addressing energy conservation, energy efficiency, supply and demand, and energy related workforce development."

Utah's utility companies in conjunction with state and local governments are currently developing and implementing programs as well as adopting policies which support ambitious statewide energy efficiency goals. Rocky Mountain Power and Questar Gas each have comprehensive demand side management

(DSM) programs in place with energy efficiency as high priority. Such programs place significant demand on Utah's workforce by requiring trained professionals to implement their DSM programs, especially through contracts with energy engineering and energy consulting firms. Energy service companies, such as Chevron Energy Solutions and Johnson Controls, identify and evaluate energy-saving opportunities for varied clients and perform recommended packaged energy upgrades. These services require trained personnel with a broad understanding of energy efficiency and management. There are more DSM and related projects waiting to be completed in Utah than can be executed by a properly trained work force.

### **Labor Market Demand**

The National Council for Workforce Education and the Academy for Educational Development published an article titled "Going Green: The Vital Role of Community Colleges in Building a Sustainable Future and Green Workforce" (2009). The following are excerpts from the article, supporting the labor market demand for the proposed degree.

"Green jobs in clean energy sectors span a variety of skills, educational backgrounds, and occupations. However, many jobs that are currently, or predicted to be, in demand are "middle-skilled" jobs that require more than a high school diploma but less than a bachelor's degree. Much of the data on high-growth, high-demand occupations for the new energy economy is not easily obtained because many of the forces (policies, investments, etc.) that drive change are still very much in flux. In addition, many of the occupations in green industries are not listed as such in the Bureau of Labor Statistics standard occupational codes (SOC), adding to the difficulty of understanding job growth and industry needs."

"Energy efficiency, particularly in buildings and construction, is one of the areas with the highest potential to reduce greenhouse gas emissions and, at the same time, create a significant number of jobs. Residential, commercial, and public buildings account for 38 percent of U.S. carbon dioxide emissions, and consume 72 percent of the nation's energy, according to the U.S. Green Building Council...The energy-efficiency sector encompasses a wide range of activities including: green-building design and construction; renovation and retrofitting of existing buildings; energy management; and manufacture of products needed for these activities."

"As the move toward a low-carbon and sustainable economy takes hold, the primary clean energy sectors of efficiency, renewables, and alternative fuels and transportation have emerged as offering the greatest potential for job creation and growth and perhaps, the greatest workforce development opportunity on the horizon for community colleges. Although it is difficult to quantify, a report produced for the American Solar Energy Society indicates that the renewable energy and efficiency industries generated 8.5 million jobs in 2006. Optimistically, these sectors may account for as many as one in four jobs, direct and indirect, by 2030."

The national projected growth (2006-2016) for this employment sector is much faster than average (21% or higher), with a median wage of \$28.81 per hour or \$59,920 annually (<http://online.onetcenter.org/>). Utah's projected growth (2006-2016) for this employment sector is 35% with a median wage of \$26.76 per hour or \$55,700 annually (<http://www.careerinfo.net.org/>). These projections and consultation with industry professionals indicate employment opportunities are available for graduates from the proposed degree. Lane Community College's program director also indicates nearly 100 percent of its program graduates find employment upon graduation.

The labor market demand for Energy Auditors in Utah incorporate both the public and private sectors. They include the following: utility companies (i.e., Rocky Mountain Power, Questar Gas, and municipalities and co-operative power providers), energy service companies (i.e., Utah Controls, Johnson Controls, TAC, Siemens and Honeywell), state and local governments, school districts, colleges and universities, large industrial commercial businesses (i.e., Alliant Technologies, Dannon, Kennecott and LDS Church), energy engineers and energy consultants (i.e., ETC Group). The SLCC PAC was formed for the proposed degree to include a few of these key companies to establish program support and need.

#### Summary of the U.S. Renewable Energy and Energy Efficiency Industries in 2006

INDUSTRY	Revenues (billions)	Direct Jobs (thousands)	Total Jobs (Direct and Indirect) Created (thousands)
Renewable Energy	\$39.2	196	452
Energy Efficiency	\$932.6 3	498	8,046
Total	\$971.8	3,694	8,498

Source: American Solar Energy Society and Management Information Services, Inc, 2007.

Expected starting salary range: \$33,280-\$47,840 (Mid-State Technical College)

#### Student Demand

SLCC Continuing Education Division offered two energy courses in Photovoltaic Systems and Energy Efficiency Manager starting in 2007. The demand for these courses measured by enrollment was strong and immediate. The Photovoltaic Systems course taught during the summer 2009 semester had 54 students enrolled. Photovoltaic Systems courses will be offered as technical electives in the proposed degree program and are certified by the North American Board of Certified Energy Practitioner (NABCEP).

In April 2009 Continuing Education launched "The Green Academy" which incorporated Energy Management training. Since then, over 70 students have inquired about the program, with backgrounds ranging from candidates seeking a two-year degree to working professionals with Baccalaureate and Masters Degrees. These potential students include working industry professionals seeking formal education to enhance their current skills and others seeking to re-enter the workforce with a new career focus. On August 10, 2009 Continuing Education enrolled 15 students in Energy Management "pilot" courses. More students are waiting for the next cohort start date to enroll in the program.

#### Similar Programs

An AAS degree with an overarching focus on energy management technology is not available in the Utah System of Higher Education. There are related programs in Engineering Science offered at other USHE institutions giving students expanded opportunities to continue their educational goals.

- University of Utah offers undergraduate and graduate programs in Mechanical Engineering, including
- Energy Systems as well as other engineering field related to energy.
- Utah State University offers undergraduate and graduate degrees in Engineering fields, including
- Mechanical and Electrical Engineering. Currently, a minor in global change is being developed.
- Utah Valley University, College of Eastern Utah, Snow College and SLCC offer a Pre-Engineering

- Science program for students planning to complete their first two to three years of engineering
- education at UVU and then transfer to a Baccalaureate university to complete their engineering degree.

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

The proposed AAS degree has not been discussed with other USHE institutions; however, it is unlikely this program would impact their programs. It is anticipated articulation agreements will be established with integrated Engineering programs at UVU, SUU and WSU.

### **Benefits**

The following are vital program benefits to the College and the community at large:

- Ability to help increase the size of the trained “green collar” workforce to meet industry demand.
- Ability to assist utility companies in Utah meet their energy efficiency goals.
- Ability to give SLCC graduates a competitive advantage to employment opportunities by being trained
- at the forefront of this growing movement.
- Ability to help meet the Governor’s energy efficiency goal and the Legislature’s Energy Policy
- objective for the State of Utah.

### **Consistency with Institutional Mission**

Salt Lake Community College is a multi-campus, comprehensive institution serving a diverse population through lifelong education. The SLCC mission focuses on student needs in an open-door setting. Based on this mission, several SLCC commitments are immediately applicable to this proposal for an AAS degree in Energy Management, including:

- 1) Career and Technical Education resulting in marketable job skills in a changing world. The proposed program trains students in the emerging field of energy management with the most advanced skills taught by faculty working in the industry. The internship experience also prepares students for entry-level positions through practical hands-on training.
- 2) General Education and pre-professional programs for transfer to other colleges and universities. The Energy Management Technician program includes General Education requirements for an AAS degree including Math, English, Communications and Human Relations and these courses would articulate to other institutions in the USHE system.
- 3) Adult and Continuing Education in cooperation with business and industry to enrich the opportunities of citizens. The proposed program will hire industry professionals as full and part-time faculty and guest lecturers to share their knowledge and expertise. Students will also have opportunities to make site visits to various businesses and engage in networking opportunities. The Introduction to Energy Management course will be open to the general public as a career exploration course. Through these interactions, SLCC will be working with businesses and industry and the community at large.
- 4) Developmental Education designed to support students making a special transition to college life. Students needing preparatory courses to meet the proposed program admission requirements will require the services provided through this Division.
- 5) Community Services Education providing services and activities that promote community involvement. The Energy Management program will play a vital role in meeting statewide, regional and national goals to improve energy efficiency.

## SECTION IV: Program and Student Assessment

### Program Assessment:

Goals for the program and measurements of success will be as follows:

Goal #1: Enroll a minimum of 20 new students per year.

Measure: Enrollment data.

Goal #2: Graduate 75 percent of the students each year who enter the program.

Measure: Graduation data.

Goal #3: Evaluate students who work in internship positions prior to graduation.

Measure: At least 70 percent of employers who utilize interns will rate their skills and attitudes at above average or higher.

Goal #4: PAC members will act as consultants to ensure continuous improvement of program.

Measure: Participation at annual PAC meeting attendance will be at least 70 percent or higher.

### Expected Standards of Performance

The Energy Management program is designed to prepare students for careers dealing with the efficient use of energy resources in buildings. It is anticipated graduating students will have met and achieved the following competencies by graduation. Specifically, students will be prepared to:

1. Evaluate the energy use patterns for residential and commercial buildings and recommend energy efficiency and alternative energy solutions for high energy consuming buildings.
2. Understand the interaction between energy consuming building systems and make recommendations based on that understanding.
3. Construct energy evaluation technical reports and make presentations for potential project implementation.
4. Use appropriate library and information resources to research professional issues and support lifelong learning.
5. Access library, computing and communications services and obtain information and data from regional, national and international networks.
6. Interpret the concepts of a problem-solving task and translate them into mathematics.
7. Collect and display data as lists, tables and plots using appropriate technology (e.g., graphing calculators, computer software).
8. Determine an appropriate scale for representing an object in a scale drawing.
9. Develop and evaluate inferences and predictions that are based on data.
10. Develop an awareness of the social, political, and economic factors dealing with energy management.
11. Work collaboratively and in multidisciplinary teams.

One measure of student competency will be the pre-post course surveys each student will complete at the start and end of each course work. This will be used to make appropriate adjustments to the curriculum to ensure competencies are better met in future courses.

Another formative evaluation procedure will consist of utilizing the appropriate SLCC assessment system. This process will evaluate student perceptions on the value of each course as they proceed toward their

goal of earning a degree. The system assesses student viewpoints in the following areas: course content, instructor competency, understanding of major course content/principles, and the overall course. Further, a formative evaluation will occur with final examinations in each Energy Management course. These exams will be constructed to focus on measuring the students' understanding of the competencies outlined above.

Summative evaluation will occur when SLCC students are placed as interns at local energy companies prior to graduation. The department internship faculty/coordinator will work jointly with students' supervisors to assess both the breadth and depth of student competencies, attitudes, and skills.

Feedback to faculty from the Instructional Assessment Systems (IAS) will occur as soon as the data is compiled and distributed by the College after the conclusion of each semester. The Division Chair to which the proposed program is assigned will meet with each faculty member to review the IAS results. However, the key element for student assessment data will be formal, written evaluations provided by the employers assessing students' performance at the end of their internship experience. Feedback from the students on program strengths/weaknesses will be used to improve the program.

In addition, SLCC's Planning and Research Office will be asked to assist in conducting a follow-up survey one (1) year after the student graduates. The survey will be mailed to graduates, giving students an opportunity to respond to the applicability of their training at SLCC. Employers will also be surveyed on the quality of SLCC graduates.



## Section V: Finance

Financial Analysis Form					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Students</b>					
Projected FTE Enrollment	34	97	143	155	149
Cost Per FTE	2832	1253	901	905	735
Student/Faculty Ratio	21	26	35	40	40
Projected Headcount	41	77	140	160	120
<b>Projected Tuition</b>					
Gross Tuition	80467	229680	338976	367488	354816
Tuition to Program	68400	195200	288100	312400	301600
5 Year Budget Projection					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Expense</b>					
Salaries & Wages	55920	97692	102537	110352	81366
Benefits	13920	18589	19515	20759	18347
Total Personnel	69912	116281	122052	131111	99713
Current Expense	1000	1200	1500	1800	2100
Travel	1500	1500	2000	3000	3000
Capital	23000	1500	2500	3500	4500
Library Expense	500	500	500	500	500
Total Expense	\$95912	\$120981	\$128552	\$139911	\$109813
<b>Revenue</b>					
Legislative Appropriation					
Grants & Contracts	30000	10000	10000		
Donations					
Reallocation					
Tuition to Program	68400	195200	288100	312400	301600
Fees	4100	11550	21000	24000	18000
Total Revenue	\$102500	\$216750	\$319100	\$336400	\$319600
<b>Difference</b>					
Revenue-Expense	\$6588	\$95769	\$190548	\$196489	\$209787

### Budget Comments

Budget is based on projected enrollment in the program each year and will be adjusted annually to reflect actual enrollment in the program.

The proposed degree is unique from other traditional academic programs in that the program is an accelerated degree, designed to run in seven, 10-week blocks. However, the academic department may choose to offer the program as a traditional academic program.

**Funding Sources**

The proposed program will be funded through tuition associated with program enrollment.

**Reallocation**

The College does not anticipate the proposed program being supported through internal reallocation.

**Impact on Existing Budgets**

The proposed program will not be absorbed within current base budgets.

**APPENDIX A**  
**Program Curriculum**  
**All Program Courses**

The accelerated program will run on 10-week block sessions, which include core requirements and technical electives. The traditional two-year program will follow the regular academic calendar.

Course Prefix & Number	Title	Credit Hours
General Education Courses		
English Composition (EN)		
ENGL 1010	Intro to Writing	3
Quantitative Studies (QS)		
MATH 1010	Intermediate Algebra	4
Communications (CM) Choose One		
COMM 1010	Elem of Eff Comm	3
COMM 1020	Prin/Public Speaking	3
CTEL 1020	Career Speech Skills	3
Human Relations (HR) Choose One		
COMM 2110	Interpersonal Comm.	3
CTEL 1010	Leadership & Team Building	3
LE 1220	Human Rel. for Career Devel.	3
MKTG 1960	Professionalism in Business	3
Distribution Areas Choose One		
	Biological Science (BS)	3
	Fine Arts (FA)	3
	Humanities (HU)	3
	Interdisciplinary (ID)	3
	Physical Science (PS)	3
	Social Science (SS)	3
	Sub-Total	16
Core Courses		
ARCH 1100	Intro to Arch Drawing	3
CIS 1019	Spreadsheet Applications	2
ENGL 2100	Technical Writing	3
PHYS 1010	Elementary Physics (PS)	3
EGMT 1010	Intro to Energy Mgmt	2
EGMT 1110	Res/Light Comm Energy Use Analys.	2
EGMT 1120	Commercial Energy Analysis	3
EGMT 1130	Building Energy Simulations	3
EGMT 1210	Air Conditioning Sys Analysis	2
EGMT 1220	Comm Air Conditioning Sys Anal	2
EGMT 1230	Energy Control Strategies	3
EGMT 1240	Energy Efficiency Methods	2
EGMT 1310	Lighting Fundamentals	2

Course Prefix & Number	Title	Credit Hours
EGMT 1320	Lighting Applications	2
EGMT 1410	Energy Investment Analysis	2
EGMT 1420	Energy Accounting	2
EGMT 1540	Alternative Energy Technology	2
EGMT 2060	Energy Management Seminar 1	1
EGMT 2065	Energy Management Seminar 2	1
EGMT 2800	Energy Management Internship	4
	<b>Sub-Total</b>	43
Technical Elective Courses - Choose Two		
ARCH 2990	Sustainability and Green Building	3
EGMT 1600	Intro to Water Resources	2
EGMT 1710	Basic Photovoltaic Systems	2
EGMT 1720	Adv. Photovoltaic Systems	3
ENVT 1010	Race to Save the Planet	3
GEOG 1800	Geospatial Technology	3
GEOG 2200	Urban Environmental Issues	3
	<b>Sub-Total</b>	5
Track/Options (if applicable)		N/A
	<b>Sub-Total</b>	N/A
	<b>Total Number of Credits</b>	67

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

It isn't anticipated that any new courses will be added in the next five years.

## Appendix B: Program Schedule

### Fall Semester 1 Block 1

Course Prefix & Number	Title	Credit Hours
ARCH 1100	Intro to Arch Drawing	3
EGMT 1010	Intro to Energy Mgmt	2
MATH 1010	Intermediate Algebra	4
CIS 1019	Spreadsheet Applications	2
	Technical Elective	2
Total		13

### Fall Semester 1 Block 2

Course Prefix & Number	Title	Credit Hours
EGMT 1110	Res/Light Comm Energy Use Analys.	2
EGMT 1540	Alternative Energy Technology	2
EGMT 2060	Energy Management Seminar 1	1
PHYS 1010	Elementary Physics (PS)	3
Total		8

### Spring Semester 1 Block 3

Course Prefix & Number	Title	Credit Hours
EGMT 1210	Air Conditioning Sys Analysis	2
EGMT 1240	Energy Efficiency Methods	2
EGMT 1310	Lighting Fundamentals	2
ENGL 1010	Intro to Writing	3
	Human Relations	3
Total		12

### Spring Semester 1 Block 4

Course Prefix & Number	Title	Credit Hours
EGMT 1220	Comm Air Conditioning Sys Anal	2
EGMT 1320	Lighting Applications	2
EGMT 1410	Energy Investment Analysis	2
Total		6

### Summer Semester 1 Block 5

Course Prefix & Number	Title	Credit Hours
EGMT 1120	Commercial Energy Analysis	3
EGMT 1230	Energy Control Strategies	3
ENGL 2100	Technical Writing	3
	Technical Elective	3
Total		12

Fall Semester 2 Block 6

Course Prefix & Number	Title	Credit Hours
EGMT 1130	Building Energy Simulations	3
EGMT 1420	Energy Accounting	2
EGMT 2065	Energy Management Seminar 2	1
	Communications	3
	Distribution	3
Total		12

Fall Semester 2 Block 7

Course Prefix & Number	Title	Credit Hours
EGMT 2800	Energy Management Internship	4
Total		4

TRADITIONAL ACADEMIC CALENDAR

Fall Semester 1

Course Prefix & Number	Title	Credit Hours
ARCH 1100	Intro to Arch Drawing	3
EGMT 1010	Intro to Energy Mgmt	2
MATH 1010	Intermediate Algebra	4
CIS 1019	Spreadsheet Applications	2
	Technical Elective	2
Total		13

Spring Semester 1

Course Prefix & Number	Title	Credit Hours
EGMT 1110	Res/Light Comm Energy Use Analys.	2
EGMT 1540	Alternative Energy Technology	2
EGMT 2060	Energy Management Seminar 1	1
PHYS 1010	Elementary Physics (PS)	3
ENGL 1010	Intro to Writing	3
	Human Relations	3
Total		14

Summer Semester 1

Course Prefix & Number	Title	Credit Hours
EGMT 1210	Air Conditioning Sys Analysis	2
EGMT 1240	Energy Efficiency Methods	2
EGMT 1310	Lighting Fundamentals	2
ENGL 2100	Technical Writing	3
Total		9

Fall Semester 2

Course Prefix & Number	Title	Credit Hours
EGMT 1120	Commercial Energy Analysis	3
EGMT 1220	Comm Air Conditioning Sys Anal	2
EGMT 1320	Lighting Applications	2
EGMT 1410	Energy Investment Analysis	2
	Technical Elective	3
	Communications	3
Total		15

Spring Semester 2

Course Prefix & Number	Title	Credit Hours
EGMT 1130	Building Energy Simulations	3
EGMT 1230	Energy Control Strategies	3
EGMT 1420	Energy Accounting	2
EGMT 2065	Energy Management Seminar 2	1
	Distribution	3
Total		12

Summer Semester 2

Course Prefix & Number	Title	Credit Hours
EGMT 2800	Energy Management Internship	4
Total		4

### Appendix C: Faculty

FACULTY NAME	EDUCATION	YEARS OF EXPERIENCE
Lee Brinton	M.S.E.E. University of Utah 1984	25
Kevin King	B.A. California Polytechnic State University	20



January 6, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Consent Calendar: Academic, Career and Technical Education and Student Success (Programs) Committee

The following have been submitted for consideration by the Regents on the Consent Calendar of the Programs Committee.

**A. *University of Utah***

**i. *New Center: The University of Utah Center at St. George***

**Request:**

The Graduate School requests authority to establish The University of Utah Graduate Center at St. George. The Center will provide classroom facilities, staff, and infrastructure required to offer selected University of Utah graduate programs and degrees to students located in St. George, Washington County and the surrounding region.

**Need:**

In 2006, the Utah State Legislature provided \$1M in ongoing base budget funding to the University of Utah for the purpose of establishing an institutional partnership with Dixie State College. The purpose of the funding was to create new opportunities for students in St. George and Washington County to earn graduate degrees and certificates in selected subjects from the University of Utah. Washington County is one of the fastest growing regions of the state, but the closest available universities are located in Cedar City or Las Vegas. The graduate partnership is designed to provide graduate degrees and programs for students in the area without expanding the educational mission of Dixie State College.

The original intent was to name the physical facility "The University of Utah at St. George." At the specific request of President Young, the name is being changed to "The University of Utah Graduate Center at St. George". For this reason, the University is requesting permission to use the word "Center" in this application.

**Institutional Impact:**

The Graduate Center will serve as the physical facility to increase graduate enrollments in University of Utah classes by including students from St. George and the surrounding region. In

most cases, this will be done by allowing a small number of students in St. George (e.g., 5-10) to join an existing class being taught by an instructor in Salt Lake City via high-definition IP videoconferencing technology. Therefore, the extension of graduate degree programs to this area will not significantly increase instructional costs. However, the University will incur the extra costs of physical infrastructure, Internet connectivity, videoconferencing equipment, occasional instructor travel, advising and local staffing in St. George.

In order to create a physical classroom facility for the program, the University leased a building from the Dixie State College Foundation adjacent to the Dixie campus at 1076 E 100 South, St. George. The first floor of the facility has been remodeled to create four small classrooms (10 students each), and one larger classroom for up to 30 students. The second floor will be remodeled to create additional classrooms in the coming months.

Responsibility for administering the institutional partnership rests with the Graduate School. The staffing and maintenance of the physical infrastructure in St. George is managed by the University's Continuing Education unit in order to take advantage of existing expertise in operating off-campus facilities.

**Finances:**

All of the costs of creating and managing the Center will be paid from the \$1M in ongoing base budget funding that was originally appropriated by the Utah State Legislature for this purpose.

***B. Utah State University***

***i. Three Year Follow Up Report—Bachelor of Science in Biochemistry***

**Program Description:**

The Bachelor of Science degree program in Biochemistry produces graduates prepared to enter the job market in industry, or for further work in academia through the advancement to professional schools including graduate, medical, dental, and pharmacy schools. The core courses in this program are organized into two-semester course sequences in the areas of general, organic, and biological chemistry, and general biology, calculus, and general physics, along with associated laboratory courses. The program core is rounded out with courses in analytical and biophysical chemistry and statistics. To complete the additional 18 credits of coursework required for the major, students choose elective courses from within the disciplines of chemistry, biochemistry, and biology.

**Enrollment Data:**

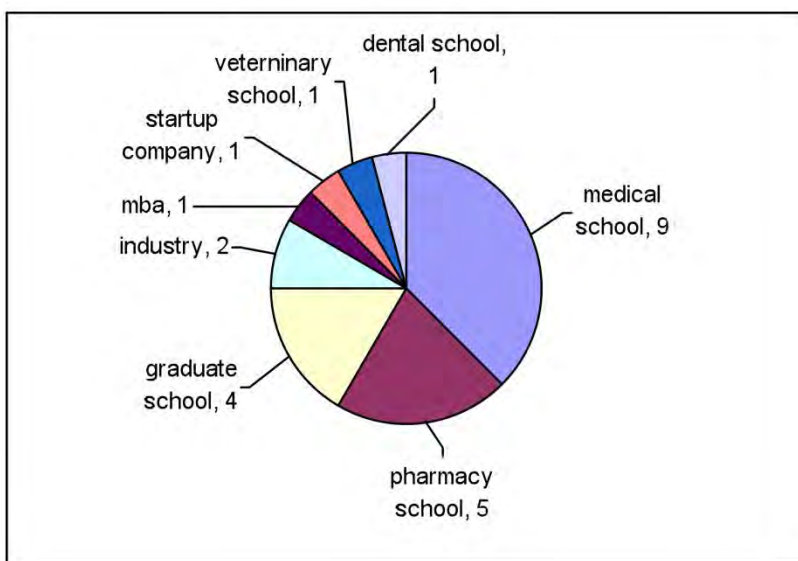
Growth in the Biochemistry program has exceeded expectations. In the proposal approved by the Utah Board of Regents in 2005, it was estimated that ten students would enroll in the biochemistry program in year one, primarily those already in the Chemistry program. It was projected that this number would "grow by perhaps five additional students in each of Years two to five, as the program gains popularity and knowledge about it spreads to others on campus." In fact, numbers have grown from 17 in the initial year of 2005, to a current count of 95 as of September, 2009. This growth has not come about through cannibalization of the Chemistry program, as Chemistry headcount has held relatively steady, from 104 in 2005 to its current number of 101.

Enrollment Data						
	Year 1 2005-06		Year 2 2006-07		Year 3 2007-08	
Students	Est	Actual	Est	Actual	Est	Actual
FTE Enrollment		53.7		138.25		184.71
Cost per FTE		3,990		3,364		4,293
Student/Faculty Ratio		4.60		16.42		18.36
Headcount	10	17	15	50	20	75
Tuition	Est	Actual	Est	Actual	Est	Actual
Tuition to Program <sup>1</sup>		n/a		n/a		n/a

<sup>1</sup> Tuition is not allocated directly to individual programs. Rather, tuition and state tax funds make up the major portion of revenue to operate the program.

### Employment Information:

To date 24 students have graduated from the Biochemistry baccalaureate degree program. The majority of these students are currently pursuing graduate studies. Their post-graduate destinations are shown in the pie chart below:



#### Graduate Schools:

Utah State University  
University of Utah  
University of Iowa  
Duke University

#### Medical and Pharmacy Schools:

University of Utah  
Idaho State University  
University of Wisconsin-Madison  
Ohio State University  
University of Toledo  
Penn State University  
Washington State University  
University of Iowa  
Duke University  
University of Southern Nevada  
New York Medical College

ii. *Three Year Follow Up Report—M.S. and Ph.D. in Human Dimensions of Ecosystem Science and Management*

**Program Description:**

The M.S. and Ph.D. degrees in the Human Dimensions of Ecosystem Science and Management (HDESM) were established in response to a growing demand in natural resource fields for more interdisciplinary professionals with diverse skills and broader intellectual capabilities. It is being recognized, for example, that social and managerial sciences are increasingly important in helping society better understand and solve environmental problems. The HDESM program produces students who are problem solvers because they are able to integrate human and biophysical aspects of ecosystems, and to better analyze policies and decisions. This degree program was approved by the Board of Regents on July 1, 2002, and began admitting students in fall of 2003.

**Enrollment Data:**

Enrollment Data						
	Year 1 – 2005-2006		Year 2 – 2006-2007		Year 3 – 2007-2008	
Students	Est.	Actual	Est.	Actual	Est.	Actual
FTE Enrollment	n/a*	18.67	n/a	15.00	n/a	16.67
Cost Per FTE	n/a	19,411	n/a	26,978	n/a	27,946
Student/Faculty Ratio*	1.5:1	3.2	2:1	2.5	2:1	3.0
Headcount	18	32	21	25	24	30
Tuition	Est.	Actual	Est.	Actual	Est.	Actual
Tuition to Program	0	0	0	0	0	0

\* These values were not estimated as part of the original proposal, which was done under a different template.

Actual student-faculty ratio has proven to be somewhat higher than anticipated. The program grew more quickly than predicted, reaching a peak of 32 students in 2005-2006 and remaining fairly constant since that time. Originally 12 department faculty members predicted that they would direct thesis committees in the HDESM degree, whereas in practice ten have done so. However, those ten have been able to easily accommodate the higher-than-anticipated load because students have selected the HDESM degree who otherwise would have chosen other degree programs offered within the same department.

**Employment Information:**

Students who have completed degrees in this program have subsequently found employment with the following employers: Forest Service (California, Alaska, Utah), Ohio State University, Ogden Nature Center, USU Wildland Resources, Utah Division of Wildlife Resources, and U.S. Fish and Wildlife Service.

### *C. Dixie State College of Utah*

#### *i. Discontinuance: Practical Nursing (PN) Certificate*

##### **Request:**

Dixie State College requests approval for discontinuation of its Practical Nursing (PN) certificate program in spring 2011.

##### **Description:**

Discontinuation of the PN program is being sought as the Nursing Program revises its curriculum to a straight Associate of Applied Science degree. The current nursing program is a 1 + 1 PN + ADN program. Students are considered practical nursing program students during their first two semesters after acceptance into the program. Students are eligible to take the PN licensing exam to become employed as PNs following successful completion of the PN program. If they wish to do so, students who successfully complete the PN program also may continue on into the ADN program (an additional two semesters). In the past three years, 95-100% of PN students continued on into the ADN program. Additionally, increasingly smaller numbers of students are electing to take the PN licensing exam, 48% and 40% of graduating students in 2007 and 2008 respectively. Upon completion of the AAS degree, students are eligible for the registered nurse (RN) licensing exam and employment as an RN.

In anticipation of continued student needs for a PN license and in order to meet community needs for PN-trained nurses, the revised AAS curriculum will offer students a PN transitions course after completion of the second semester for those students who wish to take the PN licensing exam. This is a model common to ADN programs including those at Salt Lake Community College and Weber State University. Approval for the PN program discontinuation first was sought and granted from the Utah Board of Nursing on September 10, 2009. This step was necessary before entering the consent process for the Board of Regents.

##### **Need:**

Discontinuing the PN program in order to offer a straight Associate of Applied Science degree program will result in several advantages for the College, students, and faculty. They are:

- Students will be able to complete the nursing courses in three semesters instead of the current four semesters required for the 1 + 1 program.
- Nursing courses will be full time to the students each semester thus eliminating the need for students to take additional courses to reach full time credits for financial aid.
- Within a three-year period, the program will graduate an additional 48 students compared to the current 1 + 1 program.
- As three simultaneous groups of students will be enrolled instead of the current four groups, clinical learning sites will become available. As a result, the program will be able to provide students with more clinical hours.
- NLNAC PN Program accreditation will be eliminated resulting in a savings of approximately \$9,200 in eight years.

- Students will be able to learn RN skills in the nursing arts laboratory and begin to use these skills in clinical learning experiences immediately upon enrollment in the program. Currently, students must wait until the third semester of the program when they become RN/ADN students.
- Faculty workload will be adjusted so that current faculty can be reassigned to teach RN to BSN program courses more frequently, thus providing for faster degree completion for students enrolled in the RN to BSN program.

**Institutional Impact:**

The revised AAS program will remain within the Division of Nursing and Allied Health, School of Science and Health. The proposed PN program discontinuance should have no effect on enrollments in instructional programs of affiliated departments, i.e. those providing prerequisite courses for the nursing program. Prerequisite courses for the revised AAS program will not change. No changes in faculty and staff will be required. Current nursing program faculty will continue to teach in the revised AAS program. As well, no modifications to the Russell Taylor Health Science Center or purchase of additional equipment will be needed.

**Finances:**

Discontinuance of the PN program will not require new funds, nor will it have any budgetary impact on other programs within Dixie State College with the exception of advantageously being able to allot more faculty workload to the RN to BSN program and eliminate the accreditation fees for the PN program as described above.

**Recommendation**

The Commissioner recommends the Regents review the items on the Programs Committee's Consent Calendar. No action is required.

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William A. Sederburg  
Commissioner of Higher Education

WAS/GW

January 6, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Information Calendar: Academic, Career and Technical Education and Student Success (Programs) Committee

The following have been submitted for consideration by the Regents on the Information Calendar of the Programs Committee.

**A. *University of Utah***

- i. ***Emphasis: Early Childhood Education Emphasis within the Human Development and Family Studies major in the Department of Family and Consumer Studies***

**Request:**

The Department of Family and Consumer Studies wishes to formally establish an Early Childhood Education Emphasis within the Human Development and Family Studies major. The University seeks to have this emphasis appear on the transcript of the students who successfully fulfill the emphasis requirements.

**Need:**

The No Child Left Behind federal legislation requires that the words "early childhood education" appear on university transcripts for the teacher to be designated as "highly qualified" in teaching in the early grades. The U of U has chosen to use these words in the form of an emphasis. This emphasis reference is widely recognized as a specialty in teacher education.

**Institutional Impact:**

There will be no impact to the department or institution.

**Finances:**

There will be no impact to the department or institution.

**ii. *Emphasis: Entertainment Arts and Engineering in the Division of Film Studies***

**Request:**

The EAE emphasis is a joint effort of the School of Computing and the Division of Film Studies. The purpose of this emphasis is to provide undergraduates an interdisciplinary academic path toward careers in the digital entertainment industry with experience in both computer science and the arts.

The key feature of the EAE emphasis is its interdisciplinary nature. Students from both CS and Fine Arts will take common classes throughout their undergraduate years, culminating in a year-long senior project where teams of students from both disciplines will build an interactive media project including elements drawn from animation and gaming.

**Need:**

The linking of the terms (a.) Entertainment Arts, and (b.) Engineering indicates that the emphasis has commercial potential, and includes training in engineering techniques (e.g., code writing) in such a way as to make it clear to potential employers and graduate programs that these candidates have specific skills in a new and growing field distinct from the broader umbrella of film studies.

**Institutional Impact:**

There will be no impact to the department or the institution.

**Finances:**

There will be no financial impact to the department or the institution.

**iii. *Emphasis: Financial Planning Emphasis within the Consumer and Community Studies major in the Department of Family and Consumer Studies***

**Request:**

The Department of Family and Consumer Studies wishes to establish a Financial Planning Emphasis within the Consumer and Community Studies major. The U of U seeks to have this emphasis appear on the transcript of the students who successfully fulfill the emphasis requirements.

The Financial Planning emphasis is a coherent area of focus. It is a registered program with the Certified Financial Planner (CFP®) Board (see <http://www.cfp.net>). It includes the required CFP® courses that students must take, in addition to other major requirements. Students who complete the courses fulfill the educational requirement of sitting in for the comprehensive CFP® Examination to eventually gain CFP® certification.

**Need:**

The CFP® Board of Standards requires that the title for any approved educational degree program contain the words "financial planning" in majors, concentrations, specializations, or other forms of emphasis. The U of U has chosen to use these words in the form of an emphasis. Because this emphasis reference is from the CFP® Board mandate, it is recognized outside the University of Utah.

**Institutional Impact:**

There will be no impact to the department or the institution.



### **Finances:**

There will be no financial impact to the department or the institution.

### ***iv. Name Change: Division of Film Studies to the Department of Film and Media Arts***

### **Request:**

The University of Utah proposes a change in name and status to the existing Division of Film Studies, an academic unit in the College of Fine Arts. The division requests that the name be changed to the Department of Film and Media Arts.

Effective at the time of the name change from the Division of Film Studies to the Department of Film and Media Arts, degrees awarded will read BA in Film and Media Arts and MFA in Film and Media Arts.

### **Need:**

The name change to the Department of Film and Media Arts more closely describes the mission and long-term goals of both the academic unit and the College of Fine Arts and it more accurately reflects the actual size and nature of the academic unit.

At the time of its creation as a separate division in 1998, the Division of Film Studies served fewer than 100 majors annually. The Division employed only three full-time tenured and tenure-track faculty with a handful of auxiliary faculty.

Last year the division served approximately 300 declared majors as well as numerous 'pre-Film' majors who eventually finished (or will finish) a BA in Film Studies. The division graduated 66 of the college's 275 bachelor's candidates awarding roughly one-quarter of the college's bachelor's degrees. The division typically awards between five to seven graduate degrees each year. All other academic units in the College of Fine Arts are either departments or schools. The Division of Film Studies currently has six full-time tenured and tenure-track faculty.

The Division of Film Studies combines a thorough grounding in the history, theory, and criticism of film and entertainment media with rigorous professional training in state-of-the-art production technique. The Division recognizes the importance of storytelling and compelling writing for film and media. The intent is to be flexible and forward-looking, but still maintain a strong emphasis in all the film crafts, using both traditional and new digital media including, but not limited to, animation and gaming. The goal is to encourage scholarship and research that combines technology and the traditional film arts to create new processes, tools, and vision for storytelling and entertainment.

### **Institutional Impact:**

Changing the name to the Department of Film and Media Arts will more accurately describe the current size and scope of the work and will offer additional prestige to the College of Fine Arts and the University of Utah. The U has an emerging track in animation with courses in traditional and digital animation and history of animation. The U administers an interdisciplinary minor in animation studies with partners in Communication. The U has developed an emphasis in gaming and interactive media, the Entertainment

Arts and Engineering program (EAE), with partners in the School of Computing. About 40 of the undergraduates participate in the EAE program. Many of these students were hoping to study exactly these subjects when they began their university careers, yet had some trouble identifying the Division of Film Studies as the academic unit where they could pursue their goals. Those who found the unit report both their pleasure at finally identifying the unit that served their goals and their frustration with the difficulty they had finding the unit. A *Department of Film and Media Arts* would certainly be a more obvious destination for these students.

#### **Finances:**

There are no anticipated additional costs associated with the proposed change in name and status. That is not to say that the division has adequate resources at present or that a *Department of Film and Media Arts* will have fewer needs than a Division of Film Studies. It is simply the case that changing the name of the unit will not materially change the present fiscal situation and the plans to grow the budget. It may, however, be somewhat easier to draw attention to the inadequacies in the present film budget if, as the new name and mission suggest, the scope of the U of U's ambitions and plans are more immediately identifiable. The Department of Film and Media Arts will also have the opportunity to compete for extramural funding in the same national arena with other *departments* from across the country.

- v. *Name Change: "Center for Integrated Design and Construction (CIDC)" to "Integrated Technology in Architecture Center (I TAC)".*

#### **Request:**

A proposal to change the name of the "Center for Integrated Design and Construction (CIDC)" to "Integrated Technology in Architecture Center (I TAC)".

#### **Need:**

The CIDC Mission Statement currently reads:

The mission of the proposed Center for Integrated Design and Construction (CIDC) is to promote the critical development and implementation of Building Information Modeling as an enabler for the Architecture, Engineering, and Construction (AEC) Industry and those who use its services.

The request for a name change to the "Integrated Technology in Architecture Center (I TAC)" reflects a widening of research focus to include all areas of architecture and building technology. If the name change is approved, the mission statement will read:

The mission of the Integrated Technology in Architecture Center (I TAC) is to promote process and product integration technology in architecture for sustainable design and construction practice.

CIDC focused primarily on performing research surrounding Building Information Modeling, an emerging software system for the Architecture, Engineering and Construction (AEC) industry. I TAC will continue to perform this research but apply the software to numerous and diverse issues of technology prevalent in the AEC industry today. Namely, I TAC will focus on utilizing BIM and other integration technology tools and methods to foster sustainable and lean design and construction. The goals of I TAC will include research that:

- Analyzes the sustainable integration process, players and collaboration including the utilization of BIM, energy, and life-cycle simulation software
- Develops, tests, and monitors existing and emergent integrated technology products (varied in scale, digital and material) for sustainable building
- Applies the process and products in practice scenarios through university ~ industry collaborations and demonstration projects for sustainable building
- Assesses the impact of integrated technology on society, the economy and the environment
- Disseminates this information through reports, publications, and the web to promote integration technology in the architecture, engineering and construction industry

Over the next five years, the following research projects are being planned in association with retooling of the Integrated Technology in Architecture Center, a name that reflects its work much more effectively:

- Park City Snow Creek Project: analysis, simulation, monitoring, and evaluation of workforce housing in Park City  
Collaborations: UofU Mechanical Engineering, Park City Development Services  
Funding: DOE, ConSol  
Status: In process. Anticipated duration: 2009 – 2013 (4 years)
- Simulation and Monitoring Projects: continual contract with ConSol for design, simulation, monitoring, and evaluation of energy-efficient housing in Utah  
Collaborations: Mechanical Engineering, Salt Lake Valley Municipalities  
Funding: ConSol, NAHB Research Centers
- HUD Demonstration House: design, simulation, construction, monitoring, and evaluation of low-income green houses in downtown Salt Lake City  
Collaborations: Mechanical Engineering, Assist, Salt Lake County  
Funding: HUD, Salt Lake County
- Systems Specific Research: Kama Wall, SIPs, High R-Wall, Passive House System specific testing and monitoring  
Collaborations: Mechanical Engineering, Civil Engineering  
Funding: Industry Partners, NSF, DOE, NREL
- Integrated Technology Development: research to develop integrated green technology in buildings  
Collaborations: Mechanical Engineering, Civil Engineering, Electrical Engineering  
Funding: NSF, EPA, DOE
- LCA software: development of life cycle assessment software for zero energy commercial and residential buildings  
Collaborations: Computer Engineering, Mechanical Engineering  
Funding: Pankow Foundation, DOE, NREL, Autodesk

#### **Institutional Impact:**

The refocusing and widening of the mission and goals of the Center has opened the door to additional faculty and students within the School of Architecture. Changing the Center name does not negatively impact the University; rather it brings great opportunities for increased interdisciplinary collaboration with the other Department in the College, City and Metropolitan Planning, and Departments on campus including Mechanical Engineering, Civil Engineering, Electrical Engineering. Currently the University at large is in the process of developing an interdisciplinary Sustainability Research Center (SRC). The SRC, headed by Kent Udell, is broadly focused on interdisciplinary issues related to sustainability. The I TAC will

provide a base for sustainability research on campus related specifically to architecture and buildings. I TAC will give the School of Architecture and the College a significant seat at the table in the emerging sustainability research on campus.

In addition to research, I TAC will support the teaching of integration of sustainable technology in the architecture curriculum at the undergraduate and graduate courses including, but not limited to, digital communications, material technology, environmental technology, sustainability, and practicum studios focused on integration of sustainable technology in design. Specifically, the center will emerge concurrently with an intensive graduate learning experience in the Master of Architecture sequence. The intensive experience is focused on bringing industry and the classroom together in a unique research/teaching effort in integrated green technologies in architecture. The goals of the Center are occurring in conjunction with the curricular goals in the graduate degree program.

The name change will not affect any administrative structures, faculty positions, or physical facilities.

#### **Finances:**

The College and University will incur minimal cost by changing the name of the Center. At the College level, a name change will require new business cards for the faculty, including those who are still affiliated and those who have joined the Center since its widening of focus. This affects a total of three faculty. The only other cost will be a new nameplate for the door of the Center. The Center will not change locations or require any other physical facility changes. The name change will require an update to both the Center and the College website; however, these changes will be incorporated during the regular web site updates.

### **B. *Utah State University***

- i. ***Name Change: Master of Science (MS) in Health, Physical Education and Recreation to a Master of Science in Health and Human Movement.***

#### **Request:**

The Department of Health, Physical Education and Recreation (HPER) in the Emma Eccles Jones College of Education and Human Services at Utah State University (USU) requests to rename the Master of Science (MS) in Health, Physical Education and Recreation to a Master of Science in Health and Human Movement. This request was approved by the Utah State University Board of Trustees on January 8, 2010.

#### **Need:**

The current MS in HPER degree has specializations in Health Education, Exercise Science, Corporate Wellness and in Sports Medicine. The HPER naming does not accurately describe the focus of these specializations and misrepresents the expertise of students who earn the degree. For example, none of the existing specializations contains a focus on physical education or on recreation. A renaming of this degree to Health and Human Movement more closely matches the academic focus of the four existing specializations.

#### **Institutional Impact:**

There are no curricular changes associated with this request. Renaming of the MS degree offered by the Department of Health, Physical Education and Recreation will have no impact on enrollment, administrative structure, faculty or facilities. The new degree name will more accurately reflect student background and could positively impact an evaluator's understanding of a student's expertise.

**Finances:**

There will be no budgetary impact.

- ii. *Name Change: Bachelor of Science in Human Movement Sciences degree with emphasis in "Teaching" to an emphasis in "Physical Education Teaching"*

**Request:**

The Department of Health, Physical Education and Recreation (HPER) in the Emma Eccles Jones College of Education and Human Services at Utah State University requests an emphasis name change from a "Teaching" to a "Physical Education Teaching" emphasis under the Bachelor of Science in Human Movement Sciences degree.

**Need:**

The Bachelor of Science (BS) degree was recently renamed from a BS in Physical Education to a BS in Human Movement Sciences. Under the new name, the existing "Teaching" emphasis does not designate the discipline in which a student will be prepared to teach. This proposed name change will designate the specific teaching discipline of Physical Education.

**Institutional Impact:**

There will be no institutional, college or departmental impact. All required courses are currently taught by existing faculty in HPER and the Emma Eccles Jones College of Education and Human Services.

**Finances:**

No additional costs are anticipated for this emphasis name change.

***C. Southern Utah University***

- i. *Emphasis: Secondary Education/Creative Writing Emphasis B.A. degree with English Composite Emphasis*

**Request:**

Southern Utah University requests approval to offer an English Composite: Secondary Education/Creative Writing Emphasis B.A. degree, effective Fall 2010.

**Need:**

The English Department provides a strong and diverse liberal education in literature and writing for majors, minors, and general education students. The goals are to provide courses, instruction, advising, mentoring, and experiential opportunities for students in an atmosphere that encourages and supports learning, free inquiry, critical thinking, creativity, and clear and honest communication.

The English Composite: Secondary Education/Creative Writing Emphasis major will allow students to focus their study simultaneously on English teaching and creative writing. This program of study will broaden students' experiences while preparing them to teach English composition, English literature, and creative

writing in the secondary education system, making them far more marketable than students possessing just the English teaching degree.

To earn the English Composite: Secondary Education/Creative Writing Emphasis degree, students will complete almost all of the courses required of those pursuing the English teaching B.A. and those pursuing the creative writing degree. The total number of credit hours required for this composite major would be 134. It should be noted that the total credit hours required of English Secondary Education majors amount to 128, and if a student were to major in English Secondary Education and also complete a minor, that student's credit hour total would rise to 146. These numbers include the 16 hours in one foreign language required of all students earning a Bachelor of Arts degree, as well as the 32 credit hours in Education and the 36 hours in General Education courses.

**Institutional Impact:**

There will be no impact on the institution.

**Finances:**

The proposed composite major in English teaching and creative writing would result in little fiscal impact to the English Department. As all courses required for the Composite Major in Secondary Education Teaching and Creative Writing are already being offered by faculty currently employed by the English Department, the only increase in expenditure would result from an unexpected increase in demand and enrollment. That is, increased interest in the composite degree would result in greater demand for upper-division English courses, a development that would require the hiring of new adjunct faculty to cover the existing demand for composition courses.

***D. Snow College***

***i. Program Review: Business***

**Reviewers:**

- Dr. David B Stephens, Professor of Management, Department of Management and Human Resource, Utah State University
- Kevin Christensen, Director of Economic Development for Sanpete County, Utah
- Patsy Daniels, Executive Administrative Assistant, Snow College Richfield Campus

**Program Description:**

The Business Division consists of two departments, Business Management and Business Technology, with Doug Dyreng as Division Dean, Russ Johnson as Business Management Department Chair, and Lisa Anderson as Business Technology Department Chair.

The Business Division offers the following degrees and programs: Associate of Applied Science, Associate of Science, Associate of Science-Business, Associate of Arts, and Certificate of Completion. The Associate of Applied Science has four specializations: Administrative Assistant, Administrative Legal Assistant, Administrative Medical Assistant, and Desktop Publishing/Web Design. Certificates of Completion and Certificates of Proficiency are also awarded in several specialties.

The Business Management curriculum prepares students to manage their own businesses, become employed by a business at the entry or mid-management level, and matriculate into bachelor's degree programs. The Business Technology curriculum prepares students to enter legal, medical, or administrative office positions.

The Business Division's programs are offered on the Snow College campus (west campus location) in Ephraim and on the Richfield campus.

**Faculty & Staff:**

	Tenure	Contract	Adjunct
Number of Faculty with Doctoral degrees			1
Number of Faculty with Master's degrees	9	1	2
Number of Faculty with Bachelor's degrees			
Other faculty/staff (degree unknown)			

**Students: Business Technology Department:**

Five Year Student Enrollment Data	02-03	03-04	04-05	05-06	06-07
Enrollment	1743	1851	1313	1727	1461
Student FTE	114.8	134.9	145.7	117.0	74.6
Student Credit Hours Generated	4273.5	5839.5	4373.5	3512.3	2238
Majors	184	139	131	259	210
Enrollment Trends	N/A	.678%	-.941%	1.4%	-1.1%
Graduation	86	48	30	74	55
Student to Faculty Ratio	10.57	10.62	10.22	13.27	6.26
Graduation Rate	4.4%	3.0%	N/A	N/A	N/A
Transfer Rate	2.0%	4.6	N/A	N/A	N/A

**Students: Business Management Department:**

Five Year Student Enrollment Data	02-03	03-04	04-05	05-06	06-07
Enrollment	112	941	961	960	892
Student FTE	142.1	96.3	93.4	106.3	84.6
Student Credit Hours Generated	3445	2890	2804	2291	2539
Majors	177	250	238	267	202
Enrollment Trends			.979%	0%	-1.07%
Graduation	63	48	59	21	45
Student to Faculty Ratio	18.24	12.24	14.09	14.36	10.11
Graduation Rate	4.3%	4.3%	N/A	N/A	N/A
Transfer Rate	6.0%	2.0%	N/A	N/A	N/A

**Finances: Business Technology Department:**

Five Year Instructional Cost History	02-03	03-04	04-05	05-06	06-07
Instructional Costs (full/part salaries)	\$349,059	\$354,999	\$419,835	\$388,534	\$357,499
Support Costs (benefit, expense, travel)	\$213,322	\$240,595	\$276,280	\$219,984	\$371,673

**Finances: Business Management Department:**

Five Year Instructional Cost History	02-03	03-04	04-05	05-06	06-07
Instructional Costs (full/part salaries)	\$224,587	\$243,275	\$222,483	\$202,479	\$250,586
Support Costs (benefit, expense, travel)	\$122,848	\$151,850	\$127,055	\$110,391	\$117,247

**Program Assessment:**

***Strengths:***

From the review team's perspective, derived from the self-study and interacting with numerous stakeholders during the on-site visit, the strengths of the Business Division are a committed, well-prepared faculty, generally high levels of student satisfaction, modern and well-equipped physical facilities, and an obvious "team spirit" among students, faculty, community, and administration. The programs and outcomes of the Business Division are supportive and complimentary to the five institutional standards established at Snow College, namely enrollment, quality education, quality student life, partnership development, and fiscal responsibility.

Business students constitute an important component of the Snow College enrollment in that business represents a potential growth area, and credit hours produced by both departments have risen. The quality objective is taken seriously by the faculty which is engaged in faculty development experiences and is dedicated to maintaining a contemporary curriculum. Student life is enhanced by faculty accessibility and a student-friendly attitude. It is also supported by service learning activities and student participation in nationally recognized clubs and competitions (i.e., Delta Epsilon Chi).

Partnerships are important to the Business Division as best demonstrated by the Utah State University facility located adjacent to the business building which allows for the completion of four-year degrees in Ephraim by Snow College graduates and by the concurrent enrollment program for high school students from the three high schools in Sanpete County.

Fiscal responsibility is clearly demonstrated by careful management and oversight practiced where ambitious learning objectives are being met with a limited resource base.

***Weaknesses:***

The Business Division has excellent physical facilities but they are located on the West campus several blocks from the main (Ephraim) campus. This presents logistical problems for students taking general education courses on the main campus and business courses at the West campus. In addition, student enrollment appears to be flat or declining. Currently 9% of the courses offered at Snow College and 5% of the student credit hours produced are generated by the Business Division. Concurrent enrollment of high school students has increased significantly. While this may be commendable in providing early opportunity for talented high school students, it has contributed to the heterogeneity in the makeup of classes wherein the instructors are faced with the challenge of teaching to a very broad group of learners with various levels of capability, maturation, and career objectives. Also, with small faculty and relatively small student



numbers, courses are offered infrequently, perhaps once a year. This makes it difficult for students to balance their number of credit hours across semesters and is particularly difficult for part-time, non-traditional students who are balancing employment and family issues with education. Better integration of the program offerings at the Ephraim and Richfield campuses is also needed.

The faculty is very supportive of students and turnover is low, demonstrating unusually strong faculty commitment. Nonetheless, salaries are low. Salary increases have lagged considerably relative to cost of living for years. Operating budgets have not been increased for decades and travel and faculty development funds are limited.

Neither the Business Division nor Snow College has a placement office or staff. The absence of resources dedicated to this function at least marginally hampers the graduates in obtaining professional employment and disadvantages the Business Division in demonstrating the value of the learning experience. In addition, while partnerships with school districts and Utah State University have been nurtured, there seems to be only modest attempts to reach out to the community of business practitioners.

***Commendations:***

- Faculty are dedicated, accessible, and supportive of students. There is considerable one-on-one mentoring. Faculty display an attitude of “ownership” of the curriculum and degree offerings of the division.
- Curriculum is contemporary and course content is for the most part up to date, even state-of-the-art.
- Class size is small, providing great opportunity for discussion and feedback.
- There is a clear feeling of “team spirit” among the administration, faculty, and students.
- The division is highly fiscally efficient, in that it continues to achieve the assigned instructional objectives in an environment of low growth in faculty salaries and operating budgets.
- There is excellent sharing of responsibility for staffing the Richfield business programs between the Business Management faculty in Ephraim and faculty at the Ephraim campus.
- The addition of on-campus living facilities on the Richfield campus will aid in business enrollments at that site.

***Recommendations:***

- Student recruiting by the Business and Division should be expanded to build enrollment.
- Move to “East” campus as soon as possible. Historically, enrollment in the Business Division dropped when the program moved to the West campus location.
- Encourage cross-over enrollment in business courses from arts and sciences areas.
- Market existing curriculum and develop additional focused programs for business owners beyond the offerings of the Small Business Development Center.
- Find additional funding for student recruiting, faculty salaries, faculty development, operating budgets, and student placement.
- Aggressively develop and expand the partnership with the Utah State University Ephraim Center, leading to more four-year business degree completion opportunities at Snow College.
- Increase student scholarships and financial aid generally and give more focus to aid for non-traditional students.

- Clarify the curriculum and class focus to ensure that the needs of the various types of students (those seeking certificates, those seeking applied science degrees, and those seeking to transfer to four-year schools) are being met.

#### **Institutional Response to Recommendations:**

- **Student recruiting by the Business Division should be expanded to build enrollments.**

The division has started an aggressive recruiting program, which includes the following:

- a. Each member of the division has been assigned specific high schools to contact. The contact will include a visit with business students, establishing a relationship with business teachers and advisors at each school.
  - b. The division will host an annual Business BBQ on campus to recruit potential students and develop a sense of community among business majors.
  - c. Web sites for both the Business Technology and Business Management programs have been developed and are now on-line.
  - d. Each member of the division has been given shirts to wear from time-to-time during class. The shirts are embroidered on the front with "Business is Good" Snow College Business Division. T-shirts with the same printing will be distributed to students and at special events.
  - e. Members of the division have sought and will seek the opportunity to speak at special events in the six-county area promotion business as a major at Snow College.
  - f. The division will continue to sponsor competitions for DEX and PBL students which invite students to campus and offer winners a scholarship to attend Snow College.
- **Move to "East" campus as soon as possible. Historically, enrollment in Business Division dropped when the programs moved to the West Campus location.**

The Snow College administration has made a commitment to the Business Division that upon completion of the new Snow College library, that space in the current library on the "East" campus will be made available so that the division will be able to move to the "East" campus. The square footage promised will exceed that of the current facility on West campus. This move will likely take place in 2010. Plans for the layout of the space promised are currently being pursued.

- **Encourage cross-over enrollment in business courses from arts and science areas.**
  - a. Most majors in the arts and sciences have some elective flexibility in their requirements. Arts and science majors are currently being encouraged to complete a certificate of proficiency or a one-year certificate in business in addition to general education classes and major requirements.
  - b. A specific example will clarify the current approach. For example, a music major who might want to be self-employed as a piano tuner could take seven to ten hours of electives (entrepreneurship certificate of proficiency) in conjunction with their music program. This certificate will consist of course work in entrepreneurship, business feasibility, business planning, record keeping, as well as a choice of electives to give a person the skills needed to start and run a business.

- c. Several other certificates are offered by the Business Technology Department to give students employable skills that can be of benefit while they pursue their interests in any major.
  - d. This concept has been well received by other academic divisions on campus.
- **Market existing curriculum and develop additional focused programs for business owners beyond the offerings of the Small Business Development Center.**

The Business Division has a good working relationship with the SBDC at Snow College and will work with the SBDC in designing and delivering business training to those in the six-county service area. Currently a new course has been developed in conjunction with the SBDC director, USU extension, the local school districts and business leaders in the area. This course will be titled Entrepreneurial Lectures and is awaiting final approval by the Snow College Curriculum Committee. The purpose of this course is to have successful entrepreneurs explain to potential entrepreneurs and small business owners what it takes to be successful. It is hoped that this leads to several other classes that could be offered to the public on topics like QuickBooks, Marketing your Business, Financing your Business, and many other topics.

- **Find additional funding for student recruiting, faculty salaries, faculty development, operating budgets and student placement.**
  - a. The Business Division will seek donations to help with funding by making contact with alumni and other donors. The division has recently implemented an efficiency program where one new position was replaced by each member in the division assuming some responsibility of the new position. The president promised those who participated could share in the savings which has resulted in a significant pay raise for faculty in the division. A new policy on use of institutional scholarship funds could result in the Business Division receiving more scholarship dollars from the institution. Much of the remaining funding must come from the Legislature.
  - b. One issue that remains unresolved, that is very important to the division, is student placement. The Business Division would encourage the institution to consider a placement office on campus to service both the CTE and BT divisions.
- **Aggressively develop and expand the partnership with Utah State University Ephraim Center, leading to more four-year business degree completion opportunities at Snow College.**
  - a. The division is excited to have USU in Ephraim. Most business majors seek the ASB or transfer degree leading to a four-year business degree. USU has and will continue to promote the possibility to stay in Ephraim and complete a B.S. degree in business. The faculty have expressed an interest and desire to partner with USU as adjunct teachers if USU desires the help. This partnership is viewed as a great addition to the USU service area and Snow College.

- b. Faculty meet regularly with Dan Adams, the director of the USU program. Snow College has a dual admissions program in place, making it possible to register for both Snow College and USU with one application. Those who are dual-enrolled and qualify for a Snow College scholarship will automatically qualify for a USU scholarship.
- **Increase student scholarships and financial aid generally and give more focus to aid for non-traditional students.**
  - a. As mentioned earlier, a campaign to raise scholarship money has been launched by the institution. As of this week they have received a \$1000 pledge by a former faculty member to be used only for a student majoring in the Business Division. This is just the beginning and many more scholarship dollars can be raised. The division will continue to work closely with financial aid to make sure students qualify and are taking advantage of the many programs offered.
  - b. Snow College will also make contact with the Department of Workforce Services to make sure they refer clients to the program. Snow College will make contact with Moroni Feed Company, due to its recent announcement of temporary closure, regarding possible educational opportunity available at Snow College for former employees.
- **Clarify the curriculum and class focus to ensure that the needs of the various types of students (those seeking certificates, those seeking applied science degrees, and those seeking to transfer to four-year schools) are being met.**
  - a. Several documents have been produced and distributed that focus on this issue.
  - b. The division will meet with academic advisors and recruiters to make sure they understand the various programs offered at Snow College. Instructors will be encouraged to include in their syllabus the purpose of the course and the degree or certificate toward which the course was designed. Students will be informed at Start Smart Majors options and at the Business BBQ about the various business programs and their purposes.

#### E. Dixie State College

- i. ***Emphasis: Integrated studies baccalaureate, emphasis in Operations Management***

#### **Request:**

Dixie State College requests to offer an integrated studies baccalaureate emphasis in Operations Management in Fall Semester 2010. It is the intent of the School of Business to develop an applied and industry-responsive emphasis area in management. The emphasis will include the following courses:

#### **Operations Management Emphasis (26 cr. – 16 cr. are UD)**

Business Computer Proficiency – CIS 2010	3
Business Statistics - STAT 2040	4
Economics of Social Issues - ECON 1010	3

Accounting for Management - ACCT 3000	4
Purchasing/Supply – MGMT 4000	3
Production and Operations - MGMT 3600	3
Human Resources – MGMT 4300	3
Management Law – OPER 3030	3

Note: All the above courses already exist at DSC, except for OPER 3030, Management Law.

#### DSC Integrated Studies Emphasis Area Requirements:

- At least two areas of emphasis with a minimum of 21 credits from approved list of courses for each emphasis area
- At least 12 credits must be from upper-division courses (3000 or above) in each emphasis area

#### DSC Institutional Baccalaureate Requirements:

- DSC general education requirements or an AS or AA degree
- Minimum of 120 credits, of which at least 40 are upper division (3000 or above)
- Cumulative GPA of 2.0
- Minimum of 30 semester hours of upper-division credit and at least ten of the final 45 credits must be taken from DSC

Bridge Note: For students bridging from the AAS in Operations Management degree, all baccalaureate-required general education courses must also be completed. These courses can be taken in the AAS degree as elective credit.

#### Need:

The Operations Management emphasis is being developed as part of a career ladder continuum for Operations Management. With the establishment of a manufacturing course in the Utah high schools, the competency certificate program in Advanced Manufacturing at the Dixie Applied Technology College, and the AAS degree in Operation Management at DSC, the next logical step is to add a related baccalaureate degree. Conservatively, it is estimated that 20 students from the annual cohort of 50 who will be progressing through the DXATC's advanced manufacturing program will be advancing to DSC.

The integrated studies degrees are designed to assist students in customizing their education to meet their needs. The practical and applied focus of the AAS and integrated studies emphasis in Operations Management suits this goal well, allowing students to study in an additional area of interest or educational need. Surveys of manufacturing and construction industries verify that training and education in operations management are in demand, both locally and nationally. Local manufacturing and construction companies have also shown interest and commitment in sending promising current employees for higher education, including a baccalaureate degree at DSC.

#### Institutional Impact:

It is supposed that most of the students entering the integrated studies baccalaureate emphasis in Operations Management will be advancing from the AAS in Operations Management or from the DXATC's Advanced Manufacturing Program. Many students already will be employed and on a career ladder advancement program with their companies. It is possible that some of the students from the grant-funded career ladder initiative may decide to pursue a regular bachelor's degree in business. A focus of the emphasis in the operations management program will be practical applications in industry. Offering the

integrated studies baccalaureate emphasis in Operations Management should not initially require a significant increase in infrastructure or full-time faculty. Courses will be taught by current faculty and adjuncts with industry experience.

**Finances:**

The program will be funded through state appropriation, tuition, reallocated funds, and initially through a Department of Labor grant. The major costs associated with this program are related to instruction, with most of the infrastructure already in place. Several skilled adjuncts already have been identified and employed to teach existing operations courses at DSC (e.g., MGMT3600 Operations Management and MGMT4000 Purchasing and Supply Management) and a broader and deeper list of instructors is being prepared. Of course, in a time of normal budget availability and in keeping with accreditation guidelines, an additional full-time operations faculty would be hired at the cost of approximately \$115,000 for annual salary and benefits. However, given the dire lack of funding, but also considering the urgent and real need of students and industry, DSC will make do with existing and community resources in order to get this program started. As the program grows and as the state and national economies improve, additional state allocations for dedicated full-time faculty will be justified and required.

**Recommendation**

The Commissioner recommends the Regents review the items on the Program's Information Calendar. No action is required.

---

William A. Sederburg  
Commissioner of Higher Education

WAS/GW

## ADDENDUM

January 12, 2010

## MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Information Calendar: Academic Career and Technical Education and Student Success (Programs) Committee – Late Submission

The following has been submitted for considered by the Regents on the Information Calendar of the Programs Committee.

**A. *Utah State University***

- i. *Restructuring of the College of Humanities, Arts and Social Sciences into two colleges: the College of Humanities and Social Sciences and the Caine College of the Arts*

**Request:**

Utah State University (USU) requests approval to restructure the College of Humanities, Arts, and Social Sciences into two new colleges: the Caine College of the Arts and the College of Humanities and Social Sciences. Under the proposed new structure the departments and programs in the two resulting, more focused, colleges would be well positioned to serve and fulfill the vision and strategic plans of their respective areas of academic interest and expertise.

**Need:**

While the unified College of Humanities, Arts and Social Sciences has been a pillar at Utah State University, with countless academic accomplishments and outstanding community relations, the proposed new structure will foster the development of a stronger identity for each of the distinct disciplines of humanities, social sciences, and the arts. As each of the proposed colleges develops and grows into their more focused roles, it is anticipated there will be greater visibility for their respective accomplishments, increased funding opportunities targeted at their unique contributions, and new, focused programs of excellence for USU students. In addition, the large size of the existing college, combined with the vast diversity of academic disciplines, presents a significant challenge to administrative oversight that will be alleviated under the proposed restructuring.

The new organizational structure is intended to achieve several goals:

- Greater national and regional visibility enabled by an ability to focus and develop excellence in the fundamentally distinct arenas of the arts, the humanities and the social sciences.
- Modest enrollment growth as students respond to the increased visibility and growing reputations of the respective new colleges.
- Expanded funding opportunities enabled by increased focus and college branding.
- Increased leadership representation for each of these distinct disciplines, with a new seat at the USU Council of Deans.

**Institutional Impact:**

There will be no additional academic degree programs, no new faculty, no significant impact on enrollment and no new facilities. However, there will be modest renovations to the existing facilities in order to create administrative offices for the new Caine College of the Arts.

**Finances:**

No cost savings are anticipated as a result of this proposal. Indeed, there will be some marginal additional costs associated with implementing this restructuring. For example, there is currently money in the budget for one academic dean. With the move to two colleges, USU will identify and allocate the resources necessary to pay the salary for a second dean and the staff associated with a second dean's office. Monies for these additional expenditures will come from internal college and university reallocations or the use of discretionary revenues.

**Commissioner's Recommendation**

The Commissioner recommends that the Regents review the addendum to the Programs' Committee Information Calendar. No action is required.

---

William A. Sederburg, Commissioner

WAS/PCS



January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Swaner EcoCenter Gift to Utah State University

Background

The Swaner EcoCenter has offered as a charitable gift to Utah State University the assets and attendant liabilities of the EcoCenter, which consists of the Swaner Nature Preserve, the Swaner EcoCenter building, and additional real property in Snyderville Basin. The Swaner Nature Preserve is 1200 acres of prime wetland and hillside property in the heart of the Park City metro area. It is the remnant of the Swaner family farm and is now protected in perpetuity by a conservation easement.

The Eco Center building was the first LEED-Platinum building in the State of Utah. It is a 10,000 square foot educational and administrative center. The additional property included in the gift is approximately 12 acres of land not constrained by the conservation easement. This gift will benefit Utah State University as outlined in the attachment.

Attached is a copy of the letter from USU requesting authorization to accept this gift; a summary statement of the assets and liabilities which shows assets of \$35.7 million, liabilities of \$4.1 million, and an equity position of \$31.6 million; and several photos of the EcoCenter property and building.

Commissioner's Recommendation

The Commissioner recommends authorizing Utah State University to accept the gift from the Swaner EcoCenter.

---

William A. Sederburg  
Commissioner of Higher Education

WAS/GLS/WRH  
Attachments

4 January 2010

Commissioner William A. Sederburg  
Utah System of Higher Education  
Board of Regents Building, The Gateway  
60 South 400 West  
Salt Lake City, Utah 84101-1284

Dear Commissioner Sederburg:

It is the intent of the Swaner EcoCenter to make a charitable gift to Utah State University of the assets of the Swaner EcoCenter along with their attendant liabilities.

The Swaner EcoCenter consists of the Swaner Nature Preserve, the Swaner EcoCenter building, and additional real property in Snyderville Basin. The Swaner Nature Preserve is 1200 acres of prime wetland and hillside property in the heart of the Park City metro area; the remnant of the Swaner family farm which is now protected in perpetuity by a conservation easement. The EcoCenter building was the first LEED-Platinum building in the State of Utah, and is a 10,000 square foot educational and administrative center. In addition, the Swaner EcoCenter owns approximately 12 acres of land not constrained by the conservation easement. The advantages to Utah State University of this gift are of three general categories:

#### **Educational Outreach**

The EcoCenter is well-suited to offer formal and informal educational opportunities to youth and adults through lectures, online classes, and demonstration learning on the physical premises of the preserve. Environmental education is currently and will continue to be a primary focus of the Swaner EcoCenter.

#### **Presence in Park City**

Park City is among the most prosperous communities in the state. It is also home to a large population of people from somewhere other than Utah and will provide many residents with an awareness of the work of the University.

#### **Research**

The uniqueness of the Preserve provides a rich opportunity for research in fields in which Utah State University excels. (e.g Rangeland Resources, Water Resources, and many others.) The close proximity of human development in Park City to critical natural resources creates an opportunity to study the interfaces of these mixed uses and provide useful data to areas all across the country that are facing similar growth patterns.

The University proposes to accept the Swaner EcoCenter gift and therefore requests that acceptance of this gift be placed on the consent calendar for the 15 January 2010 Board of Regents meeting. Approval of the proposed gift is anticipated by the Board of Trustees in its 8 January 2010 meeting.

Sincerely,



David T. Cowley  
Vice President for Business and Finance

C: Stan Albrecht  
Gregory L. Stauffer

# Swaner EcoCenter

## Balance Sheet

As of September 30, 2009

### ASSETS

#### Current Assets

Cash	\$	1,250,400
Accounts Receivable		467,202
Other		18,960

<b>Total Current Assets</b>		<b>1,736,562</b>
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#### Fixed Assets

Buildings and Improvements		7,331,059
Restricted Use Land		22,997,329
Unrestricted Use Land		1,889,307
Other		47,155

<b>Total Fixed Assets</b>		<b>32,264,850</b>
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#### Other Assets

Investments		1,051,035
Water Rights and Water Shares		673,000

<b>Total Other Assets</b>		<b>1,724,035</b>
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<b>TOTAL ASSETS</b>	<b>\$</b>	<b>35,725,447</b>
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### LIABILITIES & EQUITY

#### Liabilities


Accounts Payable	\$	43,702
Construction Loan		4,083,344

<b>Total Liabilities</b>		<b>4,127,046</b>
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<b>Total Equity</b>		<b>31,598,401</b>
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<b>LIABILITIES &amp; EQUITY</b>	<b>\$</b>	<b>35,725,447</b>
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A serene winter landscape featuring a snow-covered mountain range in the background. In the foreground, a river is partially frozen, with snow-laden evergreen trees on the left bank. The sky is a clear, pale blue.

*“When we see land as a community to  
which we belong, we may begin to use it  
with love and respect.”*

*~ Aldo Leopold*





*"Many eyes go through the meadow, but  
few see the flowers in it."  
~ Ralph Waldo Emerson*

Courtesy - Tom Till















January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Peer Institutions List: Southern Utah University

Background

The Commissioner's Office continues its process of working with USHE campuses to update their lists of peer institutions. A new list was approved for Salt Lake Community College in December, and work is in the early stages for several additional institutions. This month, we bring forward a revised list for Southern Utah University (SUU).

Formally approved peer lists are used for various financial and statistical comparisons (Tab M of the annual Data Book provides one example), and – with the evolving nature of institutions – it is important to review the lists on occasion in order to assure that peer group members remain representative of the nature and mission of the USHE institution to which they are being compared. Board of Regents policy R508 provides guidelines for the creation and approval of peer institutions groups. Utilizing those guidelines, SUU and OCHE have completed the task of revising the SUU peer list.

Issue

Southern Utah University continues its focus as Utah's public/private institution – offering personalized learning attention in a residential campus setting. In recognition of this focus, SUU desired to bring to its peer list, institutions from across the nation that align their resources in a similar fashion. SUU and OCHE have spent the past several months exploring updates to the Southern Utah University Peer Institution List. In undertaking this endeavor, the services of the National Center for Higher Education Management Systems (NCHEMS) were utilized. NCHEMS offers a Comparison Group Selection Service that is designed to aid in selecting groups of institutions with similar missions and demographic characteristics as an aid for comparative data analyses.

The NCHEMS selection service combed through a database of all higher education institutions; reviewing several dozen variables of institutional characteristics, and condensing the list to a workable number for the target institution. Amongst the more important variables reviewed:

- Size and service area
- Student body characteristics
- Mix of associate, baccalaureate, and masters degrees
- Academic program mix

At that point, NCHEMS, OCHE, and SUU worked together to narrow the universe of reviewed institutions to a final listing, collectively agreed upon. This listing represents a like group of public four year institutions with selected graduate programs in mid-size to small cities across the country, institutions with predominantly full-time students, an emphasis on the undergraduate experience and an emphasis on instruction over primary research.

(Please see Appendix A – SUU Peer Institution List)

Commissioner's Recommendation

The Commissioner recommends approval of the revised Peer Institution List for Southern Utah University.

---

William A. Sederburg  
Commissioner of Higher Education

WAS/GLS  
Attachment

## APPENDIX A

(Memo SUU Peer Institution List 1-15-10)

Southern Utah University Peer Institution List:

Institution	Location	Total Headcount Students	Full-time Faculty	Bachelors Programs
Austin Peay State U	Clarksville, TN	9,094	286	22
Christopher Newport U	Newport News, VA	4,884	226	15
Columbus St U	Columbus, GA	7,593	246	16
Eastern Connecticut St U	Willimantic, CT	5,137	199	17
Georgia College & State U	Milledgeville, GA	6,249	262	19
Sonoma State U	Rohnert Park, CA	8,770	273	21
Southern Oregon U	Ashland, OR	4,832	185	19
SUNY at Geneseo	Geneseo, NY	5,548	250	16
Truman State U	Kirksville, MO	5,920	344	18
Western Carolina U	Cullowhee, NC	9,056	456	21
Southern Utah U	Cedar City, UT	7,057	222	21

Full-time Equivalencies (FTE's) at the institutions range from 4,207 to 8,066. SUU's FTE # is 6,572.

January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Snow College Purchase of Ephraim Elementary School and Land

Background

Snow College is requesting Board of Regent approval to purchase the Ephraim Elementary School Building and land located at 151 South Main Street (Hwy 89), Ephraim, UT. The College has reached an agreement in principle with the South Sanpete School District to purchase the property for \$1.5 million through twenty annual no-interest payments of \$75,000.

The property in question is contiguous to the College's main campus in Ephraim at the corner of 100 East and 100 South. This purchase represents a significant opportunity to add classroom space and land for future development at reasonable price and very reasonable terms. As you are aware, Snow College is currently land locked and purchases to expand the campus footprint heretofore have been accomplished one house at a time. Purchasing the elementary school will add 6.2 acres of largely raw land. Since all other land surrounding the campus is currently occupied by homes, this purchase represents a low cost opportunity to enlarge the College footprint for the future.

Issue

This property is a single story elementary school building being vacated in the summer of 2010 when construction of the new Ephraim Elementary School is completed. It includes 6.20 acres of property fronting on Main Street in Ephraim, Utah comprising much of the block between Main Street and 100 East and 100 and 200 South. It includes the school building, 2 portable trailers containing four classrooms, asphalt paved parking, landscaping, playground equipment, sidewalks, and fencing. The relevant details of the proposal are covered in the attached letter from Snow College:

No state funds are being requested to purchase the subject property. The administration proposes to use student fee revenue currently designated for campus facilities to meet the both the \$129,600 estimated cost of demolition and remodeling and the \$75,000 annual payment negotiated with the school district. The sale remains subject to approval by the

South Sanpete School Board, though discussions with the board chair and superintendent have been favorable to date.

The College will seek operating and maintenance funding through state appropriations in the amount of \$166,800 for 22,213 square feet of building space. This amount was determined by using the current DFCM rate of \$7.51 per square foot for classroom and office space.

Commissioner's Recommendation

The Commissioner recommends approval of this property purchase, subject to approval of the South Sanpete County School Board.

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William A. Sederburg  
Commissioner of Higher Education

WAS/GLS/WRH  
Attachments



Greg Stauffer  
Associate Commissioner of Finance and Facilities  
Utah System of Higher Education  
State Board of Regents Building  
60 South 400 West  
Salt Lake City, UT 84101

January 5, 2010

Dear Commissioner Stauffer,

Snow College is requesting Board of Regent approval to purchase the Ephraim Elementary School Building and land located at 151 South Main Street (Hwy 89), Ephraim, UT. President Scott Wyatt and myself have reached an agreement in principle with the South Sanpete School District to purchase the property for \$1.5 million through twenty annual payments of \$75,000.

The property in question is contiguous of the College's main campus in Ephraim at the corner of 100 East and 100 South. This purchase represents a significant opportunity to add classroom space and land for future development at very reasonable terms. As you are aware, Snow College is currently land locked. Historically, purchases to expand the campus footprint have been accomplished a house at a time; which is an expensive approach. Purchasing the elementary school adds 6.2 acres of largely raw land. As all other land surrounding campus is currently occupied by homes, this purchase represents a low cost opportunity to enlarge our footprint for the future.

The administration is proposing to use the classrooms and general building space remaining after some demolition, to hold regular classes and may relocate the Snow/USU Elementary Education program to this facility for much needed classroom and recreation space. Other uses remain under discussion.

No state funds are being requested to purchase the subject property. The administration proposes the use of student fee revenue currently designated for campus facilities to meet the \$75,000 annual payment negotiated with the school district. The sale remains subject to approval by the South Sanpete School Board, though discussions with the board chair and superintendent have been favorable to date.

If approved, the College will seek operating and maintenance funding for 22,213 sq/ft of classroom space through state appropriation at approximately \$166,800.00

The following bullets summarize the information related to this proposed purchase.

- Subject property is a single story elementary school building being vacated in the summer of 2010 when construction of the new Ephraim Elementary School is completed.

- 6.20 acres of property fronting on Main Street in Ephraim, UT is included in the purchase; comprising much of the block between Main Street and 100 East and 100 and 200 South. It includes the school building, 2 portable trailers containing four classrooms, asphalt paved parking, landscaping, playground equipment, sidewalks, and fencing.
- The 41,654 square foot building was originally constructed in 1961 with a significant addition and remodeling in 1998. Original classroom wings on the North and East of the main building will be demolished due to age and deterioration with facade work along the demolished walls. Estimated costs for demolition and the enclosure of remaining walls, as presented below, were considered in negotiating the purchase price.
  - Demolition of 19,441 square feet @ \$4.00/sqft = \$77,800
  - Wall renovation/facade work of 131 linear feet x 15 high @ \$26.38 sq/ft = \$51,800
  - Building space remaining after demolition is 22,213 sq/ft
- An appraisal of the property was requested and paid for by Snow College using Free and Associates, Inc. Real Estate Appraisers and Consultants of Salt Lake City, UT. Snow's purchase agreement with the School District is based on the resulting appraisal issued December 7, 2009.
  - Current fee simple "As Is" value is \$1,600,000 with an "Upon Demolition and Renovation" value of \$1,470,000 not including the two portable trailers.
  - Agreed upon price including the two portable trailers is \$1,500,000 to be paid in annual installments of \$75,000 for twenty (20) years. No interest will be charged for this transaction.

Sincerely,

Marvin L. Dodge  
 Vice President  
 Finance and Administrative Services



The following pages are excerpts from the appraisal to aid in consideration of this request.

**Figure 1. Main entrance and 1998 addition, facing Main Street**



Figure 2. Plat Map of subject property

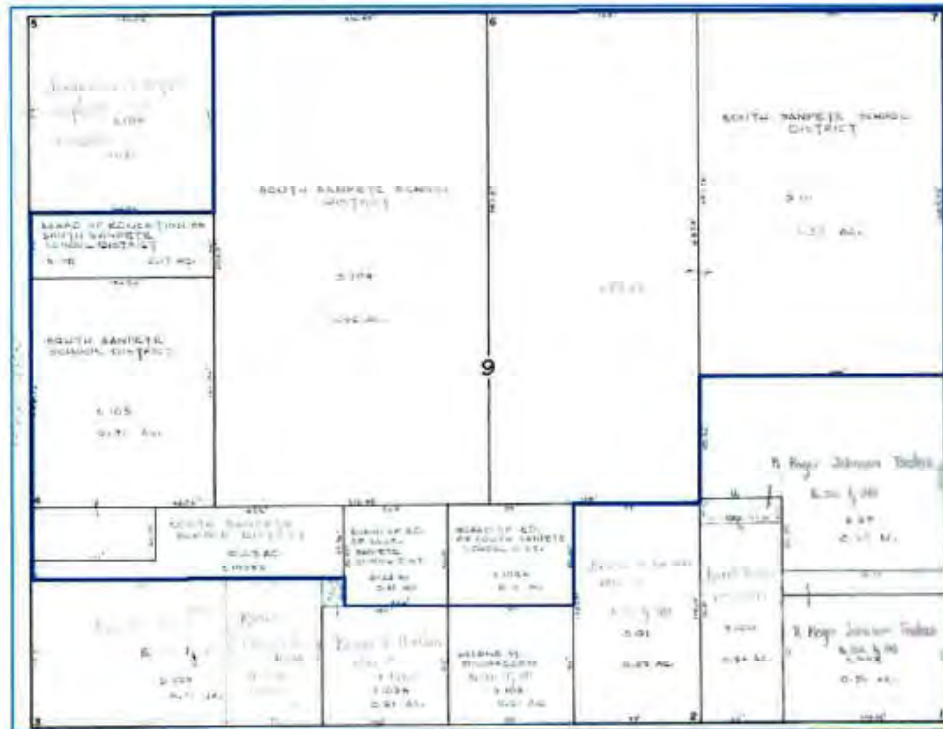


Figure 3. Aerial photo of subject property



Figure 4. Land Sketch

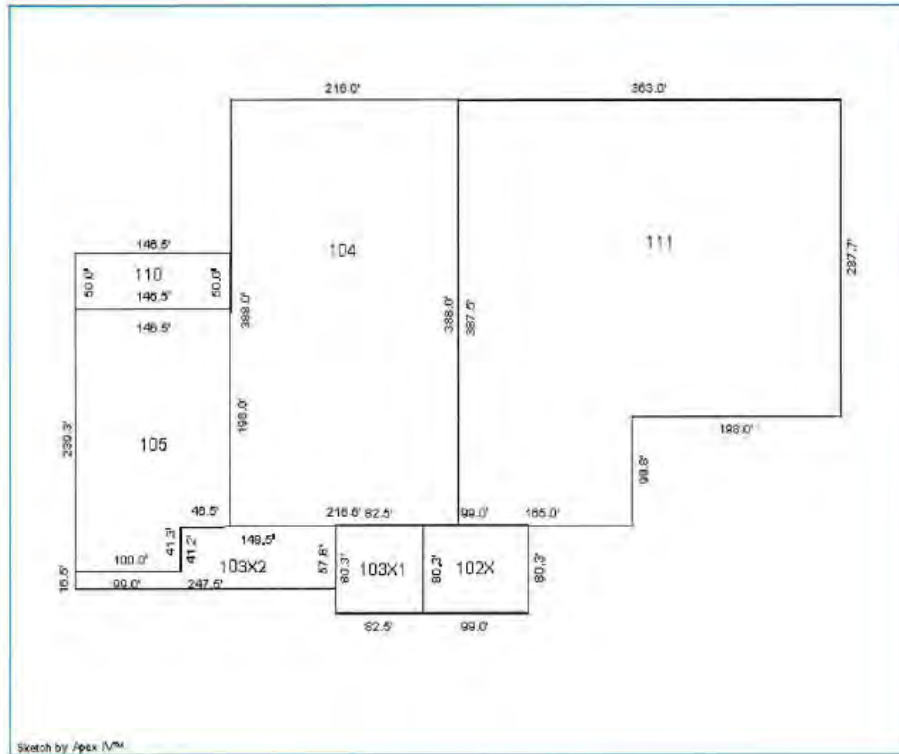


Figure 5. Outline of building and wings to be demolished (yellow)

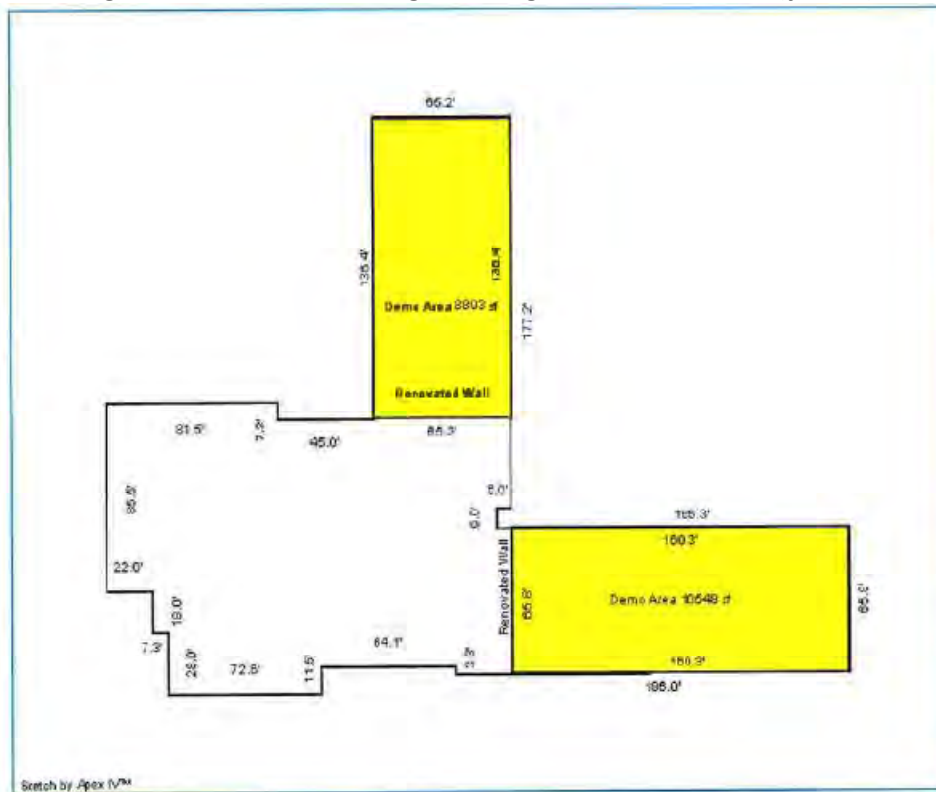
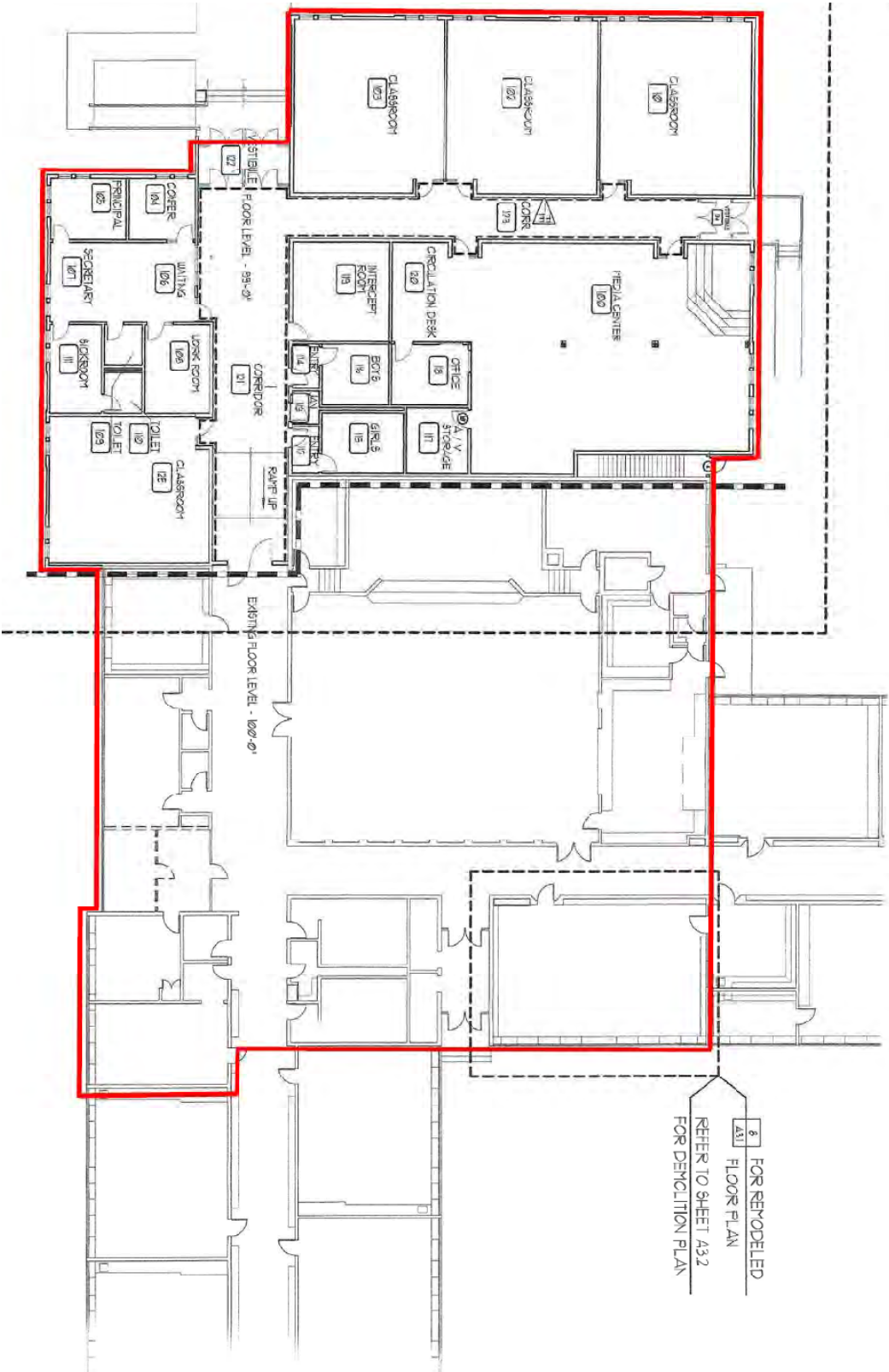


Figure 6. Blueprint of 1998 addition and area to be preserved (22,213 sqft)





## Pictures of Property



VIEW OF SUBJECT SCHOOL WEST SIDE



VIEW OF SUBJECT SCHOOL WEST SIDE



VIEW OF SUBJECT SCHOOL NORTH SIDE



VIEW OF SUBJECT SCHOOL SOUTH SIDE



VIEW OF SUBJECT SCHOOL EAST WING EXTERIOR



VIEW LOOKING SOUTH AT FRONTAGE ON MAIN ST



VIEW OF SUBJECT FIELD AREA



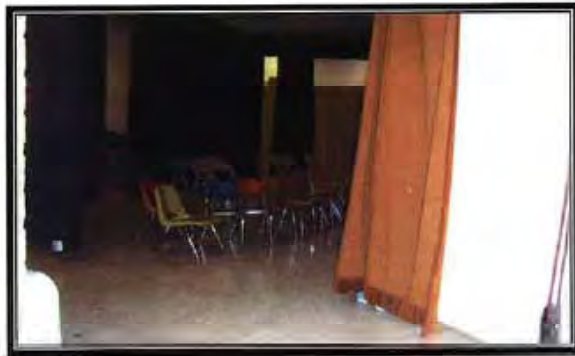
VIEW OF SUBJECT SCHOOL OFFICE AREA



VIEW OF SUBJECT SCHOOL INTERIOR



VIEW OF SUBJECT SCHOOL RESTROOM



VIEW OF SUBJECT SCHOOL STAGE



VIEW OF SUBJECT SCHOOL LUNCHROOM



VIEW OF SUBJECT SCHOOL KITCHEN



VIEW OF SUBJECT SCHOOL KITCHEN





VIEW OF SUBJECT SCHOOL BOILER



VIEW OF SUBJECT SCHOOL BOILER



VIEW OF SUBJECT SCHOOL STAGE



VIEW OF SUBJECT SCHOOL INTERIOR



VIEW OF SUBJECT SCHOOL INTERIOR

January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: SUU Residential Property Purchase

Background

Southern Utah University has requested authorization to purchase a personal residence located 1/2 block to the south of the campus. Its location is in the growth path of the campus and will be used as a rental property for new faculty and staff until a future date when it will be used for emerging campus needs.

The property is a single family residence located at 231 South 300 West, Cedar City, Utah. The purchase price is the current appraised value of \$295,000. The following items are attached for your review:

- Letter from SUU requesting authorization.
- Pictures of the property
- Satellite view of the property
- An appraisal summary dated December 16, 2009

Commissioner's Recommendation

The Commissioner recommends approval of the property purchase

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William A. Sederburg  
Commissioner of Higher Education

WAS/GLS/WRH  
Attachments



Vice President for Finance & Facilities

December 29, 2009

William A. Sederburg, Commissioner  
Utah System of Higher Education  
Board of Regents Building, The Gateway  
60 South 400 West  
Salt Lake City, UT 84101-1284

Dear Commissioner Sederburg,

Southern Utah University requests permission to purchase, at the current appraised value of \$295,000, a personal residence located ½ block to the south of our campus. This is located in our growth path and would be rented to new faculty and staff until a future date when it will be used for campus purposes.

Please refer to the following attachments:

- Pictures of Subject Property
- Satellite View of Subject Property
- Appraisal Summary – 12/16/2009

**Description:**

Single Family Residence located at 231 South 300 West, Cedar City Utah, 84720.

If there are questions or additional information is needed, please contact me at 435-586-7721, or [page@suu.edu](mailto:page@suu.edu).

Sincerely,

Dorian G. Page  
Vice President for Finance and Facilities

Cc: Dr. Gregory Stauffer, Associate Commissioner  
Michael T. Benson, President  
Ralph Hardy, Assistant Commissioner

REALTY APPRAISAL SERVICE  
**SUBJECT PHOTO ADDENDUM**

File No. 09424  
Case No.

Borrower SUU Foundation

Property Address 321 S 300 West

City Cedar City

County

Iron

State

UT

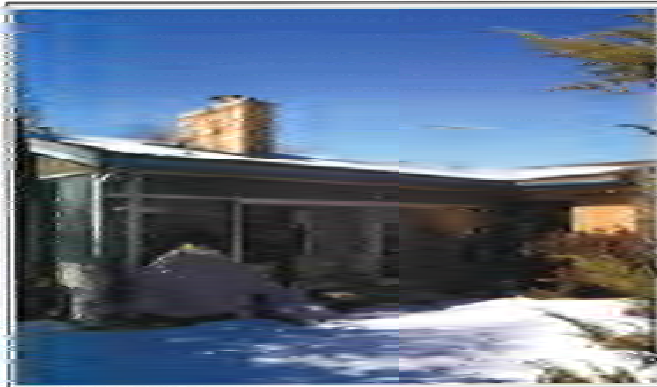
Zip Code

84720

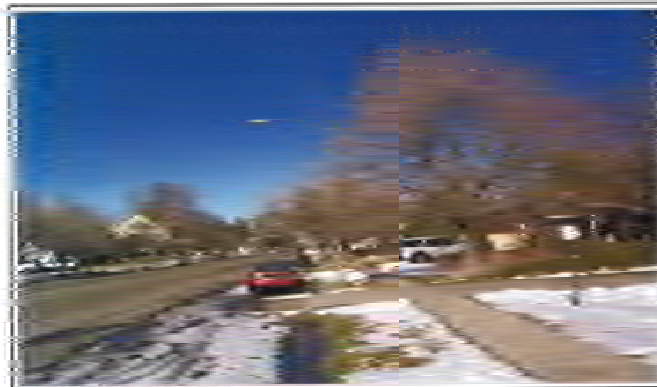
Lender/Client SOUTHERN UTAH UNIVERSITY FOUNDATION Address 361 W CENTER STREET, CEDAR CITY, UTAH 84720



**FRONT OF  
SUBJECT PROPERTY**  
321 S 300 West  
Cedar City, UT 84720



**REAR OF  
SUBJECT PROPERTY**



**STREET SCENE**





## Uniform Residential Appraisal Report

There are 156 comparable properties currently offered for sale in the subject neighborhood ranging in price from \$ 150,000 to \$ 400,000	
There are 136 comparable sales in the subject neighborhood within the past twelve months ranging in sale price from \$ 150,000 to \$ 400,000	
FEATURE	SUBJECT
Address	321 S 300 West Cedar City, UT 84720
Proximity to Subject	0.30 miles W
Sale Price	\$ N/A
Sale Price/Gross Liv. Area	\$ 0.00 sq. ft.
Data Source(s)	MLS #49784
Verification Source(s)	Seller/Reber
VALUE ADJUSTMENTS	DESCRIPTION
Sale or Financing	Conventional
Concessions	No concessions
Date of Sale/Time	7/1/2009
Location	Cedar
Leasehold/Fee Simple	Fee Simple
Site	.39 Acre
View	Typical
Design (Style)	Ranch
Quality of Construction	Average
Actual Age	46
Condition	Average
Above Grade	8
Room Count	4
Gross Living Area	2,957 sq. ft.
Basement & Finished	736
Rooms Below Grade	Finished
Functional Utility	Average
Heating/Cooling	BB/Central
Energy Efficient Items	Typical
Garage/Carport	2 car garage
Porch/Patio/Deck	Porch, Sun Room
Fireplaces	2 Fireplaces
Net Adjustment (Total)	\$ 74,275
Adjusted Sale Price of Comparables	\$ 259,275
I <input checked="" type="checkbox"/> did not research the sale or transfer history of the subject property and comparable sales. If not, explain	
My research <input checked="" type="checkbox"/> did not reveal any prior sales or transfers of the subject property for the three years prior to the effective date of this appraisal.	
Data source(s) MLS & County Records.	
My research <input checked="" type="checkbox"/> did not reveal any prior sales or transfers of the comparable sales for the year prior to the date of sale of the comparable sale.	
Data source(s) MLS	
Report the results of the research and analysis of the prior sale or transfer history of the subject property and comparable sales (report additional prior sales on page 3)	
ITEM	SUBJECT
Date of Prior Sale/Transfer	See comment below
Price of Prior Sale/Transfer	N/A
Data Source(s)	MLS & County Records
Effective Date of Data Source(s)	12/16/2009
Analysis of prior sale or transfer history of the subject property and comparable sales. The subject has not sold in the past three years. Only sale of the comparable properties in the past twelve months is indicated in the grid above.	
Summary of Sales Comparison Approach. The comparable sales used are representative of the subject market and are similar appeal homes. The adjustments are typical and self explained.	
Indicated Value by Sales Comparison Approach \$ 295,000	
Indicated Value by: Sales Comparison Approach \$ 295,000 Cost Approach (if developed) \$ 298,813 Income Approach (if developed) \$	
Direct sales comparison approach and cost approach were applied to the subject property in the analysis. The income approach was not applied as it does not have a lot of application to the subject even though the subject is being rented by the foundation if it is not a typical "income property" and would not typically be marketed as an income producing property.	
This appraisal is made <input checked="" type="checkbox"/> "as is," <input type="checkbox"/> subject to completion per plans and specifications on the basis of a hypothetical condition that the improvements have been completed, <input type="checkbox"/> subject to the following repairs or alterations on the basis of a hypothetical condition that the repairs or alterations have been completed, or <input type="checkbox"/> subject to the following required inspection based on the extraordinary assumption that the condition or deficiency does not require alteration or repair:	
Based on a complete visual inspection of the interior and exterior areas of the subject property, defined scope of work, statement of assumptions and limiting conditions, and appraiser's certification, my (our) opinion of the market value, as defined, of the real property that is the subject of this report is \$ 295,000 as of 12/16/2009, which is the date of inspection and the effective date of this appraisal.	

January 7, 2010

MEMORANDUM

TO: State Board of Regents  
FROM: William A. Sederburg  
SUBJECT: USHE – Financial Ratios

Issue

Each school's report (attached) displays its historical data and institutional financial trends. Each institutional page also displays a comparison to peer institutions listed on the school's report. Following the report provided for each USHE institution is a guide as to how the core ratios are calculated as well as an example provided by WSU.

One of the requests from the Regents was to provide analysis in a timely basis; several of the institutions did not have their 2009 financial statements audited when OCHE requested the ratios (a timing issue with the State Auditors). This will be indicated on the schools' reports.

Please note that the ratios presented are for the fiscal years 2005 through 2009 and do not reflect the current fiscal year's (2010) numbers and while institutions used the same Core ratios, they have established their own "Target Range" depending on that institution's circumstances and goals.

CEU was unable to provide their ratio data for this year's report.

Institutional representatives and OCHE staff will be available to answer any questions the Regents may have on the reports, or the ratios themselves.

Recommendation

This is an information item.

---

William A. Sederburg, Commissioner

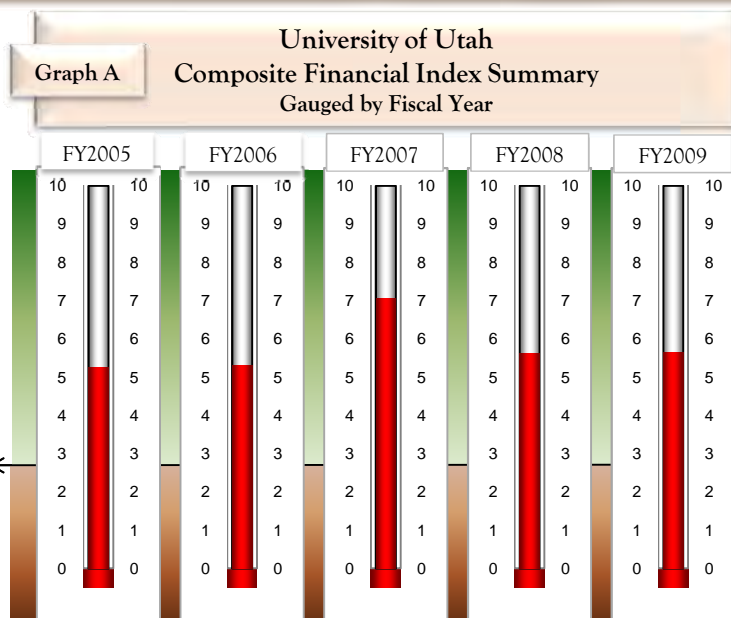
WAS/GLS/TC  
Attachments

The Composite Financial Index (CFI) is a financial measurement tool endorsed by NACUBO "to help understand not only the state of an institution's financial situation at a point in time but also serve as a valuable tool, unavailable from some other sources, that can provide insight into the trends of an institution's key financial indicators." <sup>1</sup> Financial Targets are **determined by the institutions** in each of the Core Ratios that make up the CFI. Graph A shows the **minimum** target line established by U and a five-year trend of CFI results at Fiscal Year End 2005 thru 2009.



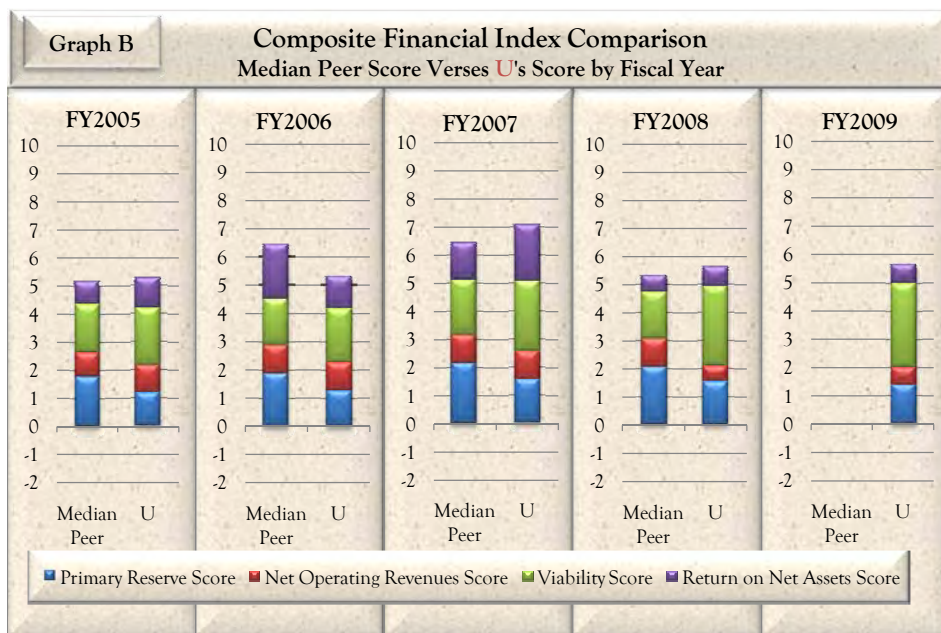
Overall General CFI Indication:  
10 = financially superior  
3 = moderate financial strength  
1 = financial weakness

U's FY2009 Financial Target Line



**How is the Composite Financial Index Score determined?** As indicated above, CFI is a calculated score derived from Core Ratios. The four Core Ratios are defined on the second page. Each Core Ratio is calculated for the Institution and its peers (median of all listed peers is shown on Graph B and Graph C). A summary of the Core Ratios' scores that make up the final CFI Score for a Fiscal Year is shown on Graph B as well as a listing of the peers (chosen by the Institution) used for comparison. 2009 numbers were not available for peer institutions when this report was created. Please note that the "Target Range" is determined by the Institution and that some Core Ratios have a minimum and some have a target range (see Graph C for details).

**Graph B** takes the individual Core Ratios generated by the institutions (see Graph C for ratio details) and converts the Core Ratios into a "score" using the calculations and measurements provided by the Composite Financial Index. Each segment on Graph B indicates the composite score—the sum of those ratio scores gives you the final CFI result (as summarized in Graph A).



#### University of Utah Peer Institutions Used in CFI Comparison

University of Virginia  
University of New Mexico  
University of Iowa  
University of Washington  
University of N. Carolina (Chapel Hill)  
University of Cincinnati



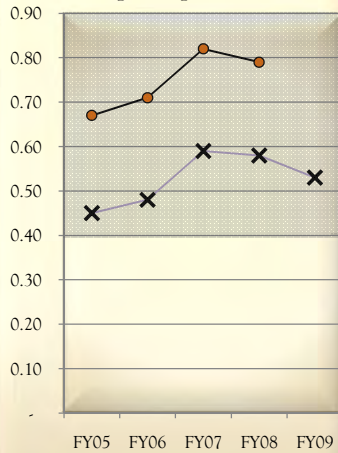
Graph C

## Core Ratios Used to Determine Composite Financial Index Score

U's Ratios by Fiscal Year Compared to Selected Institutional Peers  
(displayed is the median calculations of peers)

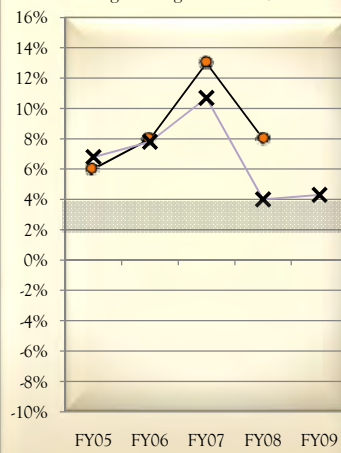
### U Primary Reserve Ratio (Liquidity Ratio)

U Target Range:  $\geq 0.40$



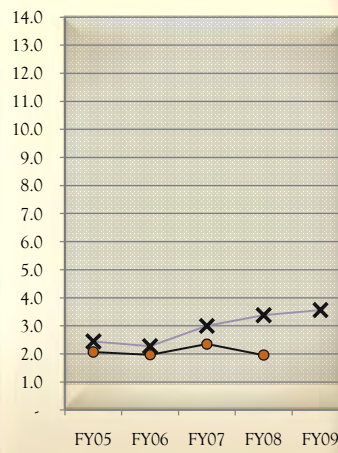
### U Net Operating Revenue Ratio (Income Ratio)

U Target Range: 2% to 4%



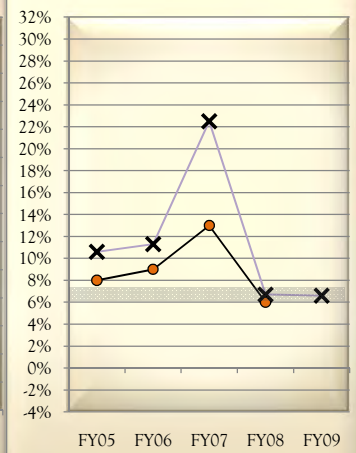
### U Viability Ratio

U Target Range:  $\geq 1.0$



### U Return on Net Assets Ratio

U Target Range: 6% to 7%



U Target Range

Peer Institution Median

U

**Primary Reserve Ratio or Liquidity Ratio** measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year).

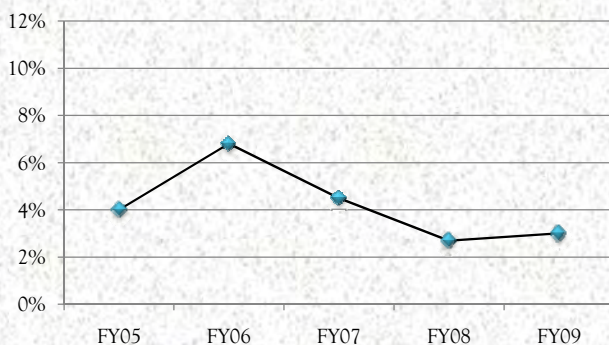
**Net Operating Revenue Ratio** indicates the degree of surplus or deficit revenues for the year.

**Viability Ratio** identifies whether an entity has sufficient expendable net assets to satisfy debt obligations at the balance sheet date.

**Return on Net Assets Ratio** indicates the real rate of return - used to determine how many dollars of earnings are derived from each dollar of assets controlled.

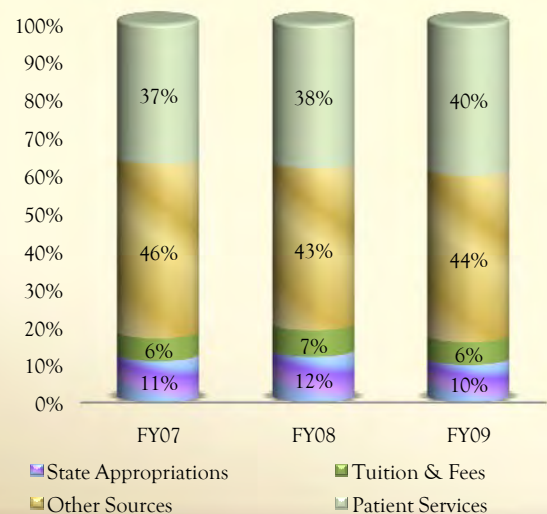
## Other Ratios

### Debt Burden Ratio



This ratio measures debt affordability - used to compare the level of current debt service with the institution's total expenses.

### Revenue Contribution by Source

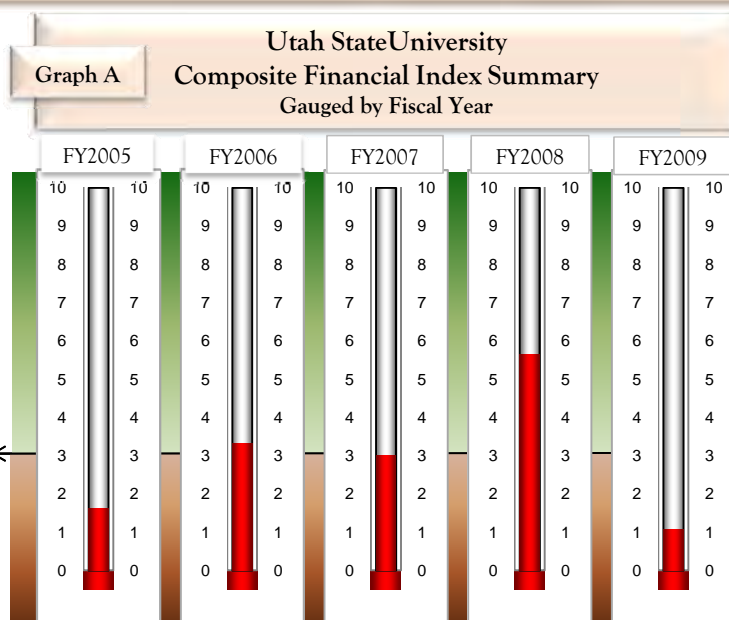


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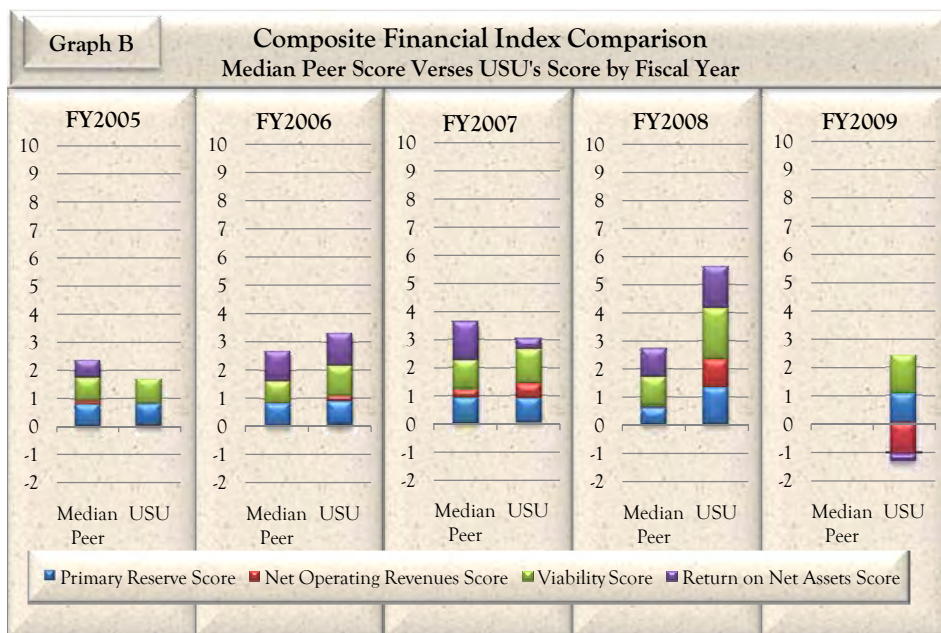
Overall General CFI Indication:  
10 = financially superior  
3 = moderate financial strength  
1 = financial weakness

USU's FY2009 Financial Target Line



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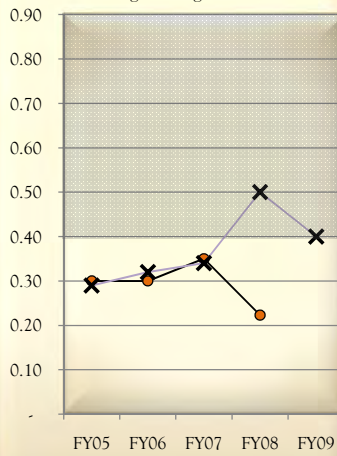
**USU Peer Institutions**  
**Used in CFI Comparison**  
Iowa State University  
New Mexico State University  
North Carolina State University



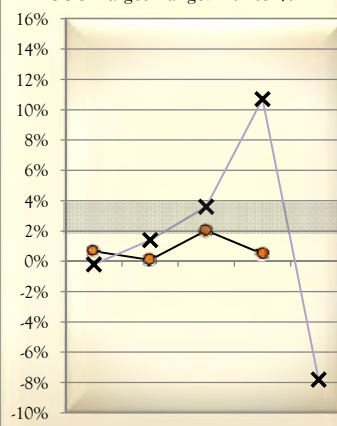
Graph C

# Core Ratios Used to Determine Composite Financial Index Score USU's Ratios by Fiscal Year Compared to Selected Institutional Peers (displayed is the median calculations of peers)

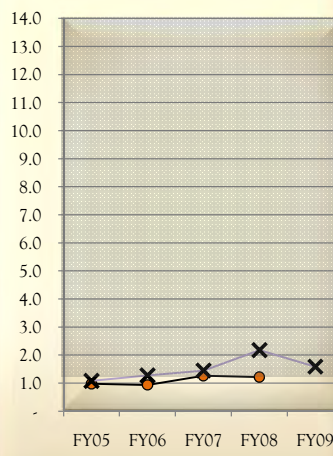
USU Primary Reserve Ratio  
 (Liquidity Ratio)  
 USU Target Range:  $\geq 0.40$



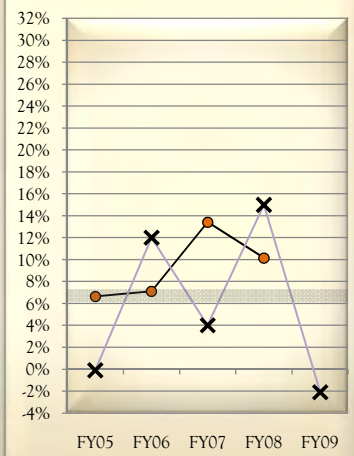
USU Net Operating Revenue Ratio  
 (Income Ratio)  
 USU Target Range: 2% to 4%



USU Viability Ratio  
 USU Target Range:  $\geq 1.25$



USU Return on Net Assets Ratio  
 USU Target Range: 6% to 7%



USU Target Range

Peer Institution Median

USU

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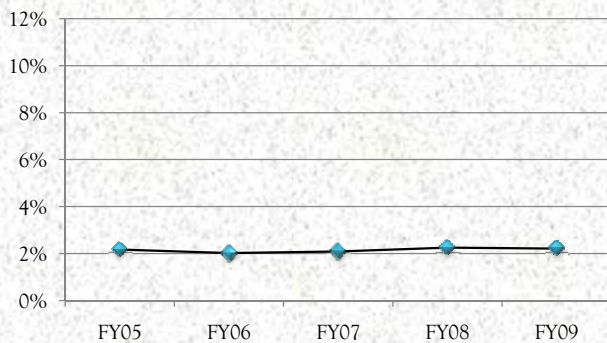
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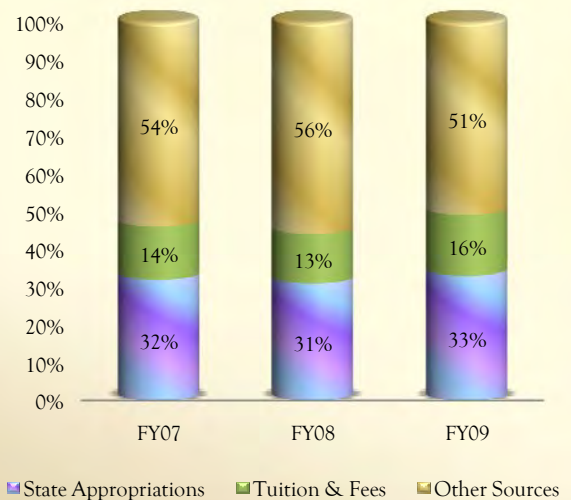
## Other Ratios

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Revenue Contribution by Source

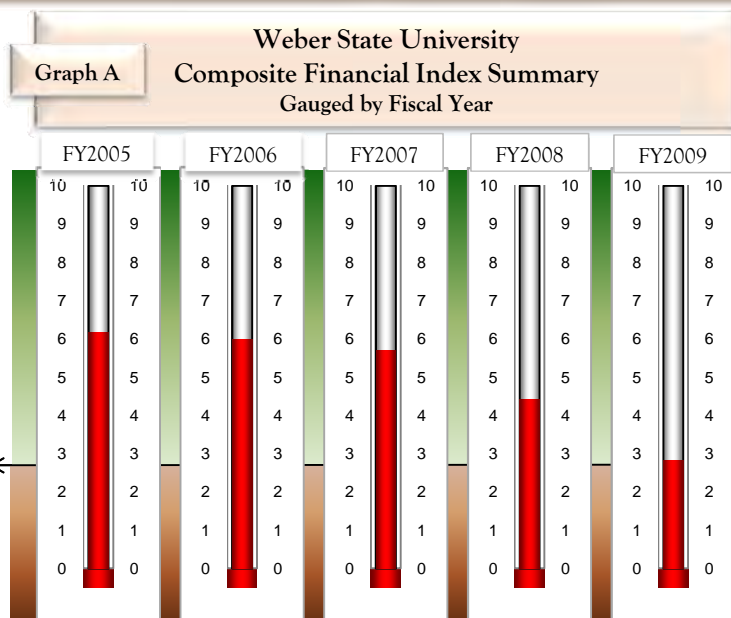


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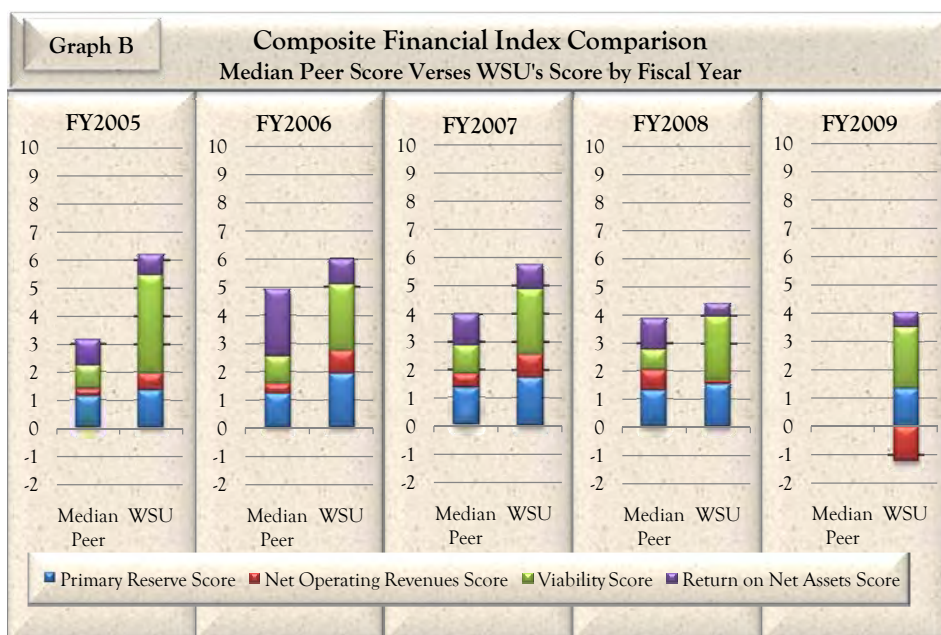
Overall General CFI Indication:  
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WSU's FY2009 Financial Target Line



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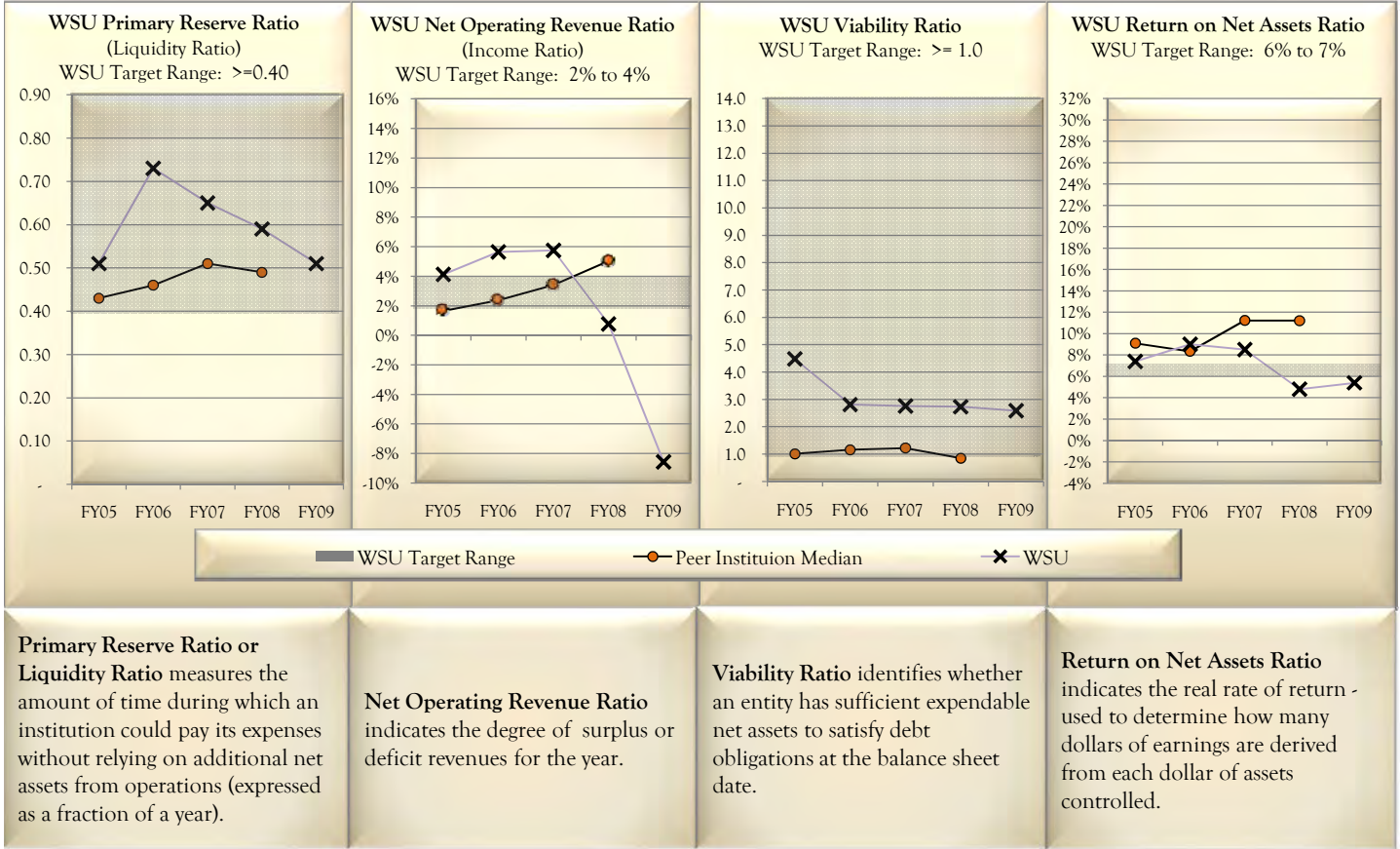


**WSU Peer Institutions**  
**Used in CFI Comparison**  
Western Washington University  
University of Northern Iowa  
University of Northern Florida  
Boise State University

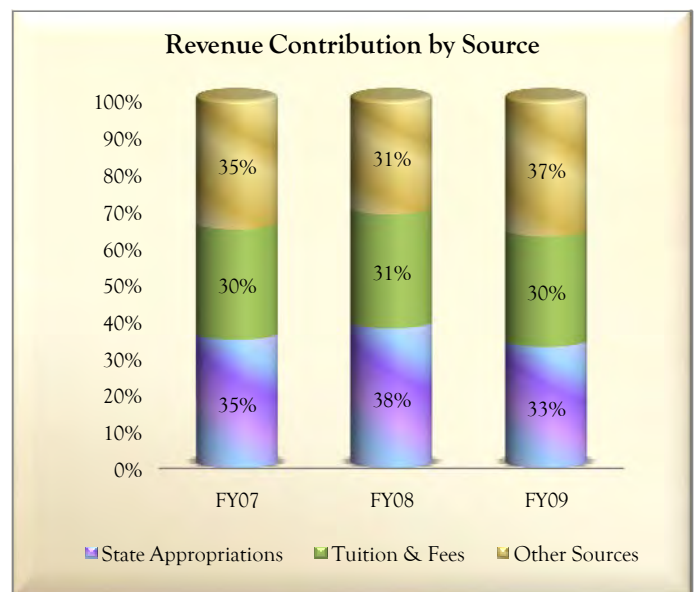
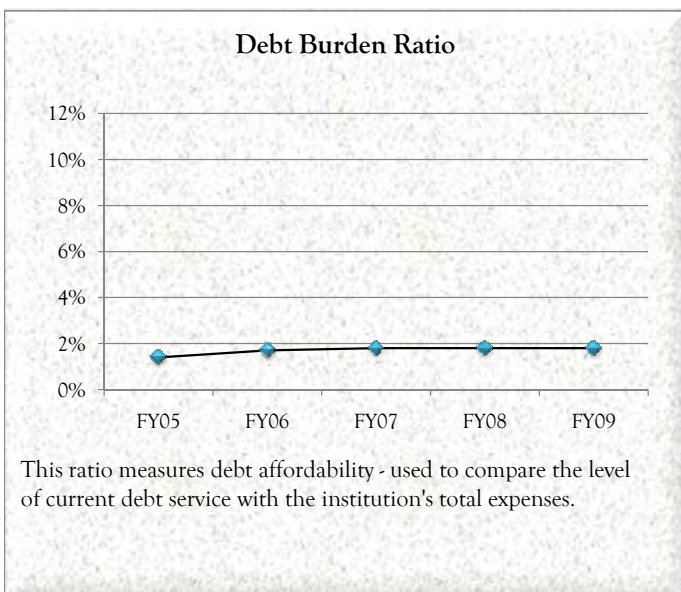


Graph C

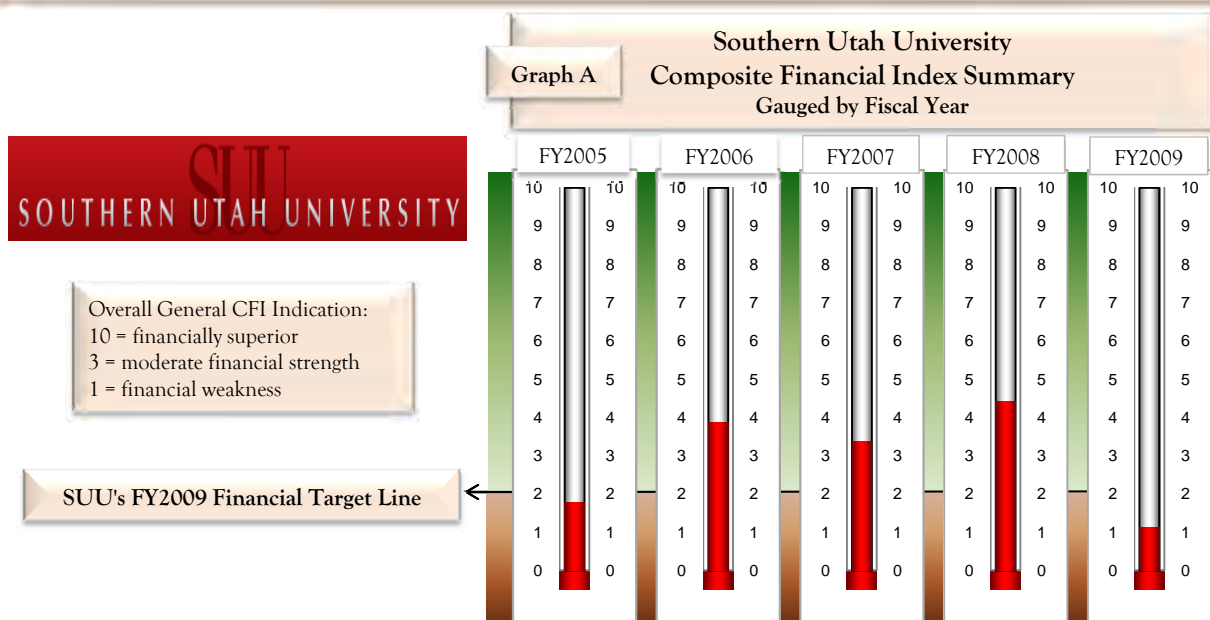
# Core Ratios Used to Determine Composite Financial Index Score WSU's Ratios by Fiscal Year Compared to Selected Institutional Peers (displayed is the median calculations of peers)



## Other Ratios

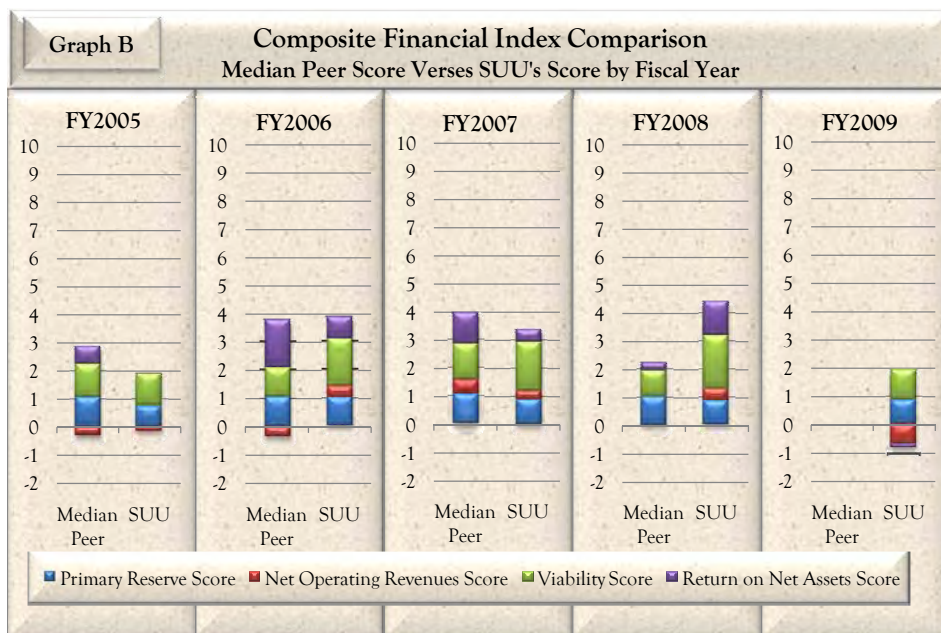


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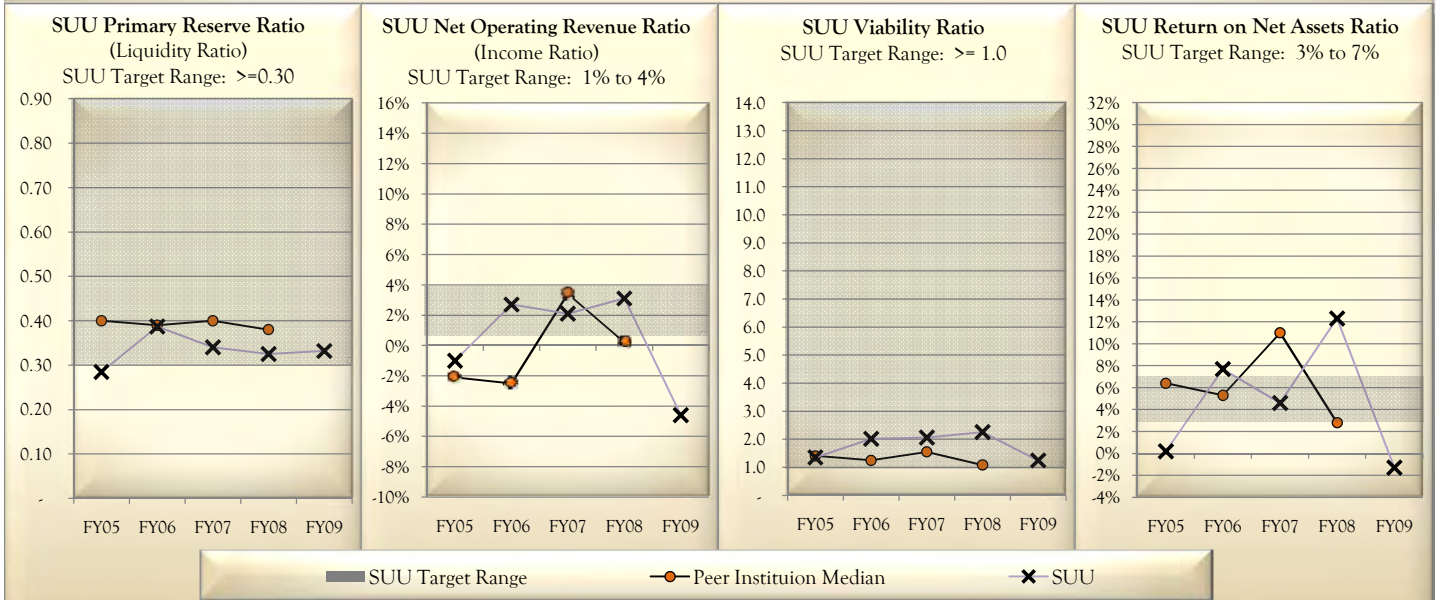


**SUU Peer Institutions**  
**Used in CFI Comparison**  
Youngtown State University  
Western Carolina University  
University of Northern Iowa



Graph C

**Core Ratios Used to Determine Composite Financial Index Score**  
**SUU's Ratios by Fiscal Year Compared to Selected Institutional Peers**  
 (displayed is the median calculations of peers)



**Primary Reserve Ratio or Liquidity Ratio** measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year).

**Net Operating Revenue Ratio** indicates the degree of surplus or deficit revenues for the year.

**Viability Ratio** identifies whether an entity has sufficient expendable net assets to satisfy debt obligations at the balance sheet date.

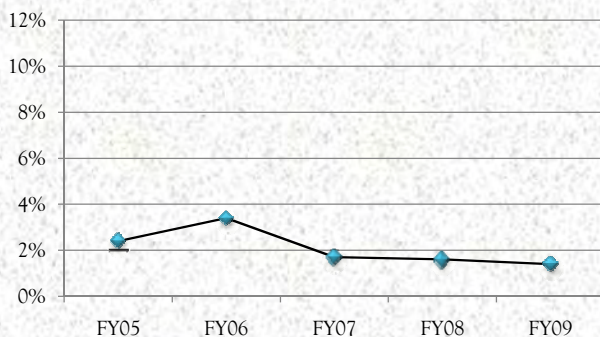
**Return on Net Assets Ratio** indicates the real rate of return - used to determine how many dollars of earnings are derived from each dollar of assets controlled.

**SUU Additional Comments:**

- 1) This ratios analysis is more beneficial as a trend analysis than it is for assessing financial health at a point in time.
- 2) Since ratios 2 (Net Operating Revenues) and 4 (Return on Net Assets) both use nearly equivalent amounts in the numerator (Net Operating Revenues minus Change in Net Assets), whatever happens is double counted in the Composite Index, which in a down year is double jeopardy. This year (2009) in particular, SUU has made a conscious decision to use reserves to avoid or delay layoffs. A ratio will not include that information.
- 3) As Not-for-Profit organizations, Net Operating Revenues should over time be at or close to zero. Return on Net Assets is not a goal or expectation.
- 4) Change in Net Assets includes Capital acquisitions, which grossly distorts the Return on Net Assets ratio. An institution could have a very serious loss in a year when they added a building and this ratio would indicate "all is well."

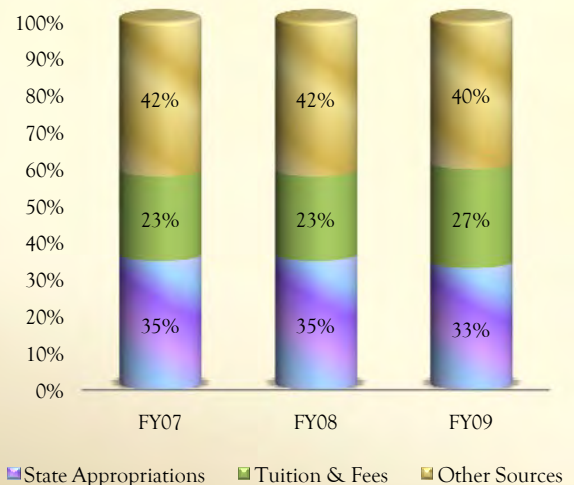
**Other Ratios**

**Debt Burden Ratio**



This ratio measures debt affordability - used to compare the level of current debt service with the institution's total expenses.

**Revenue Contribution by Source**

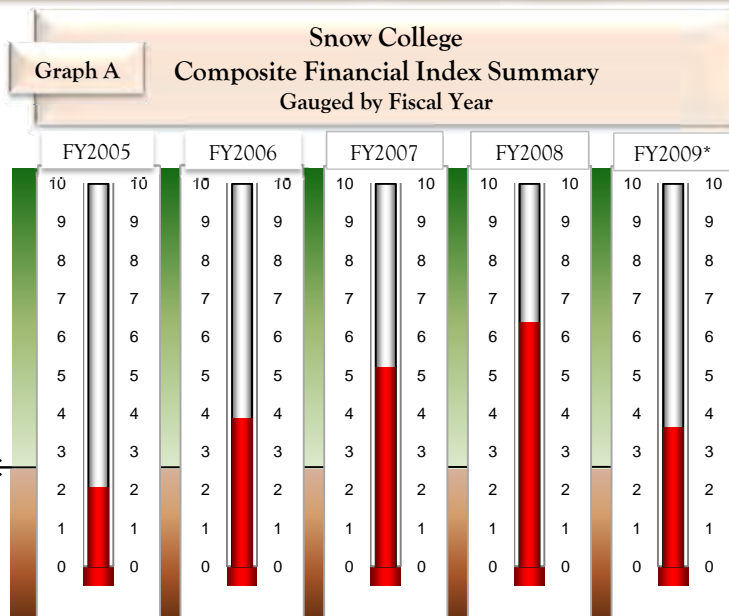


The Composite Financial Index (CFI) is a financial measurement tool endorsed by NACUBO "to help understand not only the state of an institution's financial situation at a point in time but also serve as a valuable tool, unavailable from some other sources, that can provide insight into the trends of an institution's key financial indicators." <sup>1</sup> Financial Targets are **determined by the institutions** in each of the Core Ratios that make up the CFI. Graph A shows the **minimum** target line established by SC and a five-year trend of CFI results at Fiscal Year End 2005 thru 2009.



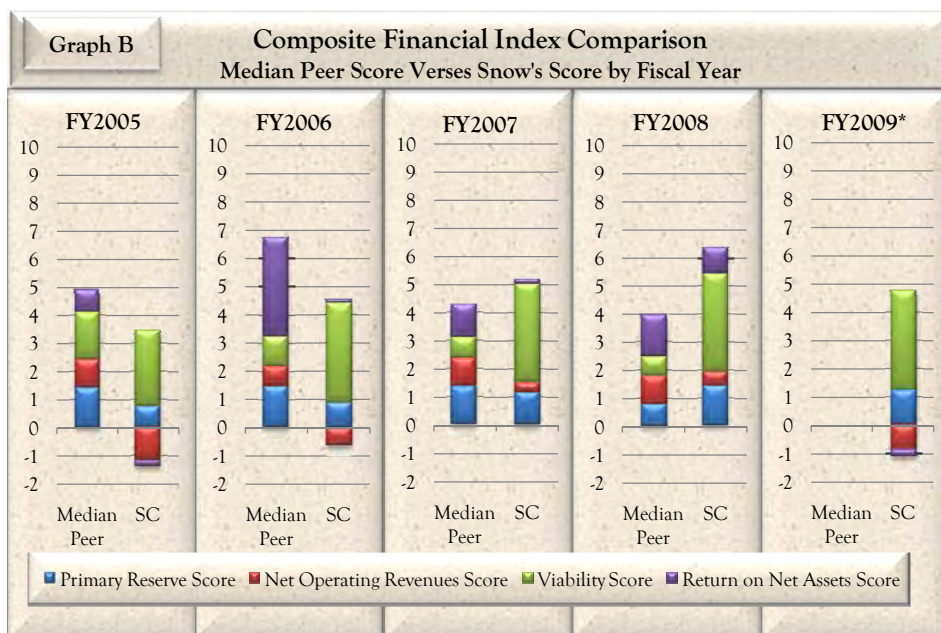
Overall General CFI Indication:  
10 = financially superior  
3 = moderate financial strength  
1 = financial weakness

Snow's FY2009 Financial Target Line



**How is the Composite Financial Index Score determined?** As indicated above, CFI is a calculated score derived from Core Ratios. The four Core Ratios are defined on the second page. Each Core Ratio is calculated for the Institution and its peers (median of all listed peers is shown on Graph B and Graph C) A summary of the Core Ratios' scores that make up the final CFI Score for a Fiscal Year is shown on Graph B as well as a listing of the peers (chosen by the Institution) used for comparison. 2009 numbers were not available for peer institutions when this report was created. Please note that the "Target Range" is determined by the Institution and that some Core Ratios have a minimum and some have a target range (see Graph C for details).

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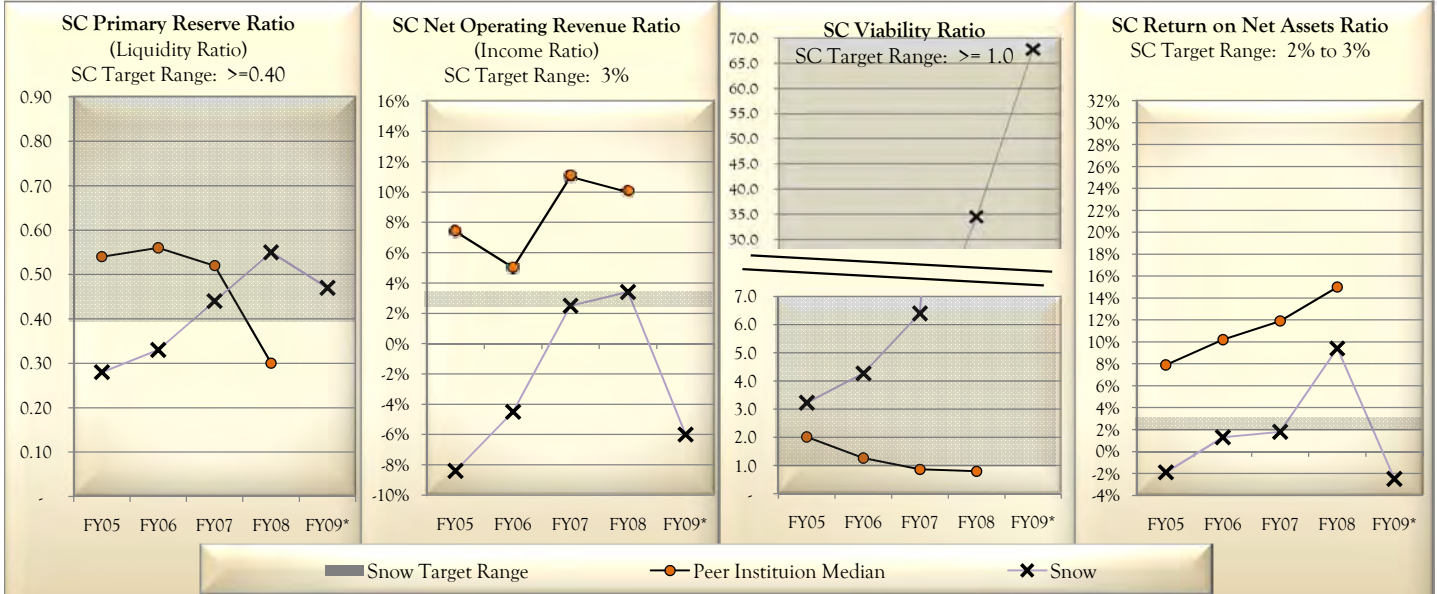


**Snow Peer Institutions**  
**Used in CFI Comparison**  
Arizona Western College  
College of Eastern Utah  
Coshise College  
San Juan College  
Yavapai College



Graph C

# Core Ratios Used to Determine Composite Financial Index Score Snow's Ratios by Fiscal Year Compared to Selected Institutional Peers (displayed is the median calculations of peers)



**Primary Reserve Ratio or Liquidity Ratio** measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year).

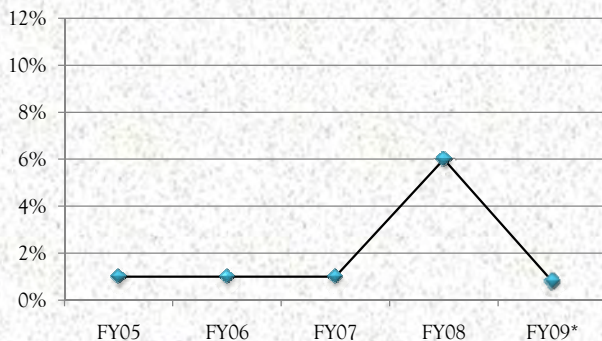
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**Viability Ratio** identifies whether an entity has sufficient expendable net assets to satisfy debt obligations at the balance sheet date.

**Return on Net Assets Ratio** indicates the real rate of return - used to determine how many dollars of earnings are derived from each dollar of assets controlled.

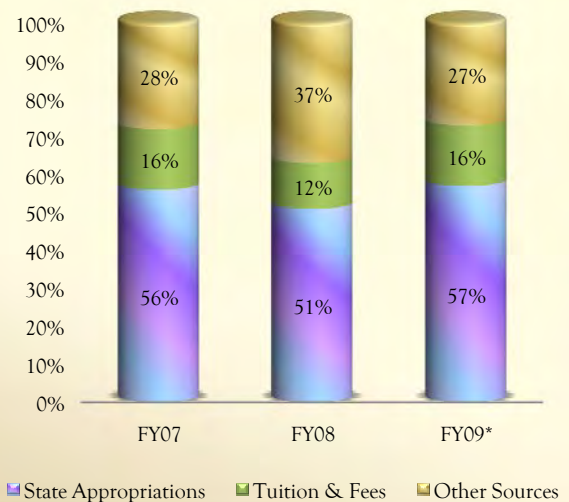
## Other Ratios

### Debt Burden Ratio



This ratio measures debt affordability - used to compare the level of current debt service with the institution's total expenses.

### Revenue Contribution by Source



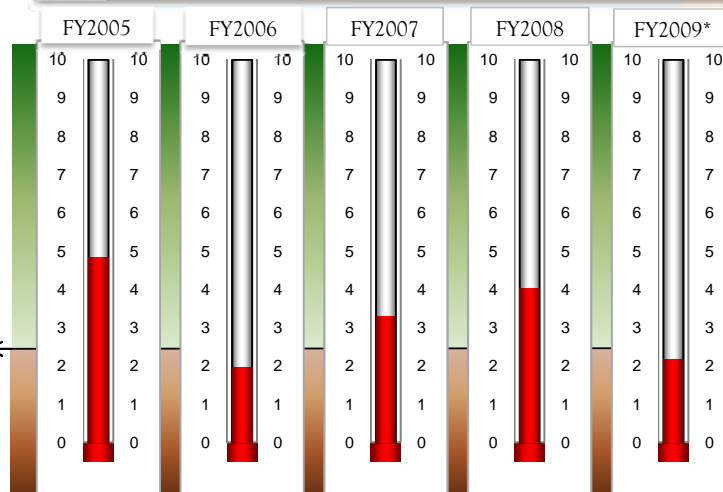
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Overall General CFI Indication:  
10 = financially superior  
3 = moderate financial strength  
1 = financial weakness

DSC's FY2009 Financial Target Line

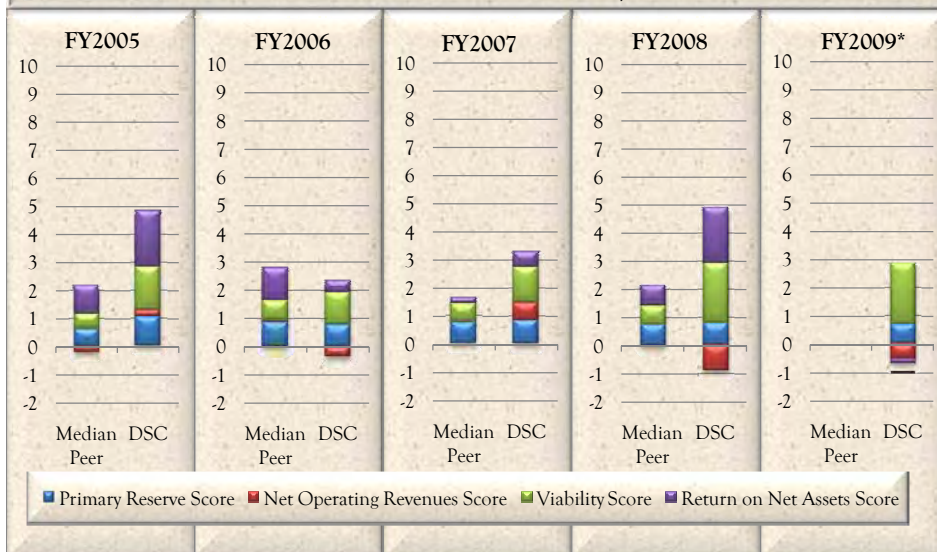
**Graph A**  
**Dixie State College of Utah**  
**Composite Financial Index Summary**  
Gauged by Fiscal Year



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**Graph B**  
**Composite Financial Index Comparison**  
Median Peer Score Verses SUU's Score by Fiscal Year



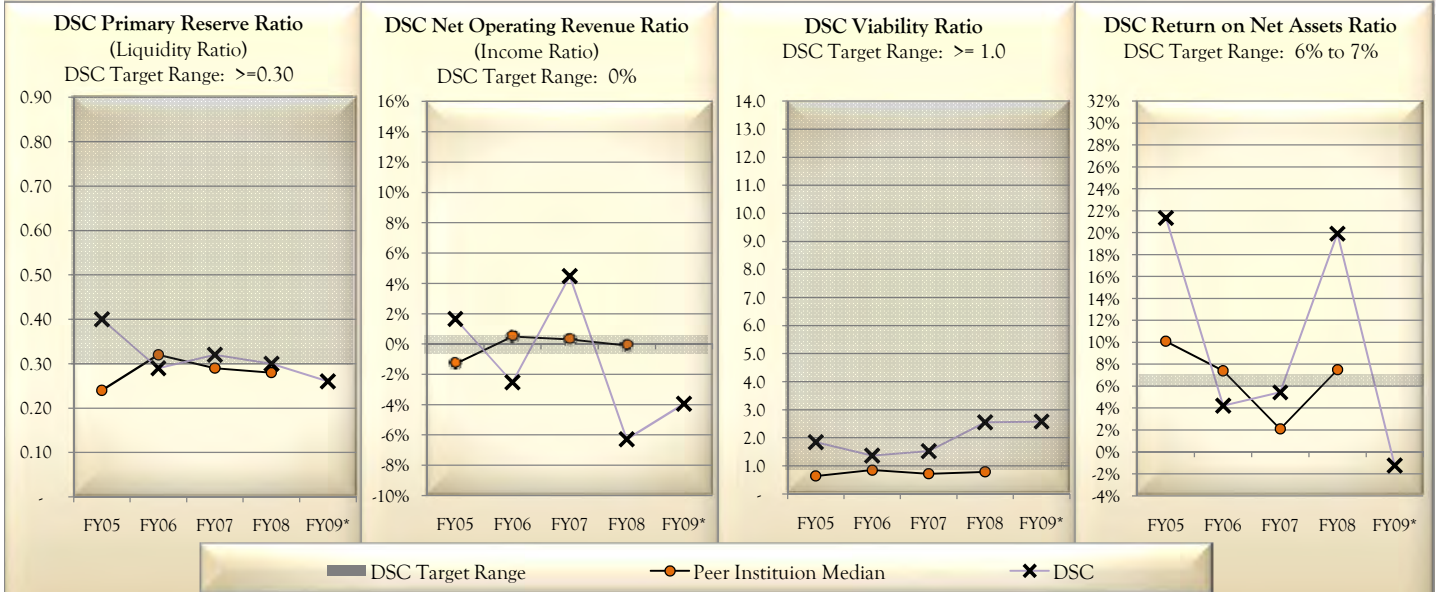
**DSC Peer Institutions**  
**Used in CFI Comparison**

Central Washington University  
Fort Lewis College  
Humboldt State University  
Macon State College  
Mesa State College  
Missouri W. State University  
University of Arkansas (Fort Smith)  
W. Washington University



Graph C

**Core Ratios Used to Determine Composite Financial Index Score**  
**DSC's Ratios by Fiscal Year Compared to Selected Institutional Peers**  
 (displayed is the median calculations of peers)



**Primary Reserve Ratio or Liquidity Ratio** measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year).

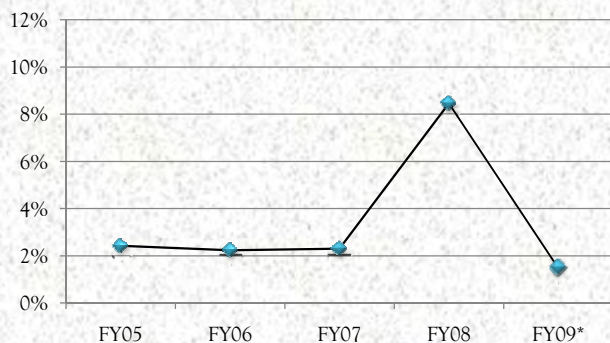
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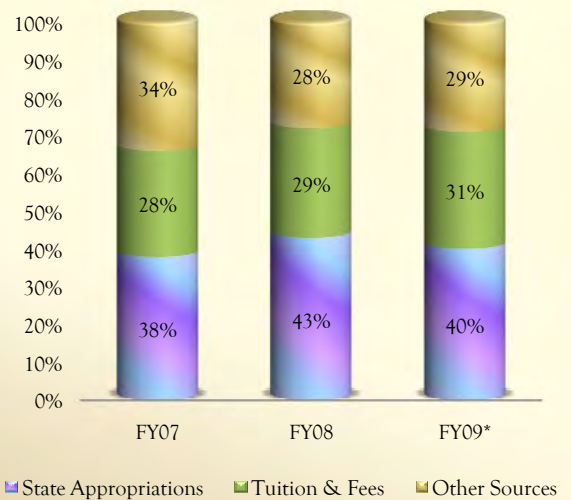
**Other Ratios**

**Debt Burden Ratio**



This ratio measures debt affordability - used to compare the level of current debt service with the institution's total expenses.

**Revenue Contribution by Source**

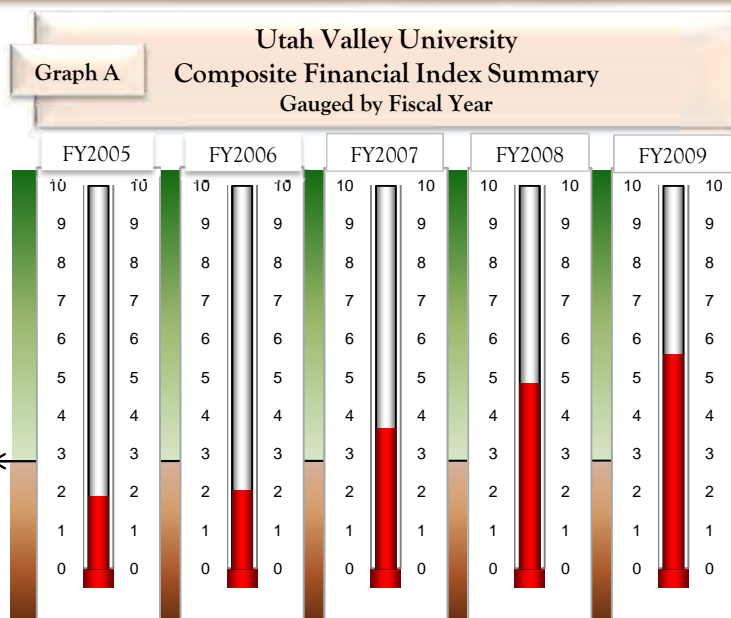


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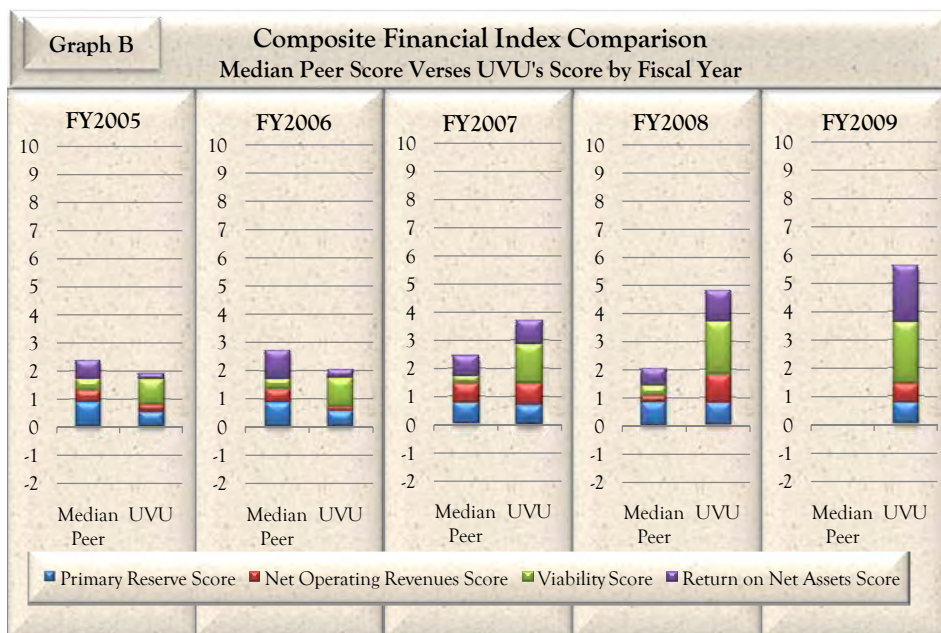
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1 = financial weakness

UVU's FY2009 Financial Target Line



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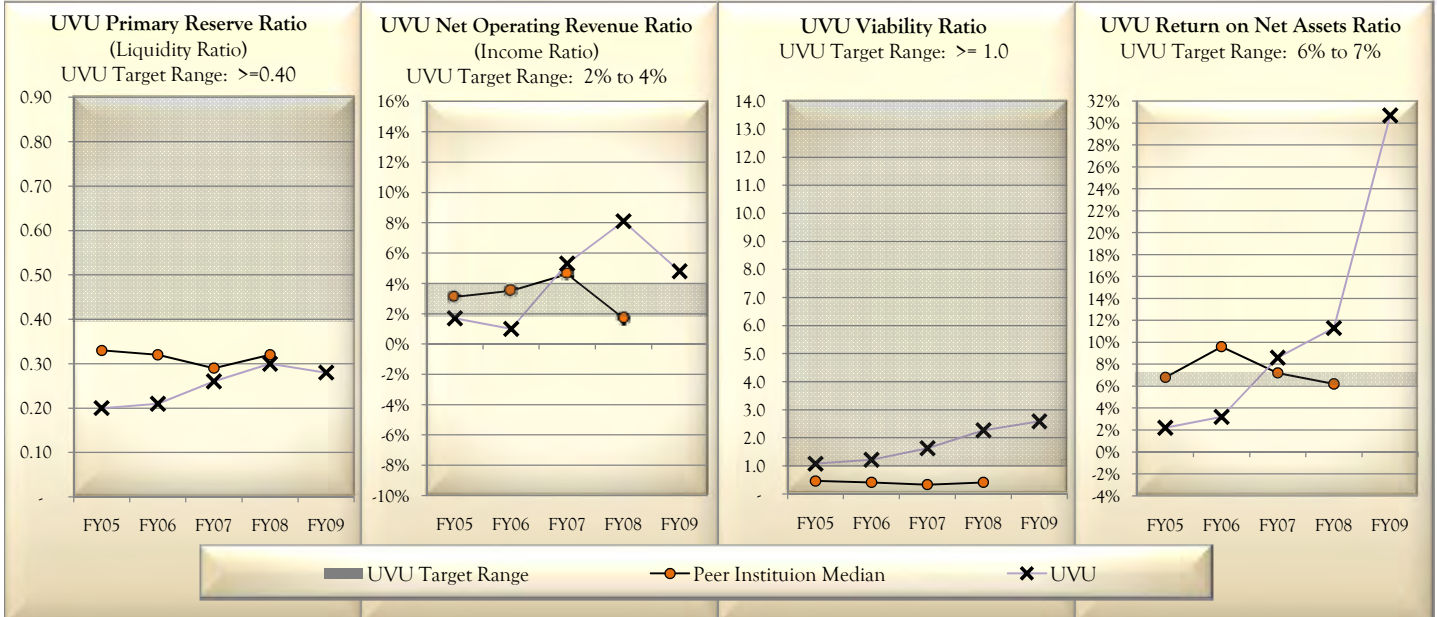


**UVU Peer Institutions  
Used in CFI Comparison**  
Boise State University  
University of Houston (Downtown)  
Fairmont State University  
Mesa State University  
Metropolitan State College of Denver  
Weber State University



Graph C

# Core Ratios Used to Determine Composite Financial Index Score UVU's Ratios by Fiscal Year Compared to Selected Institutional Peers (displayed is the median calculations of peers)



**Primary Reserve Ratio or Liquidity Ratio** measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year).

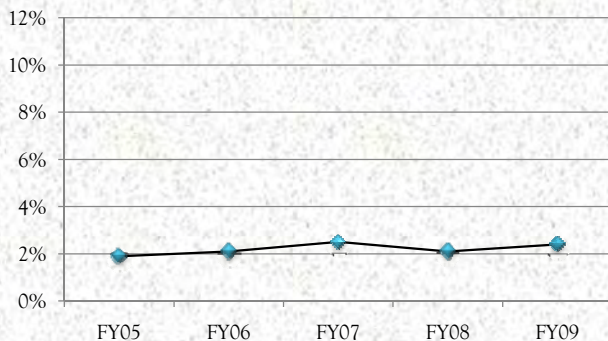
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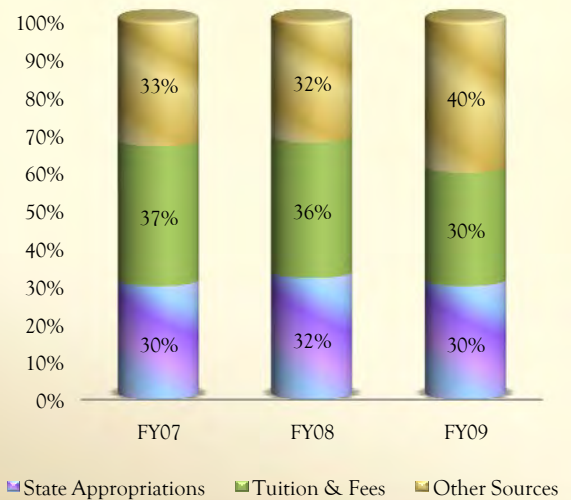
## Other Ratios

### Debt Burden Ratio



This ratio measures debt affordability - used to compare the level of current debt service with the institution's total expenses.

### Revenue Contribution by Source

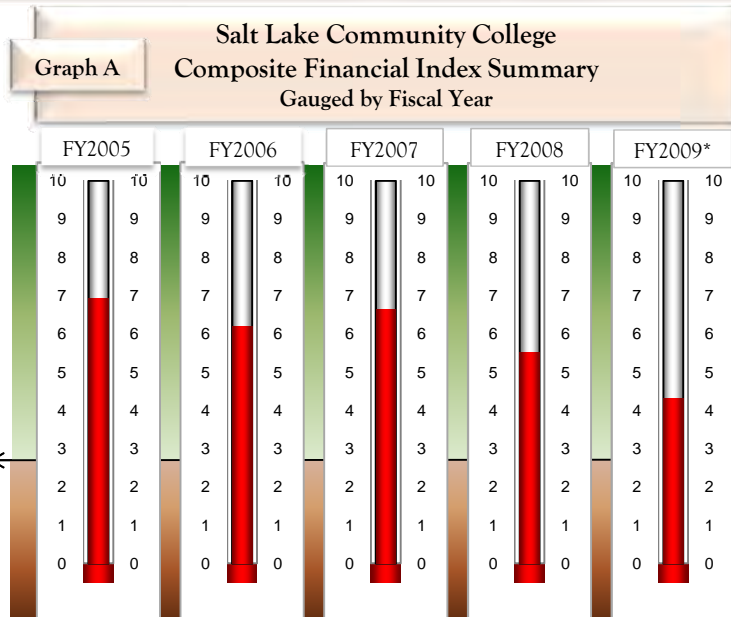


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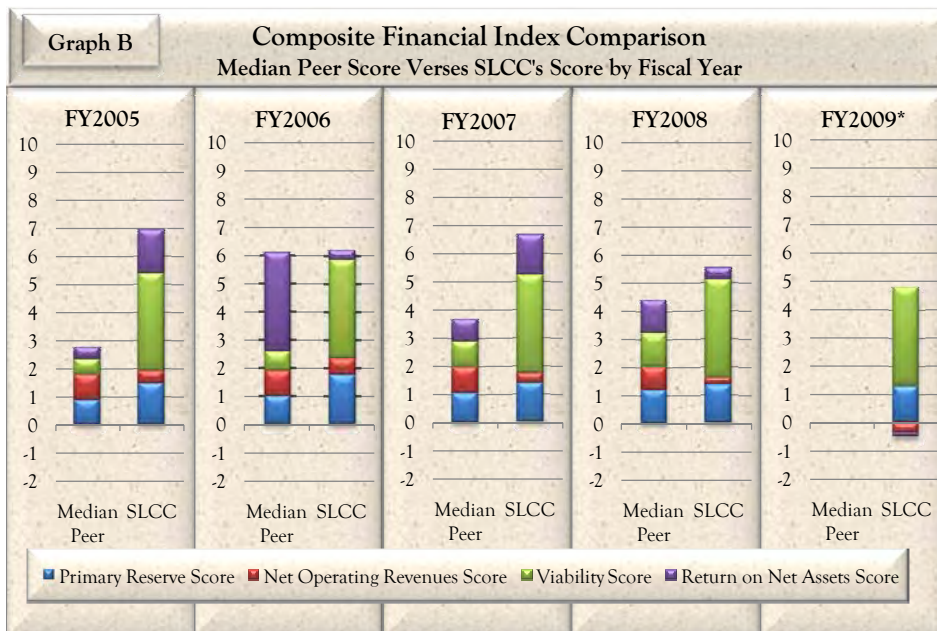
Overall General CFI Indication:  
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1 = financial weakness

SLCC's FY2009 Financial Target Line



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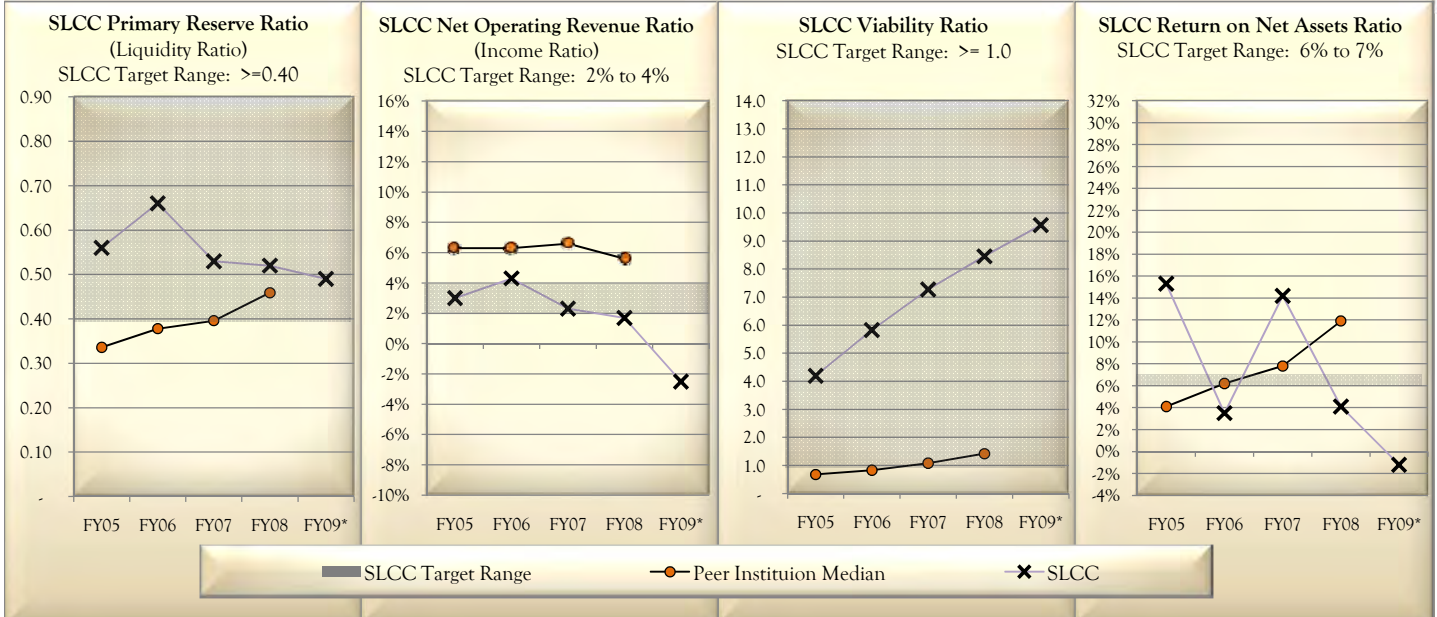


**SLCC Peer Institutions**  
**Used in CFI Comparison**  
Austin Community College  
Brodward Community College  
Pima Community College  
Portland Community College  
Johnson Community College  
Palomar Community College



Graph C

**Core Ratios Used to Determine Composite Financial Index Score**  
**SLCC's Ratios by Fiscal Year Compared to Selected Institutional Peers**  
 (displayed is the median calculations of peers)



**Primary Reserve Ratio or Liquidity Ratio** measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year).

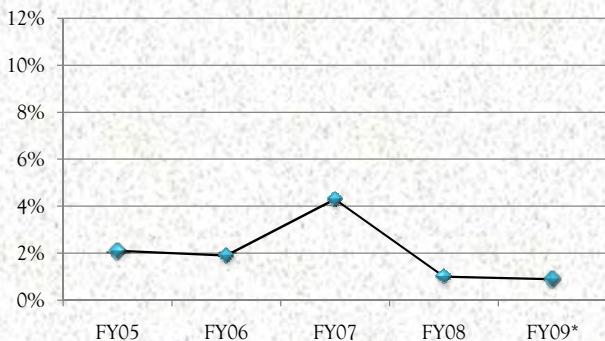
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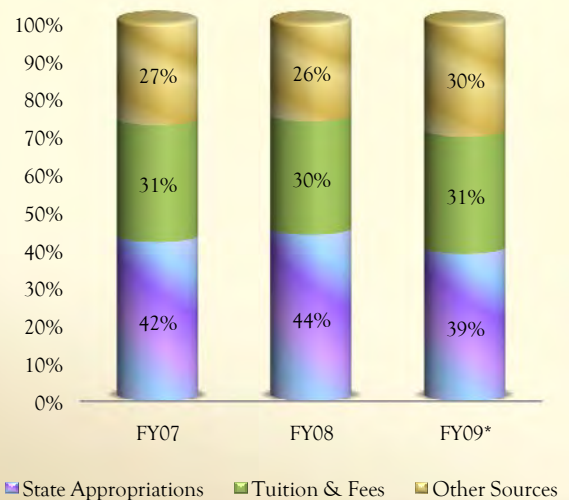
**Other Ratios**

**Debt Burden Ratio**



This ratio measures debt affordability - used to compare the level of current debt service with the institution's total expenses.

**Revenue Contribution by Source**



## Summary Explanation of the Core Ratios used in this Agenda Item

### **Primary Reserve (Liquidity)**

CALCULATED:

$$\frac{\text{Expendable Net Assets}}{\text{Total Expenses}}$$

*measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year)*

Are the institution's flexible enough to meet the institutional needs? Expendable Net Assets represent those assets that the institution can access relatively quickly and spend to satisfy its debt obligations. This is a snap shot to indicate how long a financial institution could conceivably last on its resources without using operating funds.

It should be noted that this isn't "reserve" money saved for spending...it is actual resources on hand at that moment (Fiscal year end, June 30th). "Snap shot" is a key indicator for this ratio.

---

### **Net Operating Revenues (Income)**

CALCULATED:

$$\frac{\text{Oper Loss - Total Non-Oper Revenue}}{\text{Oper Revenue - Non-Oper Revenue}}$$

*indicates the degree of surplus or deficit revenues for the year*

This ratio is a primary indicator, explaining how the surplus from operating activities affects the behavior of the other three core ratios. A large surplus or deficit directly impacts the amount of funds an institution adds or subtracts from net assets, thereby affecting the Primary Reserve Ratio, the Return on Net Assets Ratio and the Viability Ratio."

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### **Viability**

CALCULATED:

$$\frac{\text{Expendable Net Assets}}{\text{Long-Term Debt}}$$

*identifies whether an entity has sufficient expendable net assets to satisfy debt obligations at the balance sheet date*

Although a ratio of 1:1 or greater indicates that as of the balance sheet date the institution has sufficient expendable net assets to satisfy debt obligations, this value should not serve as an objective. The "right" value is institution specific and each institution should develop a target for this ratio.

---

### **Return on Net Assets**

CALCULATED:

$$\frac{\text{Change in Net Assets}}{\text{Beginning Net Assets}}$$

*indicates the real rate of return - used to determine how many dollars of earnings are derived from each dollar of assets controlled*

This ratio determines if the institution is financially better off than in previous years by measuring total economic return. An improving trend in this ratio indicates that the institution is increasing its net assets and is likely to be able to set aside financial resources to strengthen future financial flexibility. A temporary decline in this ratio may be appropriate, and even warranted, if it reflects a strategy to better fulfill the institutions mission. This ratio should be evaluated over a period of time to reduce the volatility and get an overall broader picture.

It should be noted that long-term returns are quite volatile and vary significantly based on the prevailing level of inflation in the economy.

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Please refer to the page following this one that was provided by WSU. It is an excellent example of how the ratios are calculated using the financial statements.

All ratios are taken at a point in time-specifically the end of the fiscal year to coincide with the financial statements. The ratios calculated by the institutions are as of the end of the 2009 fiscal year and do not reflect the current (2010) financial situation.

**Weber State University**  
**Sources of Data - Published Annual Financial Report**  
**For Fiscal Years Ended 2004-2008**

Components of Ratios	2004	2005	2006	2007	2008
<b>Primary Reserve (Liquidity) - Expendable Net Assets / Total Expenses</b>					
Measures the amount of time during which an institution could pay its expenses without relying on additional net assets from operations (expressed as a fraction of a year)					
Expendable: (SONA)					
Scholarships	18,270,150	20,890,102	26,033,066	28,980,723	29,208,958
Loans	8,264,535	8,511,272	8,260,723	8,375,179	8,488,144
Capital Projects	9,701,278	13,050,245	38,806,322	30,907,061	22,866,967
Sponsored Projects	1,436,391	1,409,944	1,562,692	1,601,569	1,562,011
Unrestricted	24,691,927	28,721,845	33,752,870	33,987,937	37,411,834
Expendable Net Assets	62,364,281	72,583,408	108,415,673	103,852,469	99,537,914
Operating Expenses (SRECNA)	140,736,682	142,305,138	146,991,410	158,062,231	166,139,987
Interest Expense	894,727	888,854	1,522,194	1,568,818	1,659,520
Other nonoperating expenses					-
Total Expenses	141,631,409	143,193,992	148,513,604	159,631,049	167,799,507
Primary Reserve Ratio	0.44	0.51	0.73	0.65	0.59
Expendable financial resources to operations (months of coverage)	5.28	6.08	8.76	7.81	7.12
<b>Net Operating Revenues (Income) - (Operating Loss + Total Non-operating revenue) / (Operating Revenue + Non-operating revenue)</b>					
Indicates the degree of surplus or deficit revenues for the year					
Operating Loss (SRECNA)	(63,107,770)	(60,749,580)	(65,024,810)	(88,886,444)	(94,625,266)
Total nonoperating revenue (SRECNA)	64,387,274	66,912,846	73,900,051	98,619,084	95,924,836
Operating Loss + Total Non-Oper Revenue	1,279,504	6,163,266	8,875,241	9,732,640	1,299,570
Total nonoperating revenue (SRECNA)	64,387,274	66,912,846	73,900,051	98,619,084	95,924,836
add back Interest Expense	894,727	888,854	1,522,194	1,568,818	1,659,520
add back Other Expense	-	-	-	-	-
Total Operating Revenue	77,628,912	81,555,558	81,966,600	69,175,787	71,514,721
Operating Revenue + Non-Oper Revenue	142,910,913	149,357,258	157,388,845	169,363,689	169,099,077
Net Operating Revenues Ratio	0.90%	4.13%	5.64%	5.75%	0.77%
<b>Viability - Expendable Net Assets / LT Debt (current &amp; non-current)</b>					
Identifies whether an entity has sufficient expendable net assets to satisfy debt obligations at the balance sheet date					
Expendable Net Assets	62,364,281	72,583,408	108,415,673	103,852,469	99,537,914
Long Term Debt - Current (SONA)	1,016,854	1,030,089	1,101,018	1,217,517	1,411,576
Long Term Debt - NonCurrent (SONA)	16,049,750	15,185,575	37,472,410	36,437,789	35,026,213
	17,066,604	16,215,664	38,573,428	37,655,306	36,437,789
Viability Ratio	3.65	4.48	2.81	2.76	2.73
<b>Return on Net Assets - Change in Net Assets / Beginning Net Assets</b>					
Indicates the real rate of return - used to determine how many dollars of earnings are derived from each dollar of assets controlled					
Change in Net Assets	25,872,284	15,869,682	20,789,137	21,444,728	13,195,146
Beginning Net Assets (SRECNA)	190,012,626	215,884,910	231,754,592	252,543,729	273,988,457
Ending Net Assets (SRECNA)	215,884,910	231,754,592	252,543,729	273,988,457	287,183,603
Change in Net Assets	25,872,284	15,869,682	20,789,137	21,444,728	13,195,146
Return on Net Assets Ratio	13.6%	7.4%	9.0%	8.5%	4.8%

January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: USHE – Annual Contracts and Grants Report

Issue

The State Board of Regents is the state educational agency authorized by statute (UCA 63-40-1) to apply for, negotiate, and contract with federal, state and local government agencies, as well as private organizations and individuals in the name of and in behalf of the State of Utah. The Board is also authorized to process, on behalf of the Governor's Office of Planning and Budget, applications for new "federal assistance programs," i.e., training grants (UCA 63J-4-301).

This statutory and gubernatorial authorization further requires the Board to be prepared to report on participation in federally funded programs as required by the Governor's Office of Planning and Budget, the Executive Appropriations Committee, and the Legislative Fiscal Analyst. (UCA 63-40-5)

To comply with these requirements the Board adopted policy R532, *Acceptance and Approval of Contracts and Grants*. R532-1 requires USHE institutions to submit reports showing the number and dollar amount of all awards received during the fiscal year ending. A summary of those reports is attached for the Board.

It is noteworthy that despite the decline in the economy, the dollar volume of awards in the system increased 8.4 percent over the prior fiscal year.

Commissioner's Recommendation

This is an information item only; no action is needed

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William A. Sederburg  
Commissioner of Higher Education

WAS/GLS/WRH  
Attachment



**Utah System of Higher Education  
Contracts and Grants Report \***

Institution	Fiscal Year 2008		Fiscal Year 2009		% Change	
	No.	Total \$ Amount	No.	Total \$ Amount	No.	Amount
<b>University of Utah</b>						
Research	1,450	221,007,416	1,527	252,143,180	5.3%	14.1%
Instruction	159	23,776,663	161	34,625,526	1.3%	45.6%
Clinical	183	18,602,363	162	21,288,871	-11.5%	14.4%
Other	301	34,658,555	316	46,601,601	5.0%	34.5%
<b>TOTAL - UU</b>	<b>2,093</b>	<b>298,044,997</b>	<b>2,166</b>	<b>354,659,178</b>	<b>3.5%</b>	<b>19.0%</b>
<b>Utah State University</b>						
Research	813	104,477,889	763	95,264,190	-6.2%	-8.8%
Instruction	63	4,949,886	51	4,927,696	-19.0%	-0.4%
Clinical			0			
Other	303	26,932,168	327	21,978,658	7.9%	-18.4%
<b>TOTAL - USU</b>	<b>1,179</b>	<b>136,359,943</b>	<b>1,141</b>	<b>122,170,544</b>	<b>-3.2%</b>	<b>-10.4%</b>
<b>Weber State University</b>						
Research	4	159,620	5	142,771	25.0%	-10.6%
Instruction	11	3,053,547	9	992,652	-18.2%	-67.5%
Clinical						
Other	30	1,319,340	34	3,620,737	13.3%	174.4%
<b>TOTAL - WSU</b>	<b>45</b>	<b>4,532,507</b>	<b>48</b>	<b>4,756,160</b>	<b>6.7%</b>	<b>4.9%</b>
<b>Southern Utah University</b>						
Research	3	41,100	5	34,543	66.7%	-16.0%
Instruction	4	225,359	10	400,312	150.0%	77.6%
Clinical						
Other	48	5,577,449	44	5,763,739	-8.3%	3.3%
<b>TOTAL - SUU</b>	<b>55</b>	<b>5,843,908</b>	<b>59</b>	<b>6,198,594</b>	<b>7.3%</b>	<b>6.1%</b>
<b>Dixie State College</b>						
Research	2	110,000	3	87,195	50.0%	-20.7%
Instruction						
Clinical			28	1,412,855		100.0%
Other	13	292,479			-100.0%	-100.0%
<b>TOTAL - DSC</b>	<b>15</b>	<b>402,479</b>	<b>31</b>	<b>1,500,050</b>	<b>106.7%</b>	<b>272.7%</b>
<b>Utah Valley University</b>						
Research	3	131,932	1	30,000	-66.7%	-77.3%
Instruction	15	4,583,341	11	5,959,391	-26.7%	30.0%
Clinical	7	717,469	2	362,985	-71.4%	-49.4%
Other	77	7,468,106	134	5,019,831	74.0%	-32.8%
<b>TOTAL - UVU</b>	<b>102</b>	<b>12,900,848</b>	<b>148</b>	<b>11,372,207</b>	<b>45.1%</b>	<b>-11.8%</b>

**Utah System of Higher Education  
Contracts and Grants Report \***

Institution	Fiscal Year 2008		Fiscal Year 2009		% Change	
	No.	Total \$ Amount	No.	Total \$ Amount	No.	Amount
<b>Snow College</b>						
Research	1	6,000			-100.0%	-100.0%
Instruction	1	25,000			-100.0%	-100.0%
Clinical						
Other			1	40,000		100.0%
<b>TOTAL - Snow</b>	<b>2</b>	<b>31,000</b>	<b>1</b>	<b>40,000</b>	<b>-50.0%</b>	<b>29.0%</b>
<b>College of Eastern Utah</b>						
Research						
Instruction	2	282,113			-100.0%	-100.0%
Clinical						
Other	26	4,770,805	26	4,634,392	0.0%	-2.9%
<b>TOTAL - CEU</b>	<b>28</b>	<b>5,052,918</b>	<b>26</b>	<b>4,634,392</b>	<b>-7.1%</b>	<b>-8.3%</b>
<b>Salt Lake Community College</b>						
Research						
Instruction	8	3,995,917			-100.0%	-100.0%
Clinical						
Other	13	2,079,365	18	3,539,061	38.5%	70.2%
<b>TOTAL - SLCC</b>	<b>21</b>	<b>6,075,282</b>	<b>18</b>	<b>3,539,061</b>	<b>-14.3%</b>	<b>-41.7%</b>
<b>Total USHE</b>						
Research	2,276	325,933,957	2,304	347,701,879	1.2%	6.7%
Instruction	263	40,891,826	242	46,905,577	-8.0%	14.7%
Clinical	190	19,319,832	192	23,064,711	1.1%	19.4%
Other	811	83,098,267	900	91,198,019	11.0%	9.7%
<b>TOTAL - USHE</b>	<b>3,540</b>	<b>469,243,882</b>	<b>3,638</b>	<b>508,870,186</b>	<b>2.8%</b>	<b>8.4%</b>

\* Does not include American Recovery & Reinvestment Act (ARRA) Non State Fiscal Stabilization Funds (SFSF) awards.

January 7, 2010

MEMORANDUM

TO: State Board of Regents  
FROM: William A. Sederburg  
SUBJECT: USHE – Report of Auxiliary Funds

Background

The Board of Regents requests an annual update of auxiliary operations within the Utah System of Higher Education (USHE).

Issue

Auxiliary enterprises are business activities or other support activities (as distinguished from primary programs of instruction, research, public service, and from intercollegiate athletics). According to SBR Policy R550, the primary purpose is to provide specified services to students, faculty, staff, or guests of the institution. All institutional housing, food service, and college store activities are to be classified and managed as auxiliary enterprises.

Annually, USHE institutions provide reports of auxiliary enterprise activity. This information has been consolidated by OCHE staff for the purpose of Regent review (see attachment). Auxiliary operations are examined by independent auditors during the annual financial statement audits.

In reviewing the auxiliary enterprises reports submitted by the institutions, no material financial concerns were evident with the exception of a deficit fund balance at CEU (see Report of Auxiliary Enterprise Operations 2008-2009 Actuals). Should there be questions regarding the auxiliary enterprise reports, representatives of the institutions should be available to supply explanations.

Commissioner's Recommendation

Information Only.

WAS/GLS/PM  
Attachment

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William A. Sederburg  
Commissioner of Higher Education

# UTAH SYSTEM OF HIGHER EDUCATION

## Report of Auxiliary Enterprise Operations (2008-09 Actuals)

	<u>UU</u>	<u>USU</u>	<u>WSU</u>	<u>SUU</u>	<u>SNOW</u>	<u>DSC</u>	<u>CEU</u>	<u>UVU</u>	<u>SLCC</u>
Beg Fund Balance**	\$ 314,000	\$ 626,490	\$ 3,206,029	\$ 2,278,295	\$ 732,278	\$ 1,249,637	\$ (92,995) *	\$ 3,434,396	\$ 2,414,659
Revenues	76,113,000	33,899,897	17,599,707	7,854,133	2,246,784	5,741,432	1,872,966	16,367,903	13,820,443
Expenditures	<u>(74,646,000)</u>	<u>(30,902,930)</u>	<u>(15,573,196)</u>	<u>(5,767,134)</u>	<u>(2,069,283)</u>	<u>(5,474,123)</u>	<u>(1,705,547)</u>	<u>(15,812,557)</u>	<u>(13,535,056)</u>
Net Income	1,467,000	2,996,967	2,026,511	2,086,999	177,501	267,309	167,419	555,346	285,387
Transfers	<u>(1,482,000)</u>	<u>(3,034,273)</u>	<u>(1,569,688)</u>	<u>(1,967,891)</u>	<u>-</u>	<u>(96,302)</u>	<u>(403,467)</u>	<u>(555,346)</u>	<u>(214,999)</u>
Change in F/B	<u>(15,000)</u>	<u>(37,306)</u>	<u>456,823</u>	<u>119,108</u>	<u>177,501</u>	<u>171,007</u>	<u>(236,048)</u>	<u>-</u>	<u>70,388</u>
End Fund Balance	<u><u>\$ 299,000</u></u>	<u><u>\$ 589,184</u></u>	<u><u>\$ 3,662,852</u></u>	<u><u>\$ 2,397,403</u></u>	<u><u>\$ 909,779</u></u>	<u><u>\$ 1,420,644</u></u>	<u><u>\$ (329,043)</u></u>	<u><u>\$ 3,434,396</u></u>	<u><u>\$ 2,485,047</u></u>
End Fund Bal to Rev	0.39%	1.74%	20.81%	30.52%	40.49%	24.74%	-17.57%	20.98%	17.98%
End Fund Bal to Exp	0.40%	1.91%	23.52%	41.57%	43.97%	25.95%	-19.29%	21.72%	18.36%
End Fund Bal to Net Inc	20.38%	19.66%	180.75%	114.87%	512.55%	531.46%	-196.54%	618.42%	870.76%

\* CEU's beginning auxiliary fund balance has been reduced by \$160,230. Because CEU's annual audit is completed after this report is presented to Regents, this update is necessary to accurately report CEU's beginning auxiliary fund balance.

\*\* It should be noted that the Fund Balance includes cash, inventories, etc. related to running/maintaining Auxiliary Enterprise Operations.

# UTAH SYSTEM OF HIGHER EDUCATION

## Report of Auxiliary Enterprise Operations (2009-10 Budgets)

	<u>UU</u>	<u>USU</u>	<u>WSU</u>	<u>SUU</u>	<u>SNOW</u>	<u>DSC</u>	<u>CEU</u>	<u>UVU</u>	<u>SLCC</u>
Beg Fund Balance*	\$ 299,000	\$ 589,184	\$ 3,662,852	\$ 2,397,403	\$ 909,779	\$ 1,420,644	\$ (329,043)	\$ 3,434,396	\$ 2,485,047
Revenues	77,287,000	34,753,000	17,741,000	8,477,226	1,445,000	5,801,800	2,073,500	16,221,193	13,380,600
Expenditures	<u>(75,968,000)</u>	<u>(30,310,000)</u>	<u>(16,356,000)</u>	<u>(6,235,198)</u>	<u>(1,375,000)</u>	<u>(4,987,700)</u>	<u>(1,695,000)</u>	<u>(15,691,245)</u>	<u>(13,165,600)</u>
Net Income	1,319,000	4,443,000	1,385,000	2,242,028	70,000	814,100	378,500	529,948	215,000
Transfers	<u>(1,366,000)</u>	<u>(4,443,000)</u>	<u>(1,080,000)</u>	<u>(2,213,079)</u>	<u>-</u>	<u>(8,700)</u>	<u>-</u>	<u>(529,948)</u>	<u>(215,000)</u>
Change in F/B	<u>(47,000)</u>	<u>-</u>	<u>305,000</u>	<u>28,949</u>	<u>70,000</u>	<u>805,400</u>	<u>378,500</u>	<u>-</u>	<u>-</u>
End Fund Balance	<u><u>\$ 252,000</u></u>	<u><u>\$ 589,184</u></u>	<u><u>\$ 3,967,852</u></u>	<u><u>\$ 2,426,352</u></u>	<u><u>\$ 979,779</u></u>	<u><u>\$ 2,226,044</u></u>	<u><u>\$ 49,457</u></u>	<u><u>\$ 3,434,396</u></u>	<u><u>\$ 2,485,047</u></u>
End Fund Bal to Rev	0.33%	1.70%	22.37%	28.62%	67.80%	38.37%	2.39%	21.17%	18.57%
End Fund Bal to Exp	0.33%	1.94%	24.26%	38.91%	71.26%	44.63%	2.92%	21.89%	18.88%
End Fund Bal to Net Inc	19.11%	13.26%	286.49%	108.22%	1399.68%	273.44%	0.00%	648.06%	1155.84%

\* It should be noted that the Fund Balance includes cash, inventories, etc. related to running/maintaining Auxiliary Enterprise Operations.

January 7, 2010

## MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: USHE – Annual Report of Institutional & System Bonded Indebtedness

### Background

Utah Code 53B-21 provides the Regents with the authority to issue negotiable revenue bonds for the purpose of "acquisition, purchase, construction, improvement, remodeling, adding to, extending, furnishing or equipping of more than one building" (Section 101). Revenue bonds are secured by institutional income and revenues, including (but not limited to) student fees, land grant interest, and revenues from proprietary activities. Regents are also authorized to issue refunding bonds. While the initial revenue bonds require legislative authorization prior to issuance, refunding of existing bonds may be approved at the discretion of the Board of Regents.

College and university bonds are not counted as an official "debt of the state" (53B-21-102), but many bond covenants carry a "moral obligation" pledge stating that the Board of Regents will, in the case of potential default, formally request financial assistance from the Governor and Legislature.

### Issue

In compliance with Regents' policy R590, *Issuance of Revenue Bonds for Facilities Construction or Equipment*, attached is the required annual report for fiscal year 2009 that summarizes institutional and system bonded indebtedness associated with revenue bonds. Prior to their issuance, the outstanding bonds covered in this report have all been through the process of Legislative authorization and Regents' approval as specified in State statutes and Regents' policy.

All bonds covered in the report are being retired on schedule with the debt service coverage requirements being met or exceeded in every case.

Commissioner's Recommendation

This is an information item only; no action is needed

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William A. Sederburg  
Commissioner of Higher Education

WAS/GLS/WRH  
Attachments

# Utah System of Higher Education

## Outstanding College & University Revenue Bonds

### Fiscal Year 2009

College or University (Contact Person)	Original Amount	Series	Purpose	Required Debt Service Coverage	2009 Debt Service Coverage	Maturity Date	Outstanding Balance as of June 30, 2009
U of U	\$ 11,140,000	1987A	Aux & Campus Fac Sys Ref Rev	1.0	1.49	2014	\$ 815,000
	52,590,000	1997A	Aux & Campus Fac Sys Rev (variable)	1.0	1.49	2027	8,810,000
	120,240,000	1998A	Aux & Campus Fac Sys Ref Rev	1.0	1.49	2016	53,664,302
	5,975,000	1999A	Aux & Campus Fac Sys Rev	1.0	1.49	2014	2,539,968
	2,755,000	2001	Aux & Campus Fac Sys Rev	1.0	1.49	2021	1,973,475
	9,685,000	2004A	Research Facilities Rev	N/A	0.93	2019	7,013,623
	5,515,000	2005A	Research Facilities Rev (Moran Eye Center)	N/A	0.93	2025	4,846,011
	20,130,000	2005B	Research Facilities Rev Ref	N/A	0.93	2020	15,266,710
	30,480,000	2005A	Hospital Rev Ref	1.25	2.64	2018	32,254,759
	42,955,000	2005A	Aux & Campus Fac Sys Ref Rev	1.0	1.49	2021	40,258,043
	77,145,000	2006A	Hospital Rev Ref	1.25	2.64	2032	82,016,717
	20,640,000	2008	Hospital Revenue Bonds (variable)	1.25	2.64	2031	20,640,000
	9,360,000	2008	Research Facilities Rev Ref	N/A	0.93	2022	9,054,032
	<u>\$ 408,610,000</u>						<u>\$ 279,152,640</u>
USU	\$ 15,010,000	1999A	Student Fee & Housing Sys Ref Rev	1.1	1.14	2014	\$ 9,575,000
	23,735,000	2002A	Research and Ref Rev	2.5	8.14	2017	17,580,000
	705,000	2003A	Research Revenue Bonds	2.5	8.14	2015	420,000
	11,065,000	2004A	Student Building Fee Ref Rev	1.1	1.19	2026	9,585,000
	39,155,000	2007	Student Fee & Housing Sys Rev Ref	1.1	1.19	2035	39,155,000
	22,000,000	2009	Research Revenue Bonds	2.5	8.14	2031	22,000,000
	<u>\$ 111,670,000</u>						<u>\$ 98,315,000</u>
WSU	\$ 5,050,000	1998A	Student Facilities Sys Ref Ref	1.25	1.82	2010	\$ 920,000
	12,280,000	2001A	Student Facilities Sys Rev	1.25	1.82	2012	860,000
	22,810,000	2005	Student Facilities Sys Rev	1.25	1.82	2032	22,675,000
	10,155,000	2007	Student Facilities Sys Rev Ref	1.25	1.82	2031	10,095,000
	<u>\$ 50,295,000</u>						<u>\$ 34,550,000</u>



College or University (Contact Person)	Original Amount	Series	Purpose	Required Debt Service Coverage*	2009 Debt Service Coverage	Maturity Date	Outstanding Balance as of June 30, 2009
SUU	\$ 4,540,000	2002A	Student Building Fee/Refunding Rev	1.15	1.72	2014	\$ 2,830,000
	10,060,000	2003	Student Building Fee/Refunding Rev	1.15	1.72	2023	8,605,000
	975,000	2005	Pav/Sta Fac Exp Student Bldg Fee Rev Ref	1.15	1.69	2014	558,648
	12,025,000	2008	Auxiliary System & Student Bldg. Fee Rev	1.15	1.72	2033	12,025,000
	<u>\$ 27,600,000</u>						<u>\$ 24,018,648</u>
Snow	none						<u>\$ 0</u>
DSC	\$ 5,195,000	2006	Dixie Center Lease Rev Ref	N/A	N/A	2023	<u>\$ 4,730,000</u>
CEU	none						<u>\$ 0</u>
UVU	\$ 11,020,000	2004A	Student Ctr Build Fee/Unified Sys Rev Ref	1.1	1.33	2020	\$ 7,020,000
	4,035,000	2004B	Student Ctr Build Fee/Unified Sys Rev Ref	1.1	1.33	2011	925,000
	3,900,000	2004A	MBA Utah County/Lease Rev	1.1	1.33	2019	3,140,000
	2,600,000	2004B	MBA Utah County/Lease Rev Taxable	1.1	1.33	2014	1,530,000
	<u>\$ 21,555,000</u>						<u>\$ 12,615,000</u>
SLCC	\$ 6,600,000	1998	Aux Sys & Student Fee Rev Ref	1.25	2.05	2012	\$ 2,765,000
	5,890,000	2001	Aux Sys & Student Fee Rev Ref	1.25	2.05	2016	5,490,000
	<u>\$ 12,490,000</u>						<u>\$ 8,255,000</u>
USHE Totals	<u>\$ 632,222,006</u>						<u>\$ 461,636,288</u>

January 7, 2010

MEMORANDUM

TO: State Board of Regents  
FROM: William A. Sederburg  
SUBJECT: Update on Institutional Audit Reports to the Regents' Audit Committee

Issue

Regent Policy R-565 requires the Regents to meet as needed to review audits and financial information. As part of this responsibility, the Regent Audit Committee is charged with scheduling meetings as necessary to maintain regular, independent communication and information flow between the Regent Audit Committee and trustee audit committees.

The Committee will meet January 14<sup>th</sup>, 2010 with institutional trustee audit chairs, trustee chairs, and in some cases campus auditors.

Commissioner's Recommendation

No recommendation is required at this time. This agenda item is for a discussion purpose only.

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William A. Sederburg  
Commissioner of Higher Education

WAS/GLS/DAM

January 7, 2010

MEMORANDUM

TO: State Board of Regents  
FROM: William A. Sederburg  
SUBJECT: Efficiencies in Higher Education Through the use of Information Technology

Issue

The economic downturn has caused business and industry to cut cost and find more efficient ways to do business. Increased enrollments combined with declining state revenues have made it necessary for higher education to do the same thing. The greater use of technology is a way we can reduce cost and bring about greater efficiency.

Steve Hess, CIO for the Utah State System of Higher Education, will present ways colleges and universities in the Utah System of Higher Education have used information technology to save money and make the services and business processes of higher education more efficient and accessible. Some of these efficiencies have resulted both in the reduction of cost for information technology services but also in business, academic and research processes. The use of IT has also resulted in more efficient delivery and greater accessibility of services to students and faculty. Cost savings in IT services have been accomplished through standardization, consolidation and outsourcing of services. Software and hardware are purchased on a state wide basis for significant savings. Consolidation of commodity services such as email, data centers, networks, disaster recovery, research clusters, storage, servers, courseware management and ERP systems has resulted in significant savings and efficiencies. The availability of cloud computing and externally hosted services has opened up new avenues for outsourcing IT services. Standardization of IT architecture, desktop and laptop computers, desktop images, data management, security, web content management and policies has also saved money.

Cost savings have also been realized in application of IT in automating college and university business processes. These processes include student services, human resource management, facilities management, research administration, faculty services, teaching and learning, and financial services such as accounting, purchasing, travel, and equipment inventory. Once a process has been automated and documents digitized, data collected is gathered in data bases for use in reports for administrative decisions and accreditation.

The report will provide specific examples of savings and recommendations for additional ways technology can bring additional savings and efficiencies to the Utah State System of Higher Education.

Commissioner's Recommendation

This is an information item only; no action is needed

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William S. Sederburg  
Commissioner of Higher Education

WAS/GLS/SH  
Attachments

### **IT Efficiency Recommendations**

Listed below are some recommended best practices to improve IT efficiencies. These are taken from IT consulting groups and the University and College CIO's from the Utah System of Higher Education.

1. Centralize commodity IT services.
2. Automate processes put them on line and reduce paper and personnel costs.
3. Standardize desktop image for business units and some academic departments.
4. Shared printer pools (5 to 15 per printer) and reduction in the number of printers.
5. Centralized network care to the faceplate and shared network storage.
6. Shared disaster recovery.
7. Single course management system.
8. Maintain TCO (total costs of ownership) reports on IT services, compared with outsourcing and use the lowest cost service all other issues being equal.
9. Virtualized server farm to a central campus or state cloud (virtual 7/24 automated data center).
10. Focus on leveraging existing tools instead of investing in future technologies particularly those that are untested. Be a rapid follower not a bleeding edge.
11. Deploy standardized distance education tools.
12. Improve business intelligence reporting to the administration and deans have the data they need to make timely strategic decisions.
13. Stay with current enterprise application for all of campuses.
14. Single Email system
15. Central campus calendars and collaboration
16. Central storage area network
17. Tiered chargeback pricing
18. Usage-based Storage Policies

January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: University of Utah Hospital Revenue Bonds – Series 209A&B

Background

Attached is a Financing Summary of the results of the recent Hospital Bond sale by the University of Utah for expansion of the University Neuropsychiatric Institute. This bond sale was authorized by the Board on October 16, 2009. The sale date was December 1, 2009 with closing on December 17, 2009.

The Financing Summary provides the Regents with the relevant information, with the final results updated in red. It is noteworthy that all of the details of the bond sale fall within the parameters approved by the Board.

Commissioner's Recommendation

This is an information item. No action is required.

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William A. Sederburg  
Commissioner of Higher Education

WAS/GLS/WRH  
Attachment



**\$52,000,000\***

**\$50,920,000 (actual par amount)**

State Board of Regents of the State of Utah

**University of Utah**

**Hospital Revenue Bonds**

**Series 2009A&B**

**(University Neuropsychiatric Institute Expansion Project)**

**FINANCING SUMMARY (Final Results updated in Red)**

Purpose:	Proceeds from the sale of the Series 2009 Bonds will be used to (i) finance the costs of the acquisition, construction, equipping and furnishing of an expansion to the University of Utah Neuropsychiatric Institute ("UNI"), (ii) fund a deposit to a debt service reserve fund, and (iii) pay costs of issuance of the Series 2009 Bonds.
Par Amount:	Not-to-exceed \$45,000,000 plus costs of issuance, including the funding (from bond proceeds) of a debt service reserve fund and capitalized interest. (\$45 million was the actual amount deposited to the construction fund)
Security:	The Series 2009 Bonds are payable from and secured by a pledge and assignment of the net revenues of the University of Utah's Hospitals and Clinics.
Ratings:	'AA/Aa2' (expected) by virtue of the State of Utah's moral obligation pledge for such bonds. (These ratings were confirmed)
Method of Sale:	Public offering through negotiation with Underwriter(s) to be determined. (The University selected the firms of Barclays Capital and RBC Capital Markets as underwriters on the transaction)
Total Discount:	Not-to-exceed 2.00% (including Underwriter's Discount) (Underwriter's discount came in at \$5.81 per \$1000, or 0.581%)

Sale Date: December 1, 2009 (tentative) (This was the sale date)

Closing Date: December 17, 2009 (tentative) (This was the closing date)

Interest Payment Dates: August 1<sup>st</sup> and February 1<sup>st</sup>, commencing August 1, 2010

Interest Basis: 30/360

Interest Rates: Not-to-exceed 7.00% (to accommodate the potential inclusion of so-called “Build America Bonds” (Federally Taxable Bonds with 35% interest subsidy flowing back from the Federal Government to the University of Utah Hospitals and Clinics). (The 2030 Term Bond’s coupon was 6.241%)

Principal Payment Dates: August 1, 2010 through August 1, 2029 (University opted to have final maturity on August 1, 2030, 20.5 years—still within the parameter)

Maturity: Not-to-exceed 21 years (see note immediately above)

Redemption: Not-to-exceed 11 years at 101% (10 years at 100% is anticipated). A non-callable option (so-called “Make-Whole Call”) will also be available due to strong potential of “Build America Bonds” being included in this financing. (All of the Series 2009 Bonds were structured with a non-callable Make-Whole Call)

University of Utah Contacts: Gordon Crabtree (801) 587-3572  
Arnold B. Combe (801-581-6404)

Financial Advisor: Kelly Murdock, Wells Fargo Securities (801-246-1732)

Trustee, Paying Agent/Reg.: Wells Fargo Bank, National Association

Bond Counsel: Ballard Spahr Andrews & Ingersoll, LLP (Blake Wade)

Final Bond Structure: \$9,135,000 tax-exempt bonds representing maturities August 1, 2012 through 2016. \$42,475,000 taxable “Build America Bonds” representing maturities August 1, 2017 through 2030. “All-in True Interest Cost” of 3.857% was achieved.





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January 6, 2010

## MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: UHEAA Update: Student Loan Program

### Issue

The UHEAA Board of Directors met on December 17, 2009 under the direction of Chair David Jordan and reviewed current events concerning the changing national student loan landscape and other action and information reports as summarized below.

**1. Record Student Loan Volume.** Enrollment growth, increased borrowing limits, and other factors have resulted in record student loan volume for UHEAA. For the first five months of the fiscal year (July – November), UHEAA's loan volume compared to the same period last year has increased as follows:

Number of Loans:	89,000	28% increase over fiscal 2009
Dollar Volume:	\$394 million	24% increase over fiscal 2009

Higher student loan volumes for this fiscal year combined with increases in the previous fiscal year have resulted in UHEAA's loan volume increasing 57% over the last 18 months. Despite continuing turmoil and volatility in the financial markets, UHEAA has been able to meet this year's record demand for student loans with no delays for students. Student loan volume in fiscal 2010 is expected to exceed \$500 million.

**2. UHEAA's Commitment as Loan Originator: Funding for 2009-10.** To assure access to student loans, UHEAA is functioning as an originating lender. Due to market conditions, many traditional lending partners have ceased making student loans. Only credit unions remain as lender partners in the program. UHEAA began making loans directly for the first time in its history in fiscal 2009 and is now the largest volume student loan lender. For fiscal year 2010, the top student loan lenders are as follows:

<u>Lender</u>	<u>Market Share (% of Total Loans Made)</u>
UHEAA	48%
America First Credit Union	20%
Mountain America Credit Union	11%
Utah Community Credit Union	7%
University of Utah Credit Union	5%
Deseret First Credit Union	3%

UHEAA's commitment to make loans directly is essential to ensure loans are available to all eligible students. To assure adequate funding, UHEAA successfully negotiated a line of credit up to \$200 million with UBS Bank USA. The first draw on the line of credit was made on December 7, 2009. UHEAA's overall plan for meeting the student loan demand in fiscal 2010 is to use a combination of its own capital, funding from credit unions, the UBS line of credit, and participation in the U.S. Secretary of Education's liquidity programs.

**3. Approval to Sell UHEAA Loans to U.S. Secretary of Education.** UHEAA has successfully participated in the U.S. Secretary of Education's liquidity programs for student loans since March 2009. These complex federal programs provide UHEAA with an outlet for the fiscal 2009 and fiscal 2010 student loans which cannot be economically financed. If UHEAA kept these loans in its own portfolio, the estimated cost for doing so would be approximately \$30 million in forfeited fees and other costs. Given these financial realities, the UHEAA Board approved the sale of loans made for fiscal 2009 and fiscal 2010 to the U.S. Secretary of Education. Servicing and ownership of the loans must be transferred to the Secretary under the liquidity programs.

**4. Washington Update: Student Loan Reform.** In late September 2009, the U.S. House of Representatives passed the Student Aid and Fiscal Responsibility Act which proposes making 100% of student loans through the federal Direct Loan program with U.S. Treasury funds. The House bill, which passed on a nearly party-line vote, included a provision to authorize the servicing of student loans by non-profit agencies like UHEAA. Student loan reform legislation in the Senate has been delayed by health care legislation, which creates much uncertainty for student lending for the 2010-11 year. Consequently, UHEAA has advised the institutions and has offered assistance to help schools prepare for the possibility of direct loans. This will allow student loans to be made under either program depending on the legislative outcome in the Congress. UHEAA's executive director continues to be active in Washington to encourage legislation which keeps the servicing of student loans local.

**5. UHEAA Budget Forecast: Return to Profitability in Fiscal 2010.** Disruptions in the credit markets and the low student loan yield set by Congress resulted in UHEAA's first operating loss in history for the fiscal year ending June 30, 2009. The UHEAA staff kept operating losses at a minimum (\$7.4 million) by reducing expenses and carefully using the U.S. Secretary of Education's liquidity program. For fiscal year 2010, UHEAA expects a return to profitability and is working aggressively to restructure all of its \$2.2 billion existing debt as credit markets improve.

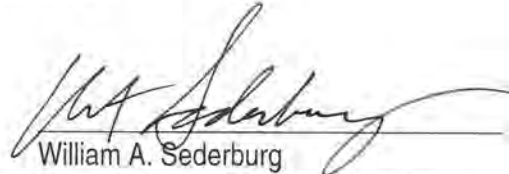
**6. Successes Despite Challenges.** UHEAA continues an impressive record of service and achievement despite many challenges and has the lowest student loan default rate in the nation at 2.1%, more than three times lower than the national average. In fiscal 2009 UHEAA provided nearly \$17 million in student borrower benefits which include fee waivers and interest rate reductions to encourage on-time payment. UHEAA also maintains a strong record of near-flawless audits, a remarkable achievement given the volume and complexity of the transactions UHEAA processes.

**7. Next Steps.** UHEAA is undertaking a major change in its business model and expects to have a strong role going forward. While the exact nature of that role remains to be determined by final legislation, UHEAA is moving ahead with optimism, strength and clarity of purpose. UHEAA is analyzing private loan programs, enhancements to need-based financial aid, and additional

services for institutions. UHEAA's track record of outstanding customer service and responsible fiscal management will be the foundation for future success. UHEAA's priorities remain 1) funding loans for 2009-10, 2) servicing the existing \$2.4 billion portfolio economically, 3) restructuring the associated underlying debt, and 4) adapting and evolving UHEAA into the new student loan world.

Commissioner's Recommendation

This report is for information only. No action is needed.



William A. Sederburg  
Commissioner of Higher Education

WAS/DAF

January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Preview of the 2010 Legislative Session

The 2010 Session of the Utah Legislature will convene on Monday, January 25, and will be completed by midnight on Thursday, March 11. The Utah Higher Education legislative agenda will be coordinated by Associate Commissioner David Buhler, with, of course, active personal involvement from Commissioner Sederburg, Associate Commissioner Greg Stauffer and his staff, and each of the nine Presidents and key staff members. Members of the Board of Regents and institutional boards of trustees will also be involved, as will students as coordinated by Joseph Watkins, Executive Director of the Utah Student Association.

Regents should note that the higher education day luncheon with members of the Legislature is scheduled for Friday, February 19, at noon at the State Capitol Rotunda. (Regents are encouraged to arrive by 11:30 a.m.) Your attendance and participation will be appreciated.

The Board of Regents has previously taken action approving higher education's legislative agenda and messages for the Legislative Session, including the budget and capital facilities requests (on August 28), and legislative priorities and messaging (October 16 and November 13). The major focus of the Legislative Session will be the budget for both the current fiscal year (2009-2010) and the fiscal year beginning on July 1 (FY 2010-2011). Significant legislation will include bills to implement the Utah State University-College of Eastern Utah affiliation, to enhance the sustainability of the New Century and Regents' Scholarships, and some housekeeping and governance amendments to UESP and UHEAA statutes.

Attached is a pre-legislative session report prepared by Associate Commissioner Buhler.

Recommendation

This is an information item only; no action is required. However, Regents are encouraged to review the attached report, ask questions and provide input to staff.

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William A. Sederburg  
Commissioner of Higher Education

WAS/DB  
Attachment

## ***Preview of 2010 Legislative Session***

Prepared By David Buhler  
Associate Commissioner for Public Affairs  
January 5, 2010

### **Introduction/Background**

The Utah Legislature will convene in its annual 45-day general session on Monday, January 25; the session will be concluded by midnight on Thursday, March 11. The Board of Regents formally adopted its budget and capital facility recommendations on August 28, and legislative agenda and messaging on October 16 and November 13. From these actions, the Commissioner's Office and the institutions have the Board's direction going into the Legislative Session.

This report is intended to provide a preview of the upcoming session, what we know now about the major issues affecting higher education, the environment in which the Utah System of Higher Education and allies will advocate their priorities. The major issue will be the budget to be appropriated for higher education as the state continues to struggle economically. Another budget issue will be the extent, if any, that new capital facilities are funded. The Commissioner's Office is actively working with legislative sponsors on three pieces of legislation, and throughout the session dozens more will be monitored and input provided as needed. A weekly summary will be provided to Regents and Presidents each Monday, beginning on February 1, with a full report at the Regents' meeting on April 1.

### **Budget**

On December 11, Governor Gary Herbert presented his budget recommendation to the Legislature. In it he recommended fully funding a supplemental of \$1.5 million in the current year (2009-10) to cover the shortfall in the New Century Scholarship program, and new funding of \$4 million (combined) for the Regents' and New Century Scholarships for fiscal year 2010-11. He also recommended replacing this year's one-time "backfill" with funding of \$61 million in USHE budgets for another year, or in other words, keeping state funding at the same level for 2010-11 as was appropriated for 2009-10, preventing the proposed cut of the full 17%. All of this is very positive for higher education, particularly given the fiscal situation of the state.

To deal with an additional budget shortfall in the current year, however, on December 11, the Governor signed an Executive Order reducing, on a "one-time" basis, state higher education funding in the current year by an average of 2.8%, totaling approximately \$19 million. Presidents are working to implement these cuts although, as stated by Chair Pitcher and Vice Chair Beesley in their statement of December 18, there is concern that these cuts are beginning to affect quality. If the Governor's recommendations for 2010-11 are followed and the funding is restored, however, higher education will be able to "step back" from the "tipping-point" described in the Regents' November 13 policy statement. When considered as a two-year budget, Governor Herbert's recommendation is favorable toward higher education.

On December 15, the Executive Appropriations Committee of the Legislature met to begin their process in preparing the state budget. Their first step was to provide guidelines for the various Appropriations Subcommittees, including the Higher Education Subcommittee. They took the following actions:

- 1- Adopted consensus revenue estimates (the same revenue estimates used by the Governor in preparing his budget).
- 2- Decided to allocate 95% of estimated revenue for FY 2010-11, holding back \$100 million until the updated revenue estimates are available in mid-February.
  - a. Several commented that it is easier to "add back" at the end of the session than it is to cut deeper at the session's end.
  - b. Also, concerns were raised about federal tax changes (capital gains and inheritance taxes) and how they may impact the estimates due to behavior on capital gains.
- 3- For the current fiscal year (FY 2009-10), they instructed Appropriations Subcommittees to look at cutting 4% "one time" from the current (net) funding across all of state government and K-12 Public Education. They are asking for options in case the decision is made to cut further in the current year than what has already been ordered by Governor Herbert.
  - a. To accomplish this, Appropriations Subcommittees will meet on both Tuesday, January 12, and Wednesday, January 20 (currently scheduled at 9:00 a.m.).
  - b. The Higher Education Subcommittee will undoubtedly want to know how we would cut, what the impacts would be in current year, etc.
- 4- For next fiscal year (2010-11), they instructed their staff to prepare, so they can pass early in the session, a "base budget bill" at 98% of the current base budget. Remembering that our base on-going budget was cut 17% as it goes into effect for FY 2010-11 (without replacing the one-time money), this would be 98% of the lower base, for a total net cut of 18.66% rather than 17%.
- 5- Also for FY2010-11, they are instructing the subcommittees to make a list of potential cuts totaling 5% to provide options should revenues deteriorate. If enacted, this would be in addition to the 17% base cut for next year (FY10-11) that they adopted in 2009.
- 6- The Fiscal Analyst reported that the state is now projected to be \$642 million below the statutory spending limit.

Clearly, the Executive Appropriations Committee is taking a conservative approach by holding back projected revenue and asking subcommittees to look at options for further cuts, while they await the February revenue estimates. It will be up to USHE and our institutions to make the case against further cuts and to continue funding for 2010-11 at the level appropriated for 2009-10.

With the resignation of Rep. Kory Holdaway from the Legislature, former Speaker of the House, Rep. Mel Brown, has been named as the House Co-Chair of the Higher Education Appropriations Subcommittee. Senator (and former Senate President) John Valentine remains the Senate Co-Chair. New legislators Senator Stuart Adams (who replaced Lt. Governor Greg Bell) and Rep. Johnny Anderson (who replaced Rep. Holdaway) are new members of the subcommittee. As mentioned, special meetings of the Subcommittee will be held on Tuesday, January 12, and Wednesday, January 20, and regular meetings are expected to begin on Wednesday, January 27, and every Monday, Wednesday and Thursday afternoons until February 11, from 2:00 to 5:00 p.m.

## Capital Facilities

The Board of Regents has recommended and prioritized eleven capital projects, totaling \$321 million in state funding. The Governor did not recommend any state-funded capital projects. There is no on-going funding in the state budget for capital facilities (with the exception of \$55 million currently in funding for capital improvements or "AR&I").

Capital projects are often a top legislative priority of presidents and of some legislators. The challenge will be the funding source not just for the projects, which could be funded through a general obligation bond, but finding the source for on-going debt service and operations and maintenance (O&M). As we push for projects we need to be careful to make sure that the funding source for debt service and O&M does not come out of additional cuts in higher education operating budgets.

## **Legislation**

The Commissioner's Office, as approved by the Board of Regents, is working with legislators to present three bills as priorities during the 2010 session: USU-CEU Affiliation, to be sponsored by Sen. David Hinkins and Rep. Patrick Painter; Scholarship Amendments, sponsored by Sen. John Valentine and Rep. Greg Hughes; and some housekeeping amendments to UESP and UHEAA, sponsored by Sen. Wayne Niederhauser. These are summarized below:

- The USU-CEU bill is to implement the Board of Regents' action in adopting the Memorandum of Understanding at the December 11, 2009 meeting, with an intended effective date of July 1, 2010.
- The Scholarship amendments bill is to improve the New Century Scholarship program and increase its sustainability by raising some standards, and making some parallel changes, where applicable, to the Regents' Scholarship.
- The UESP bill is mostly to bring the statute into conformance with current practice: streamlining provisions, clarifying the authority of the Board of Regents, and eliminating a provision that the amount of the tax credit can decrease if the consumer price index goes down.

In addition to these three bills, the Commissioner's Office and legislative liaisons from each institution will monitor all introduced legislation, taking note of and appropriate action of bills affecting higher education. A weekly report will be provided every Monday of the Session.

## **Advocacy**

In November and December, the Commissioner, Regents and Presidents invited legislators to attend one of five breakfasts or lunches held in Logan, Ogden, Salt Lake City, Orem, and St. George. The events were well attended and provided an opportunity to share our priorities and learn from legislators their perspectives leading up to the Legislative Session.

In addition, the Friends of Utah Higher Education have been holding meetings with key legislators, and organized a Utah County chapter. The Salt Lake Chamber announced a new education initiative, and adopted for the 2010 Legislative Session the stance that education budgets must not face further cuts, even if it means some selected tax increases.

We will work closely with both the Friends of Utah Higher Education and the Salt Lake Chamber during the session to coordinate messages and efforts. More directly, we have scheduled a legislative luncheon in the Capitol Rotunda for Friday, February 19. Every legislator will be invited and all Regents, Presidents, student body presidents, and trustee chairs and vice chairs are encouraged to attend and participate.



**Addendum to**  
***Preview of 2010 Legislative Session***

Prepared by David Buhler  
Associate Commissioner for Public Affairs  
January 14, 2010

Recent events have re-emphasized the importance of the policy statement adopted by the Board of Regents on November 13, particularly to whatever degree it may have helped the Governor in preparing his budget recommendation. As you know, the Governor agreed with the Regents in recommending no further cuts for fiscal year 2010-11 by replacing \$61 million in one-time funds. It is increasingly obvious that the Utah System of Higher Education needs to work closely with the Governor and his office during the upcoming Legislative Session to persuade legislators to adopt the same result for higher education; right now they are nearly \$100 million apart.

Earlier this week the Legislature began their work, in anticipation of the legislative session which will convene on January 25. The following is a report of the meeting of the Higher Education Appropriations Subcommittee and issues raised this week.

**Meetings of Appropriations Subcommittee**

The Higher Education Appropriations Subcommittee held a day-long meeting on Tuesday, January 12. The meeting was requested by the Legislature's Executive Appropriations Committee, which directed all subcommittees to provide them with lists of possible cuts totaling 4% for the current fiscal year (would include the cut already ordered by the Governor for current year, 2009-2010) and an additional 5% on-going cut for fiscal year 2010-11 (on top of the 17% base cut). A follow-up meeting is set for January 20.

Subcommittee members heard a presentation by Legislative Fiscal Analyst Spencer Pratt on the state budget situation and their charge from the Executive Appropriations Committee. Next, they heard an overview from Commissioner Sederburg, with additional comments by Regents' Vice Chair Bonnie Jean Beesley, followed by Presidents Cynthia Bioteau (Salt Lake Community College), Michael Benson (Southern Utah University), and Michael Young (University of Utah). Each made the case of the serious consequences to their missions as a result of past and possible future budget cuts. The presidents were followed by a panel of students introduced by Joseph Watkins, Executive Director of the Utah Student Association: Christina Lowe and Richard Portwood from Utah Valley University, Matt Haidenthaller from Salt Lake Community College, and Taylor Clough from the University of Utah. Similar to the student panel at the November 13 special meeting of the Board of Regents, students gave personal experiences of the difficulties they are already seeing as a result of budget cuts.

In the afternoon, the subcommittee heard from the remaining institutions: President Mike King (College of Eastern Utah), Vice President Marvin Dodge (Snow College), Presidents Ann Millner (Weber State University) and Matt Holland (Utah Valley University), Vice President Donna Dillingham-Evans (Dixie State College), and Provost Ray Coward (Utah State University). Presentations were also made by the Utah College of Applied Technology, Utah Education Network, and Medical Education Council, which are also under the Subcommittee's jurisdiction.

As pointed out in the original legislative preview report, legislative leadership is taking a much different approach than the Governor on the budget, by starting with a 4% across-the-board cut for all state



programs in the current year, including K-12 Public Education (surpassing the Governor's 3% cut of personnel budgets), totaling over \$6 million more for USHE. They have also directed subcommittees to identify 5% more in on-going cuts (\$32 million) for next year. (This is on top of full implementation of the 17% cut.) Contrasted with Governor Herbert, who recommended replacing \$61 million in on-going funding for higher education, so far, legislative leaders are not recommending any be replaced. The net result, if these cuts were enacted, would mean \$93 million less for higher education in 2011 than recommended by the Governor.

The subcommittee will meet again on Wednesday, January 20, at 1:00 p.m., to consider its recommendations to the Executive Appropriations Committee. The Commissioner's Office is working with the Presidents to prepare a response that recommends they go on record opposing further cuts but requesting that if cuts are made that they be proportionate to institutional budgets and that presidents be given maximum flexibility.

Two other issues have focused relating to the budget this week—the use of “institutional funds” for capital facilities, and the cost of remedial education. I will address each of these briefly.

Senator Curt Bramble, the new Co-Chair of the Capital Facilities Appropriations Subcommittee, has asked about the use of “institutional funds” for buildings and for operations and maintenance. This term has been used for many years as a way to identify funds other than state tax funds that are used for facilities. However, the use of this term has raised questions about to what extent institutions have discretionary money that might be used to replace budget cuts rather than to build or maintain buildings. As you know, these “institutional funds” are generally private donations or revenue from the University health system or student fees. The Commissioner's Office is preparing detailed information to explain the funding sources. Also, during the Higher Education Subcommittee meeting Tuesday, Dixie College, apparently inadvertently, raised the issue of the extent and cost of remedial education. This may or may not “get traction,” but Senator Valentine indicated that the Higher Education Subcommittee would need to look into this further.

## Conclusion

It is nearly 60 days until the end of the legislative session. Much can and will happen between now and the session's end. As requested by the Board, I will be providing weekly written reports on the Legislative Session every Monday morning beginning with February 1. How well higher education budgets fare will depend mostly on the condition of state revenues as estimated in mid-February. But it will also be critically important that all of higher education—Regents, presidents, institutional representatives, and friends in the business community--stay united and on message. When we do so, my experience has been our chances for success improve, even in the difficult environment we have today.

January 6, 2010

MEMORANDUM

TO: State Board of Regents  
FROM: William A. Sederburg  
SUBJECT: Roles and Authority Task Force Update

Issue

To update the Regents on the status of the Roles and Authority Task Force as well as to seek input from the members of the Board of Regents regarding their suggestions on how to improve and clarify the working relationship between the Regents, the institutions' Boards of Trustees, the Commissioner and his office, and the institutional Presidents.

Background

Institutional Boards of Trustees were asked to submit by the end of the 2009 calendar year any feedback pertaining to the Roles and Authority Task Force "charge," which is outlined in the attached document. All trustee feedback has been received. The task force is seeking any input from members of the Board of Regents so it can be included in the task force's report as suggested improvements for the Board of Regents to consider. Feedback can be given directly to the Commissioner or a member of the task force, who are identified in the attached document.

The task force's final report to the Regents will be submitted as part of the April 1, 2010 agenda packet.

Commissioner's Recommendation

This item is for information only.

WAS/CKM /JAC  
Attachments

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William A. Sederburg, Commissioner



## State Board of Regents Roles and Authority Quality Improvement Initiative

### Charge

Under the direction of the Board of Regents, the Commissioner of Higher Education has launched a quality improvement (QI) initiative led by the “Roles and Authority Task Force” to improve and clarify the working relationship between the State Board of Regents (SBR), the institutions’ Boards of Trustees (BOT), the Commissioner (the Office of Higher Education for Higher Education—OCHE), and the Presidents (the institutions). Specifically, the Task Force (TF) will answer the question: **What authority, role, and function currently held or performed by the SBR ought to be retained by the SBR or delegated to the BOTs, Commissioner, and Presidents to:**

1. improve the strategic focus and function of the SBR in fulfilling its statutory obligations and statewide role as stewards of higher education,
2. empower the BOTs and Presidents to be innovative and successful in meeting the needs of their constituents and institutional missions,
3. refine the scope of the OCHE services and functions in support of the Utah System of Higher Education (USHE) and its network of institutions and resources,
4. improve system efficiencies, and
5. eliminate unnecessary functional duplications?

### Timeline (checked items have been completed)

- ✓ February 2009 – OCHE staff develop the “Roles and Authority Matrix” to provide a quick overview of current policy and practices pertaining to the working relationship between the SBR, BOTs, Commissioner, and Presidents.
- ✓ April 2009 – Members to serve on the Roles and Authority Task Force (TF) were identified and invited to serve. They are:
  - Cameron Martin, OCHE (Chair)
  - Greg Stauffer, OCHE
  - Lucille Stoddard, OCHE
  - Teddi Safman, OCHE
  - Gary Wixom, OCHE
  - Fred Hunsaker, USU
  - John Francis, UU
  - Ed Barbanell, UU
  - Val Peterson, UVU
  - Norm Tarbox, WSU
  - Joe Peterson, SLCC
- ✓ May 29, 2009 – SBR approved the establishment of the TF and its charge (listed above). Additionally, the SBR approved initial TF recommendations to:

- a. amend Regents' policies R203, "Presidential Searches," and R208, "Resource and Review Teams" to clarify and strengthen the role of the Trustees in the presidential search, hiring, and evaluation processes, and
  - b. delegate the budget and operations oversight of the University Health Care System to the University of Utah's BOT concurring the oversight between the University of Utah Hospitals and Clinics Board and the University's BOT was adequate and the additional reporting obligation to the SBR was an unnecessary duplication function.
- ✓ SBR committees (Programs, Finance & Facilities, and Strategic Planning & Communication) have been tasked to assess Regents' policies, procedures and practices that pertain to each committee's stewardship and recommend necessary changes, if any, in fulfillment of the TF Charge.
- ✓ September 2009 – Council of Presidents (COP) review of "Roles and Authority Matrix" and were given through the end of the 2009 calendar year to gather feedback from their respective executive staff and Boards of Trustees.
- ✓ October/November 2009 – continue Task Force discovery.
- ✓ January 2009-February 2010 – SBR/BOT review of initial TF findings and recommendations.
- March 2010 – TF report writing.
- April 1, 2010 – TF report as SBR action item.
- May-August 2010 – share SBR approved report with BOTs.
- August 2011 – OCHE host first annual training presentation.

## Deliverables

1. A report to the Board of Regents for action outlining the Task Force's findings and recommendations, which will include a training program and quick reference guide.
2. To share the SBR approved report and training program with each USHE institution's President and BOT.
3. To share the SBR approved report with Governor Herbert and other legislative leaders.
4. A training program and quick reference guide that clarifies the roles, authority, functions of the SBR, BOT, Commissioner (OCHE), and the Presidents (the institutions) within the USHE. The training program is to be initially shared with each institution's BOT by the OCHE. Thereafter, OCHE will host an annual training session with specific attention given to new members to the SBR, BOT, the Commissioner's staff, and Presidents' cabinets.

January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: Annual USHE Data Reports

Issue

Each year, prior to the beginning of each legislative session, the Commissioner's Office updates and publishes data reports to inform educational and policy makers of the historical and current status of the Utah System of Higher Education. These reports are posted on the USHE website and include the: 1) *USHE Data Book*, 2) *Facts At-a-Glance*, and 3) *Voluntary System of Accountability* (VSA).

Background

The *USHE Data Book* is a comprehensive set of tables and charts that covers topics from enrollments, graduation, financial aid, facilities, budgets, personnel and workload measures. It summarizes data at both the institution and system levels. The *USHE Data Book* is published on-line in PDF format at <http://higheredutah.org/index.php/about/research/>.

*Facts At-a-Glance* is a one-page synopsis of the most frequently asked questions and issues pertaining to the USHE. The document contains USHE system-level data on enrollments, completions, and tuition. This is a paper document that is intended for broad distribution and use.

*Voluntary System of Accountability* (VSA) is a new effort being completed by the Commissioner's Office and various USHE institutions, in alignment with a national movement led by the American Association of State Colleges and Universities and the Association of Public and Land-Grant Universities. The VSA is a web-base reporting system that reports data in a common format so individual readers can easily access and compare institutions of interest.

The VSA website hosted by USHE contains system-level data that is commonly reported by individual institutions to the National Center for Educational Statistics (NCES, IPEDS) and the National Common Data Set. Additionally, it provides links to information found in the USHE Data Book, Utah Futures, UESP, and to the VSA websites of USHE institutions. The VSA web address is <http://higheredutah.org/index.php/about/research/>.

Commissioner's Recommendation

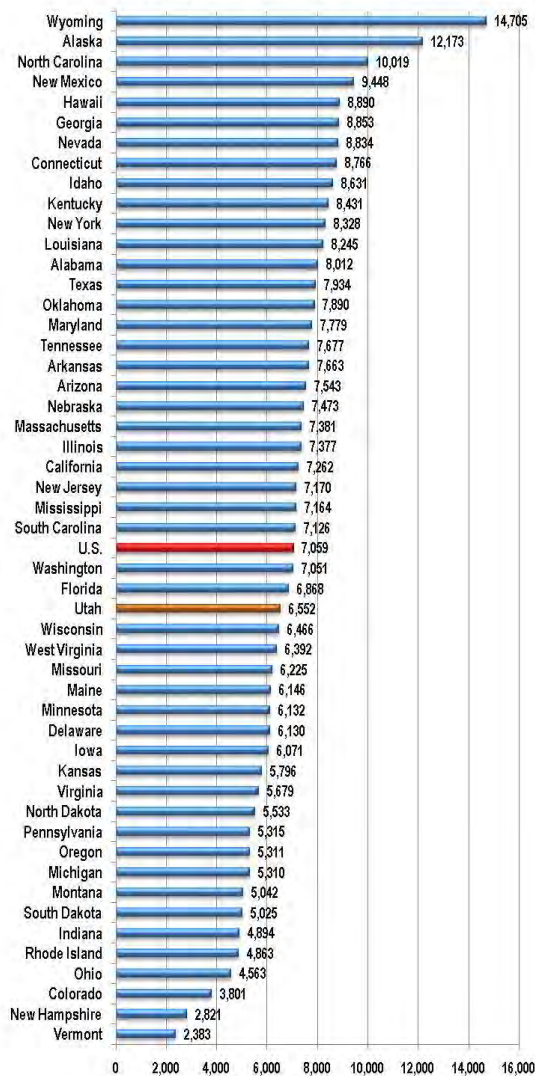
This item is for information only.

WAS/CKM /JAC  
Attachments

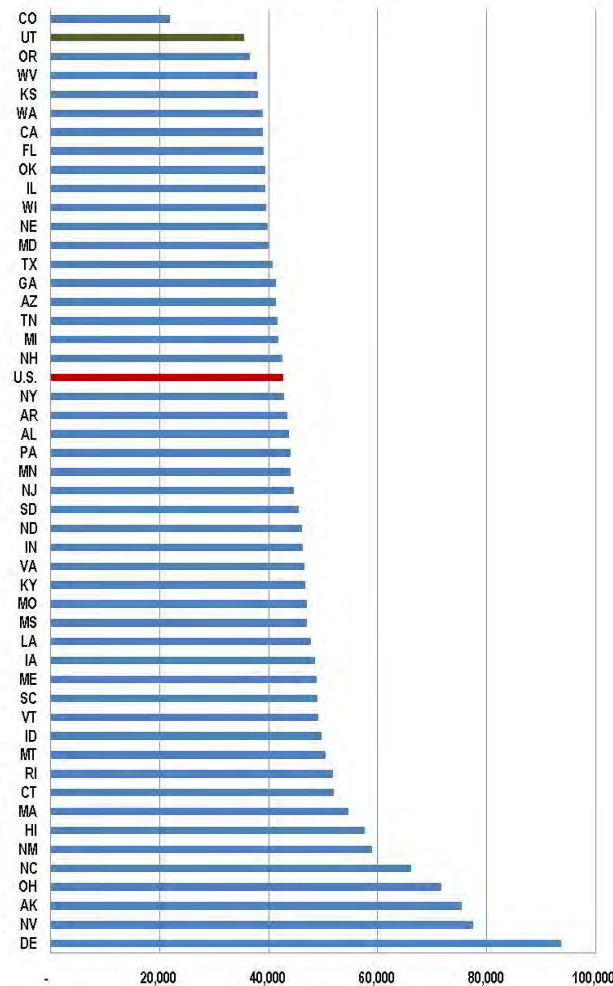
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William A. Sederburg, Commissioner

State Appropriations per FTE Student - 2008



Productivity of Bachelor's and Master's Institutions:  
Total Funding Per Degree/ Certificate  
(Weighted \* 2006-07)



\*Adjusted for value of degrees in the state employment market (median earnings by degree type and level)

Sources: NCES , IPEDS Finance and Completions Surveys; U.S. Census Bureau, American Community Survey



Facts at a Glance

DRAFT

Updated January 2010  
Office of the Commissioner of Higher Education  
Board of Regents Building, The Gateway  
60 South 400 West  
Salt Lake City, UT 84101-1284  
(801) 321-7100  
[www.utahsbr.edu](http://www.utahsbr.edu)

## 2009-10 USHE Total Enrollments

### Fall Headcount (Budget-related and Self-Support)

	Resident	Nonresident	Total	1-yr change	5-yr change
UU	26,873	4,534	31,407	3.9%	3.0%
USU	22,615	2,450	25,065	4.8%	4.8%
WSU	21,784	1,547	23,331	7.6%	23.6%
SUU	6,991	1,075	8,066	7.3%	20.9%
SC	4,071	297	4,368	15.0%	6.3%
DSC	7,431	480	7,911	22.8%	-7.6%
CEU	2,032	141	2,173	4.4%	-12.1%
UVU	25,817	2,948	28,765	7.8%	19.1%
SLCC	32,366	1,410	33,776	13.1%	31.4%
Total	149,980	14,882	164,862	8.3%	13.7%

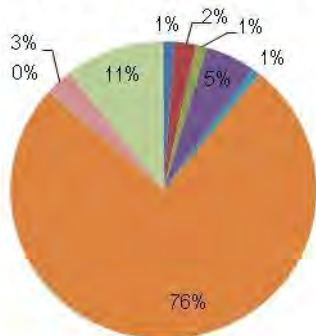
Source: 2009 USHE Data Book Tab C

### Estimated Annualized FTE (Budget-related and Self-Support)

	Resident	Nonresident	Total	1-yr change	5-yr change
UU	22,934	4,439	27,373	2.4%	-0.2%
USU	17,136	2,297	19,433	-0.7%	-1.0%
WSU	14,700	1,317	16,018	8.3%	1.1%
SUU	6,393	1,073	7,466	8.2%	21.5%
SC	2,942	299	3,241	22.8%	6.0%
DSC	5,469	518	5,987	42.8%	31.2%
CEU	1,453	116	1,569	2.5%	-19.3%
UVU	18,489	2,745	21,234	17.7%	19.3%
SLCC	18,968	1,004	19,972	6.0%	6.4%
Total	108,484	13,808	122,293	8.0%	6.2%

Source: 2009 USHE Data Book Tab C

## Total USHE Headcount



- American Indian Alaskan
- Black or African American
- Native Hawaiian or Pacific Islander
- Multiple
- Unspecified
- Asian
- Hispanic or Latino
- White
- Non Resident Alien

## 2009-10 Annual Undergraduate <sup>(1)</sup> Tuition and Fees

	Non-Resident	Resident	Resident
	Resident	Resident	1-yr change 5-yr change
UU	\$5,746	\$18,136	8.7% 43.7%
USU	\$4,828	\$13,802	8.6% 48.7%
WSU	\$4,088	\$11,555	6.1% 42.1%
SUU	\$4,269	\$12,847	6.0% 39.8%
SC	\$2,542	\$8,238	8.3% 41.7%
DSC	\$3,145	\$10,897	8.7% 66.8%
CEU	\$2,470	\$4,540	10.2% 32.7%
UVU	\$4,048	\$11,888	7.9% 45.2%
SLCC	\$2,790	\$8,730	4.9% 28.3%

<sup>(1)</sup> Undergraduate Tuition and Centrally Administered Fees for 2 semesters at 15 credit hours.

## USHE First Tier Tuition Set Aside for Financial Aid

### Students Receiving Need Based Aid

	2008-09		Budget 2009-10	
Award Type	Number	Average Amount	Number	Average Amount
Grants	6,808	2,312	7,724	\$2,971
Loans	4,781	3,781	6,337	\$4,239
Work Study	747	1,032	779	\$1,045
Total	12,336	2,864	14,840	\$3,481
Total Expenditures	\$35,330,112		\$51,662,065	

## Regular and Adjunct Faculty Change 2008-09

Institution	Regular			Adjunct		
	2009	2008	Change	2009	2008	Change
UU	1,289	1,232	57	238	203	35
USU	895	851	44	146	149	(3)
WSU	472	467	5	333	334	(1)
SUU	232	223	9	101	102	(1)
Snow	125	127	(2)	50	50	-
DSC	148	128	20	146	133	13
CEU	73	92	(19)	23	22	1
UVU	454	425	29	457	445	12
SLCC	348	361	(13)	521	552	(31)
Total	4,036	3,906	130	2,015	1,990	25

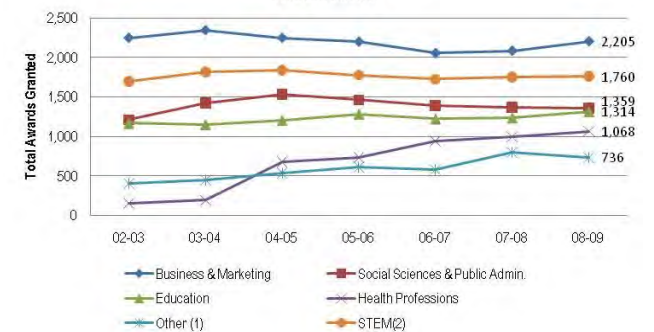
Source A-1 Actuals

## 2008-09 USHE Degrees and Awards

	Cert.	Assoc.	Bacc.	Masters	Doct.	1st Prf	Total	1-yr %	5-yr %
UU	303	-	4,896	1,563	313	372	7,447	-0.9%	5.1%
USU	15	493	2,968	696	88	-	4,260	-1.8%	8.3%
WSU	41	1,851	1,872	194	-	-	3,958	4.2%	4.7%
SUU	11	323	909	307	-	-	1,550	14.3%	61.8%
SC	54	589	-	-	-	-	643	-2.4%	-27.0%
DSC	625	778	213	-	-	-	1,616	9.9%	2.3%
CEU	80	302	-	-	-	-	382	3.5%	-28.3%
UVU	18	1,651	1,772	-	-	-	3,441	5.1%	4.0%
SLCC	692	3,001	-	-	-	-	3,693	1.3%	34.2%
USHE	1,839	8,988	12,630	2,760	401	372	26,990	2.1%	8.8%

Cert.=Certificate, Short-term certificates, other awards: 1st Prf=first professional, e.g. MD, JD, etc.  
Source: 2009 USHE Data Book Tab B

## Top Bachelor's Degrees in Utah Public Institutions



<sup>(1)</sup> Includes Library Science, Military Technologies, Multi/Interdisciplinary Studies, and Parks & Recreation.

<sup>(2)</sup> STEM includes: Engineering, Math, Biological, Computer and Physical Sciences

## Degrees and Awards by Race/ Ethnicity and Institution

Institution	Non-Resident			Asian/ Pacific				Total	
	Alien	Black	American Indian	Islander	Hispanic	White	Other	Degrees Awarded	
UU	381	61	49	343	316	5907	390	7,447	
USU	388	20	24	50	76	3555	147	4,260	
WSU	21	19	13	71	123	2714	997	3,958	
SUU	24	10	18	22	23	1413	40	1,550	
Snow	17	0	7	14	10	591	4	643	
DSC	5	5	10	24	81	1459	32	1,616	
CEU	0	4	31	5	12	321	9	382	
UVU	48	13	29	65	118	3084	84	3,441	
SLCC	35	70	40	159	224	2909	256	3,693	
USHE Total	919	202	221	753	983	21,953	1,959	26,990	
Percent	3.4%	0.7%	0.8%	2.8%	3.6%	81.3%	7.3%	100%	



**Draft Copy**

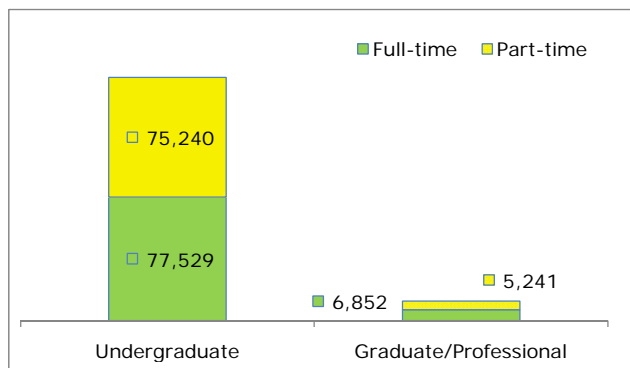
The Utah System of Higher Education (USHE) consists of nine public colleges and universities governed by the State Board of Regents, assisted by local Board of Trustees. The system includes three Community Colleges, four Regional Universities and College, one Land-Grant University, and one Flagship University.

## Student Characteristics (Fall 2009)

[More](#)

**TOTAL NUMBER OF STUDENTS** 164,862

### Student Level and Enrollment Status



### UNDERGRADUATE PROFILE

Total	152,769	
<b>Gender</b>		
Women	75,757	49.59%
Men	76,734	50.23%
Unspecified	278	0.18%

### Race/Ethnicity

African American / Black	1,821	1.19%
American Indian / Alaskan	1,833	1.20%
Asian	3,459	2.26%
Hispanic	8,503	5.57%
International	3,051	2.00%
Multiple	156	0.10%
Pacific Islander	1,399	0.92%
White	116,171	76.04%
Race / Ethnicity Unknown	16,376	10.72%

### Geographic Distribution (Degree-Seeking)

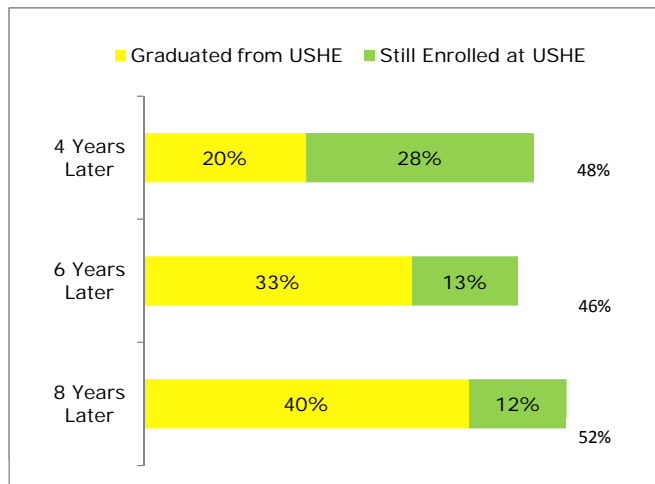
Utah	82.08%
Other US States & Territories	11.87%
Other Countries	2.79%
Unknown	3.26%

### Age (Degree-Seeking)

Average Age	24.28
Percent of Undergraduate Age 25 or Older	33.79%

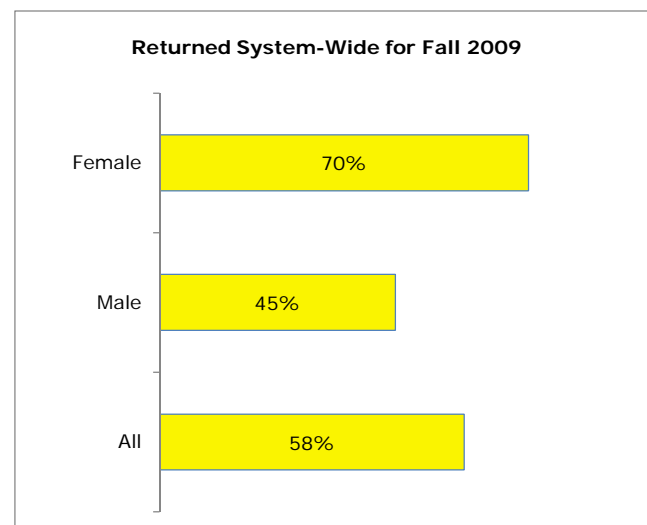
## Undergraduate Success and Progress Rate

### First-time Freshmen Starting in Fall 2001



As an example, a 52% eight-year success and progress rate means that 52% of first-time freshmen starting in Fall 2001 either graduated or are still enrolled at a USHE institution eight years later. 18,300 students (both full-time and part-time & both associate's and bachelor's) were counted in the graph above.

### Retention of Fall 2008 First-Time Freshmen



## 2009-2010 Tuition and Fees

[More](#)

USHE Undergraduate Tuition and Fees for one Academic Year (2 semesters at 15 credit hours each)

INSTITUTION	FEE	IN-STATE TUITION	OUT-OF-STATE TUITION
<b>Flagship University</b>			
UU	790	4,956	17,346
<b>Land-Grant University</b>			
USU	785	4,043	13,017
<b>Regional University</b>			
WSU	730	3,358	10,825
SUU	539	3,730	12,308
UVU	584	3,464	11,304
DSC	505	2,640	10,392
<b>Community College</b>			
SNOW	390	2,152	7,848
CEU	400	2,070	4,140
SLCC	414	2,376	8,316

## Tuition Waivers

[More](#)

### Total Resident Waivers for 2007-2008

UU	\$5,478,982
USU	\$3,255,746
WSU	\$3,849,295
SUU	\$1,680,001
UVU	\$3,319,600
DSC	\$896,777
SNOW	\$380,937
CEU	\$208,393
SLCC	\$1,595,157
<b>USHE Total</b>	<b>\$20,664,888</b>

### Total Non-Resident Waivers for 2007-2008

UU	\$3,623,611
USU	\$9,805,708
WSU	\$1,864,989
SUU	\$2,218,996
UVU	\$1,624,179
DSC	\$1,745,254
SNOW	\$203,938
CEU	\$187,405
SLCC	\$612,258
<b>USHE Total</b>	<b>\$21,886,338</b>

**Total Waivers** \$42,551,226

## Degrees & Areas of Study

[More](#)

### Degrees Awarded by USHE in 2008-2009

Certificates	1,839
Associate's	8,988
Bachelor's	12,630
Master's	2,760
Doctoral	401
Professional (e.g. Law, Medicine)	372
<b>Total</b>	<b>26,990</b>

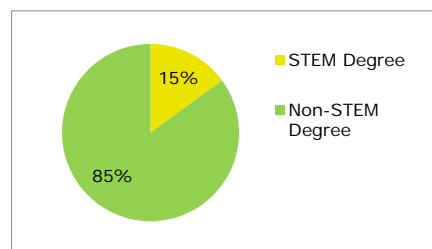
### Areas of Study with the Largest Number of Associate's Degrees Awarded in 2008-2009

Liberal Arts & Sciences/Gen. Studies	58%
Health Professions	15%
Other Vocational Studies	5%
Business & Marketing	6%
All Other Degree Areas	16%
<b>Total</b>	<b>100%</b>

### Areas of Study with the Largest Number of Bachelor's Degrees Awarded in 2008-2009

Business & Marketing	18%
Social Sciences & Public Admin.	11%
Education	10%
Health Professions	9%
All Other Degree Areas	52%
<b>Total</b>	<b>100%</b>

### Percentage of Bachelor's Degrees That Are in STEM Fields vs. Non-STEM Degree



### Number of Bachelor's Degrees Awarded in STEM Fields in 2008-2009

Agricultural Sciences	24
Chemistry	102
Computer Science	326
Engineering	620
Environmental Science	47
Geosciences	75
Life/Biological Sciences	483
Mathematics	109
Physics/Astronomy	56
<b>Total</b>	<b>1,842</b>

The mission of the Utah System of Higher Education (USHE) is to provide high quality academic, professional and career technology learning opportunities designed to advance the intellectual, cultural, social, and economic well-being of the state and its people. The USHE will foster a society of lifelong learners, prepare a productive work force for a knowledge-based global marketplace, cultivate social responsibility and commitment to ethical values, improve the quality and understanding of life, and promote cultural awareness and appreciation for diversity. Many programs and services are available to students in support of USHE's mission, such as Utah Scholars, Utah Futures, Utah Educational Savings Plan, and Utah Higher Education Assistance Authority.



Click on the each institution's logo for VSA or other Accountability Information

**Flagship university.** The University of Utah serves as Utah's flagship public research university offering a broad range of baccalaureate, master's and doctoral programs including law, medicine, health care professional and a full-service health care system.



**Land-Grant university.** Utah State University serves as a research university with an emphasis in applied fields such as agriculture, engineering and business, with an extensive outreach system of extension operations.



**Regional universities.** In addition to a strong community college function, regional universities provide access to high demand baccalaureate programs and selected master's degrees. These regional universities are teaching universities that are fully committed to community engagement in student learning and in economic development.



**Community Colleges.** Community colleges provide open and low-cost access to all those who aspire to postsecondary training, and fill a wide range of community needs and play a vital role in local and state economic development.



**Private Utah Institutions.** In Utah, there are also private not-for-profit institutions of Higher Education that offer associate and bachelor's degrees. The private institutions in Utah are listed below. Click on the logos for accountability information.



January 7, 2010

MEMORANDUM

To: State Board of Regents

From: William A. Sederburg

SUBJECT: Outreach Report (Biennial Report)

Issue

The trends in college attainment nationally and in Utah are disturbing. With its young population, Utah is poised to lead the nation as an economic powerhouse, but only if this young population is well educated relative to the rest of the nation and the world. Changing demographics in the state call for a concerted effort to help minority populations complete high school, prepare for, attend, and succeed in college. In every area of the state there is room for improvement, but in some counties, the need is particularly acute. All of these challenges require a statewide effort in establishing readiness standards and communicating clear signals to students, parents and our K-12 partners. Additionally, as it is denoted by the literature, we must prevent the "leaking pipeline" by intentional interventions prior to 9<sup>th</sup> grade. To align with the Regents' goal of increasing participation, and to provide statewide coordination, support, and collaboration among the USHE institutions, the Office of the Commissioner of Higher Education created in July 2009 the "Outreach and Access" unit. This unit is under the general supervision of Associate Commissioner Dave Buhler. Melissa Miller Kincart, Assistant Commissioner for Outreach and Access, and her team have oversight of the Utah Scholars Initiative, Regents' and New Century Scholarships, College Access Challenge Grant, and Participation Task Force. Additionally, Melissa has begun to work with program directors at our institutions in an effort to increase communication and collaborations among programs/initiatives that help underserved populations better prepare for and succeed in college.

As a Loan Guarantee Program of the U.S. Department of Education, UHEAA is required to do education outreach. Under the general supervision of Michael Nemelka, Associate Executive Director for Business Development, and the oversight of Stephen Rogers, Manager for Outreach, and his team, UHEAA distributes and provides information and training throughout the state of Utah for students, parents and educators on college access, participation, and financial literacy with a special emphasis on serving under-represented populations.

In collaboration, the Office of the Commissioner and UHEAA, through the following outreach efforts, are striving to help Utah citizens plan, prepare and succeed in college.

## Scholarship Update

### Regents' Scholarship

The Regents' Scholarship was enacted in 2008 to encourage high school students to complete a rigorous course of study during their four years of high school. State Law requires the Commissioner's Office to submit an annual report to the Legislative Interim Education Committee regarding the program each October. The report written by Carrie F. Beckman, Policy and Special Projects Coordinator, was shared with the Board in the October meeting. However, the final review and appeals process had not yet concluded as result of the statutory requirement that expires this year that allowed students to have until September 1 to complete the requirements. The numbers have been updated since that report.

This 2009 Award Cycle was complete in mid-November. This year 393 students from 23 school districts, and some charter and private high schools, received a Regents' Scholarship Award, in comparison to 195 students in 2008 .

Summary of 2009 High School Regents' Scholarship Applicants			
Total # of Applications	# of Award Recipients	# of Denied Applicants	# of Incomplete Applications*
1021	393	460	168

\*Incomplete applications are not reviewed for eligibility.

We have now launched into our third application cycle of the Regents' Scholarship. The on-line application became available on December 1, 2009 for the high school graduating class of 2010. Complete applications, which include the on-line application as well as supplemental documentation, are due (postmarked) February 1, 2010. Priority consideration may be given to students who submit a complete application (postmarked) January 8, 2010.

As of printing this report, we have already received **503** on-line applications which have been successfully downloaded; of those applications, **61** have a complete file. Students must submit official transcripts and Spring semester/term class schedules in order to complete their file. We will begin reviewing applications once we have a complete file. Last year we only had **1021** total applications submitted by the February 1 deadline, so we anticipate an increase in applicants as well as recipients for the 2010 cycle.

### New Century Scholarship

The New Century Scholarship was enacted ten years ago to encourage students to accelerate their education by earning an Associate's degree in high school.

Given the communication and projection challenges of late summer, we have made a number of changes to the administration and sustainability of the program.

- Changed the management of the program. The program is now under the direct management of Melissa Miller Kincart, Assistant Commissioner for Outreach and Access, and under the general supervision of Associate Commissioner Dave Buhler, with continued considerable staff support from the Utah Higher Education Assistance Authority (UHEAA). All administrative costs continue to be absorbed by the Board of Regents.
- Immediately implemented the directive of the Executive Appropriations Committee to fully fund the scholarships for the 09-10 (fall/spring semesters) academic year.
- Reached out several times and ways to communicate these messages to higher education institutions, high schools, and over 2,500 students we can identify who are in or preparing for the program with the following messages:

- While scholarship will be fully funded for this academic year, due to state budget constraints, funding it is uncertain for next year—students are encouraged to also pursue other scholarships, grants, and funding options.
- Funding level for the 2010 academic year will be announced in April.
- A new application deadline is in place—January 8, 2010—for returning recipients and for new 2010 graduating high school applicants. This will provide us with the information we need to share with the Legislature on the funding needs and enable us to communicate in April the actual funding level.
- Worked with legislators to make improvements in the program to help its long-term sustainability. Have met twice with Education Interim Committee; Senator John Valentine and Representative Greg Hughes have agreed to sponsor legislation.
- Enclosed is a detailed list of our recent and ongoing communication efforts, as well as a copy of the article that was in the Salt Lake Tribune on January 3, 2009.

Furthermore, we have made a number of internal program changes to be effective in 2010 to help in program management and sustainability. In addition to the application deadline, students must make take 12 credit hours each semester, receive an approved Deferral or Leave of Absence if they do not plan to be enrolled each Fall or Spring semester, and we have instituted deadlines for grades and proof of enrollment submissions in order to maintain eligibility. These policy changes are reflective in policy R604 that was submitted and approved by the Board in the October meeting.

As of printing this report we have received **1114** Renewal Applications and **391** New Student Applications. We expect to receive additional applications throughout the week as the can be postmarked through January 8, 2010.

In addition to aligning management of these programs we have worked diligently to align our information and web presence regarding these programs. See [www.utahsbr.edu/scholarships](http://www.utahsbr.edu/scholarships) for more information and 2010 applications.

### Overall Outreach Endeavors and Impact

#### **Utah Scholars Initiative**

The Utah Scholars Initiative was initiated in the 2006-2007 school year with a \$300,000 grant from the U. S. Department of Education and the Western Interstate Commission for Higher Education (WICHE). The Initiative is a business and education partnership in which volunteers go into 8<sup>th</sup> grade classrooms to share a presentation that encourages students to prepare for their future and by taking a defined core course of study throughout all 4-years of high school. During the first year of implementation, we rolled out the program in eight middle schools and five high schools across the Wasatch Front in Davis, Granite, Jordan, and Park City School Districts. By the end of 2006-2007 school year, the State Scholars presentation had been delivered to nearly **2,400** 8<sup>th</sup> graders by **20** different business and community leaders.

The program has seen modest growth over the past few years, despite funding uncertainty beyond the grant and leadership changes in the executive team of OCHE. Additionally, it is important to note that the Utah Scholars Core Course of Study was adopted in 2008 as the course criteria for the Regents' Scholarship. Utah Scholars works with partner districts and schools who primarily serve a larger percentage of underserved populations. This is an intentional outreach effort to increase awareness with students and parents about what it takes to be ready and successful for college. The Regents' Scholarship is currently the financial incentive linked to this program, although the scholarship is available to all Utah students who qualify.

For the past few months, Melissa Miller Kincart, Assistant Commissioner for Outreach and Access, as well as Andrea Cox, the Utah Scholars Program coordinator, have worked diligently to build stronger relationships with partner districts and schools. For 2009-2010 we have ten participating districts (Alpine, **Davis, Canyons, Granite, Jordan,**

Ogden, Park City, Provo, Salt Lake, Washington). The bolded districts are those that came on board this year or who requested we increase our capacity to service more schools. This year we are servicing:

- **34** High Schools (Including all schools in Alpine, Park City, Washington, Ogden and Salt Lake Districts and AMES- Early College High School)
- **44** Junior High/Middle Schools

Additionally, this year we have greatly increased our volunteer base business, community and higher education partners. We currently have **130** trained volunteers and approximately **12** are bilingual, which has provided us the opportunity to service some schools with Spanish presentations. Delivery of 8<sup>th</sup> grade presentations and matching of volunteers for the school year are well under way. As of December 31, 2009 we have:

- Delivered **150** presentations –**132** with Business, Community and Higher Education Volunteers and **18** by OCHE and UHEAA staff.
- Serviced **16** Junior/Middle schools.
- Reached approximately **7000** students.
- 

As we look to projections for 2010 we have:

- Scheduled **28** schools.
- Anticipate delivering an additional **336** presentations and reaching **7500** thus totaling approximately **14500** students. In comparison to **230** presentations reaching **9500** in 2008-2009.

The program growth and sustainability has been made possible the past two years by U. S. Department of Education's College Access Challenge Grant. Monies from this grant have also made possible Utah Scholars publications, posters, in English and Spanish, and a new website which allows students who receive the presentation to submit an online participant commitment form. These communications we launched in October and delivered to all partner schools in December.

## UHEAA

During FY2009, UHEAA's Outreach team provided training and materials to 13,320 Utahns, consisting of middle school and high school counselors, public education and higher education administrators and teachers, and students and their parents. Listed below is a description of these outreach activities and the number of students, parents and educators served.

### UtahFutures.org

In cooperation with K-12 education, higher education, and the Department of Workforce Services, UHEAA provides UtahFutures.org, which replaces UtahMentor as the primary online tool for public education and higher education students. UHEAA Outreach develops and maintains the website, provides content for the site, and provides training to high school and middle school students as well as counselors and educators about how to use UtahFutures.org.

- Number of users per month: **30,000**

### National Training for Counselors and Mentors and other Counselor/Educator Training

Training specifically geared towards counselors, mentors, K-12 educators, and postsecondary educators included events such as National Training for Counselors and Mentors (NT4CM), which places emphasis on sharing information on financial aid and scholarship resources, demonstrations and training on how to use college information systems such as UtahFutures and more.

- Number of events in FY2009: **33**
- Educators trained: **2,562**

#### Financial Aid Nights/College Fairs

UHEAA's Outreach team also participates in back-to-school nights, financial aid nights, college fairs, and career fairs. These involve distributing materials about college preparation and paying for college, as well as answering the specific questions of students and parents.

- Number of events in FY2009: 20
- Students and parents assisted: 3,660

#### FAFSA Completion Events

UHEAA conducts FAFSA completion events and FAFSA Nights. The FAFSA is the Free Application for Federal Student Aid, a federal form required to determine eligibility for Pell Grants, student loans, and other types of aid. These events involve personalized help filling out the FAFSA and are targeted towards populations traditionally underrepresented in higher education.

- Number of events in FY2009: 5
- Students and parents mentored: 175

#### Financial Literacy Training/College Access and Prep

Another primary aspect of UHEAA's Outreach work is financial literacy, college access, and college preparation training. These events focus on UtahFutures as a tool to help students plan and prepare for post-secondary education. These events are held in high school and middle school computer labs, and provide a hands-on demonstration for the students of how to use the website as well as providing incentives to do so.

- Number of events in FY2009: 42
- Students mentored: 6,923

#### Commissioner's Recommendation

This is an information item only; no formal action by the Board is required. However, the Board is encouraged to read and take note of the information in this memorandum, and note that further follow-up will be handled by the Commissioner's Office as part of the Board's Participation strategic objective.

---

William A. Sederburg, Commissioner

WAS/MMK  
Attachments



## New Century Scholarship Communications and Outreach Efforts

Utah State Board of Regents    September 2009 –January 2010

August 21	Letter sent to <b>1500</b> + new and continuing participants confirming the 75% award amount for the 2009-10 academic year as well as communicating funding uncertainty for 2010-11.
September 4	Letter to current <b>1700</b> + NC recipients, <b>1089</b> junior and high school counselors and school personnel, and <b>51</b> higher education financial aid, scholarship and NC advisors confirming 75% award amount for the 2009-10 academic year as well as communicating funding uncertainty for 2010-11 and financial preparedness suggestions.
September 19	Presentation and Q & A at the Early College High School Conference to <b>30</b> faculty, staff and administrators.
September 22	Training on UtahFuture.org with a presentation on statewide scholarships for <b>20</b> secondary counselors in Central Utah held at Snow College.
October 9	Letter to each legislator with recipient update, administrative changes including introduction of January application deadline.
October 21	Application deadline presented at Education Interim Committee.
October 22	Interview on <i>KSL Doug Wright Show</i> regarding possible program sustainability options and a discussion of the January application deadline.
October 27-28	<p>Letter sent to <b>1806</b> NC current recipients, <b>1089</b> junior and high school counselors and school personnel, and <b>51</b> higher education financial aid, scholarship and NC advisors outlining the new application deadline and process--in addition to including financial preparedness suggestions.</p> <ul style="list-style-type: none"><li>• Website updated with new information and forms.</li><li>• Similar content was e-mailed to <b>1126</b> current recipients whom have valid e-mail addresses.</li><li>• E-mail sent to Chief Academic and Student Services Officers at the USHE institutions as well as the Utah Council (Approximately <b>50</b> college and university recruiters) asking them to assist us in relaying the deadline information to all prospective students and high school counselors in their service area.</li><li>• Letter posted on USOE School Counselor List serve. Approximately <b>857</b> + subscribe to this list.</li></ul>
October 28	Conference for <b>25</b> college and university personnel who work in some capacity to administer and advise NC recipients and potential applicants.
October 29-30	Training on UtahFuture.org with a presentation on statewide scholarships for <b>84</b> secondary counselors in Southern Utah held at Dixie State College and Southern Utah University.
November 3-4	Training on UtahFuture.org with a presentation on statewide scholarships for <b>88</b> secondary counselors in Northern Utah held at Utah State University.
November 11	Presentation and Q & A with <b>60</b> + directors at the Concurrent Enrollment Quarterly Training.
November 13	E-mail from USOE to School Counselors List serve. Approximately <b>857</b> + subscribe to this list.

## New Century Scholarship Communications and Outreach Efforts

Utah State Board of Regents    September 2009 –January 2010

November 17-18	Training on UtahFuture.org with a presentation on statewide scholarships for <b>138</b> secondary counselors in Utah County held at Utah Valley University.
November 12	Letters sent to <b>180</b> students who have filed a NEW or RENEWAL Application confirming receipt.
November 19	Letter to <b>881</b> high school seniors identified by our institutions as potential NC applicants.
November 19	Tribune Article <i>New Rules for New Century Scholarship</i> which included the new application deadline information.
December 9	E-mail from USOE to School Counselors List serve. Approximately <b>857</b> + subscribe to this list.
December 9	Letters sent to <b>395</b> students who have filed a NEW or RENEWAL Application confirming receipt.
December 10	Flyer sent to <b>352</b> high school counselors and districts reminding them of the deadline.
December 11	Dave Buhler sent letter to all state legislators giving them a progress report on the New Century Scholarship, advising them of the deadline, and asking for their help in communicating with their constituents.
December 11	Training on UtahFuture.org with a presentation on statewide scholarships for <b>48</b> secondary counselors in Granite District.
December 11	Letters sent to <b>1312</b> non-responding current recipients.
December 14	E-mail to <b>795</b> non-responding current recipients whom have valid e-mail addresses.
December 15-16	Training on UtahFuture.org with a presentation on statewide on scholarships for <b>29</b> secondary counselors in Northern Utah held at Weber State University.
December 17	Press release regarding scholarship deadlines.
December 23	Letters sent to <b>1072</b> non-responding currents recipients.
December 29	E-mail to <b>572</b> non-responding current recipients whom have valid e-mail addresses.
January 3	Tribune Article <i>Deadlines near for Utah scholarships.</i>
January 4	E-mail from USOE to School Counselors List serve. Approximately <b>857</b> + subscribe to this list.

### Ongoing Outreach Efforts

- Website updates
- Communication posts on Twitter and facebook
- Approximately **10** presentations at requested scholarship and financial aid evenings, district and school meetings
- Phone and e-mail correspondence with constituents

December 11, 2009

Dear Legislator:

At the recommendation of the Education Interim Committee at their most recent meeting, I am happy to provide you with an update on the changes we have made in the administration of the New Century Scholarship program since this past summer. I also want to ask your assistance in sharing some important information to any constituents you may be aware of who are planning to apply for (or renew) this scholarship in the next year.

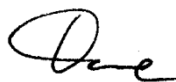
In the past several months, we have:

- **Changed the management of the program.** The program is now under the direct management of Melissa Miller Kincart, Assistant Commissioner for Participation and Outreach, and under my general supervision, with continued considerable staff support from the Utah Higher Education Assistance Authority (UHEAA). All administrative costs continued to be absorbed by the Board of Regents.
- **Immediately implemented the directive of the Executive Appropriations Committee** to fully fund the scholarships for the current academic year.
- **Reached out several times and ways to communicate these messages** to higher education institutions, high schools, and over 2,500 students we can identify who are in or preparing for the program
  - While scholarship is fully funded this year, due to state budget constraints funding it is uncertain for next year—students are encouraged to also pursue other scholarships, grants, and funding options.
  - Funding level for the 2010 academic year will be announced in April.
  - A new application deadline is in place—January 8—for returning scholars and for new applicants. This will provide us with the information we need to share with the Legislature on the funding needs and enable us to communicate in April the actual funding level.
- **Worked with legislators to make improvements** in the program to help its long-term sustainability. Have met twice with Education Interim Committee and Senator John Valentine and Representative Greg Hughes have agreed to sponsor legislation.

Enclosed is a detailed list of our recent and on-going communication efforts. Our website is updated regularly with information; it can be accessed at <http://www.utahsbr.edu/scholarships/>. Also enclosed is a flier going out this week to every high school and college/university. We remain concerned that the word gets out that students need to apply by January 8 (even though new students have longer than that to complete their requirements). If you are aware of students who are working toward the scholarship, please let them know of this new application deadline.

As always, please feel free to contact me if you have suggestions or concerns (801-321-7162, email [dbuhler@utahsbr.edu](mailto:dbuhler@utahsbr.edu)) .

Sincerely,



David L. Buhler  
Associate Commissioner for Public Affairs

# Important Information Regarding Changes to the New Century Scholarship Program

**ATTENTION high school counselors and other high school personnel working with the graduating class of 2010:**

Please note that all high school seniors in the ***class of 2010*** working towards the New Century Scholarship **MUST** submit an application by **January 8, 2010**.

Late applications will not be accepted or reviewed.

2010 high school graduates still have until September 1, 2010 to earn an Associate Degree. The following documentation **MUST** be submitted by **October 15, 2010** to verify a student's eligibility:

- Official high school transcript showing the high school graduation date.
- Official college transcript showing the Associate Degree posted.
- Proof of U.S. citizenship (see website for approved documents).
- Proof of full-time enrollment at an eligible institution or a deferral application (see website for more information).

A printable application is available at [www.utahsbr.edu/scholarships](http://www.utahsbr.edu/scholarships).  
(Click on "New Century Scholarship" then click on "Application Form NEW")

Mail the New Century Application to:

Utah System of Higher Education  
New Century Scholarship Program  
P O Box 145116  
Salt Lake City, UT 84114-5116



[www.utahsbr.edu/scholarships](http://www.utahsbr.edu/scholarships)

# The Salt Lake Tribune

<http://www.sltrib.com>

## Deadlines near for Utah scholarships

New Century » Applications should be postmarked by Jan. 8

By Brian Maffly  
The Salt Lake Tribune

Salt Lake Tribune

Updated:01/03/2010 09:13:05 AM MST

# The Salt Lake Tribune

<http://www.sltrib.com>

For the first time, Utah students seeking a New Century Scholarship, either a new one or a renewal, must submit an application by a Jan. 8 deadline.

And college-bound high school seniors seeking a Regents scholarship should also get their applications in by Jan. 8, or risk leaving \$1,000 on the table if the Legislature decides against fully funding the state's two main merit-based aid programs. The Regents program has a final deadline of Feb. 1.

The reason for the new deadlines is to give higher education officials a clear picture of the programs' funding needs before the Legislature convenes later this month.

But officials are worried that some college-bound students are not getting their papers ready and may miss out on a great subsidy.

"Like most scholarships, the New Century and Regents scholarship programs require a significant amount of information-gathering before an application is fully completed," Commissioner of Higher Education William Sederburg said. "The holiday break is an excellent time for students to complete admissions and scholarship applications for next year."

New Century provides a two-year scholarship that covers up to 75 percent of tuition for high school graduates who complete an associate's degree by the September after graduation. They also need a cumulative 3.0 GPA.

Surging popularity and declining state revenues have left this program precariously underfunded, so the Board of Regents wants to present lawmakers with precise numbers of those qualifying for New Century and Regents scholarships, said David Buhler, an associate commissioner of higher education.

Gov. Gary Herbert has recommended releasing \$4 million to bolster financial aid programs, but there is no guarantee the Legislature will comply, especially if revenue projections continue to erode.

This session lawmakers are expected to tinker with New Century to make it harder to qualify and possibly prohibit using the money to attend private schools.

Changes already in place for this year are designed to keep students on pace toward graduating. For example, New Century scholars must now enroll and complete 12 credit hours a semester. They must also be continuously enrolled and submit proof of completion after each semester, or risk having to pay back the scholarship.

[bmaffly@sltrib.com](mailto:bmaffly@sltrib.com)

Looming deadline: Jan. 8

New Century Scholarship

Covers first two years of college, up to 75 percent of tuition, for high school graduates who obtain an associate's degree with a cumulative 3.0 GPA.

Regents Scholarship

Provides \$1,000 for high school graduates who complete a tough college-preparatory curriculum with a 3.0 GPA.

Both scholarships can be used at Utah colleges and universities, including the private Westminster College and Brigham Young University. See <http://utahsbr.edu/scholarships/>

January 7, 2010

MEMORANDUM

To: State Board of Regents

From: William A. Sederburg

SUBJECT: Participation Task Force --Update

Issue

At the July 2009 Regents' meeting, the Board charged the Office of the Commissioner's Outreach and Access unit and USHE Presidents to begin working together to establish meaningful participation goals and strategies to enhance or create new programs and/or partnerships for the populations they serve. In the August 2009 Council of Presidents meeting it was determined that a working team must be identified. Each President has designated a high level member of his/her administration as the point of contact with the Commissioner's Office to represent their institution on this working team. This working group is comprised of the following members:

- University Of Utah: Vice President Barbara Snyder
- Utah State University: Vice President James Morales
- Weber State University: Vice President Janet Winniford
- Southern Utah University: Vice President Donna Eddleman
- Snow College: Director of Admissions, Greg Dart
- Dixie State College: Vice President Frank Lojko
- College of Eastern Utah: Vice President Brad King
- Utah Valley University: Assistant to the President, Kyle Reyes
- Salt Lake Community College: Vice President Deneece Huftalin
- Office of the Commissioner: Associate Commissioner David Buhler and Assistant Commissioner for Outreach and Access, Melissa Miller Kincart.

Participation is a complex issue to tackle. It includes issues of student academic readiness and preparation, access, perceptions and attitudes toward education, family background and barriers such as inadequate financial aid or lack of information and navigation skills. Our institutions have multifaceted approaches, offices, programs and initiatives that straddle the "Participation" responsibility that encompass outreach, access, recruitment, admissions, financial aid, advising and marketing, to name a few. Additionally, Dr. Clifford Adelman in his 2007 article for the Carnegie Foundation *Do We Really Have an Access Problem?* argues that participation includes not only those students who have entered higher education but who have

established enough momentum toward obtaining a certificate or degree. He asserts that students have equal responsibility with the institutions in which they attend to take an active role in their participation.

### Progress to Date

The group convened for the first time on November 5, 2009. The focus of this meeting was to understand the Task Force charge, discuss the 2009 Utah Public Opinion Survey, review participation data, and to map out its direction for the coming year. The group spent a good deal of time talking about ways to clean up and refine the college participation data in an effort to present data which accurately reflect where we are today to more effectively benchmark for the future. Dr. Joseph Curtin, Director of Office for Institutional Research, and his team are currently working on the following refinements.

- Refining Utah's college participation rate by removing for-profit schools to include only USHE institutions, as well as BYU and Westminster College. Additionally, determine a USHE college participation rate.
- Building upon the college participation work/report which included 2007 high school graduates, and add 2008 and 2009 high school cohort information.
- Creating participation rate and data indicator information for each institution as well as peer institution comparative data (i.e., new student applications, admitted and enrolled students, ACT and GPA averages, male, female and ethnicity comparisons, financial aid percentages, first-year retention rates, and six-year graduation rates).

The Task Force also discussed other possible areas for future discussion: College readiness and high school preparation, remedial and developmental education, student intent—degree completion versus workforce development, underserved students and understanding what other states doing to increase college participation. The group was encouraged by Vice President Donna Eddleman to read the new book by William Bowen and Colleagues, *Crossing the Finish Line*, which is a combination of evidence and analysis regarding college completion at American's public universities.

### Moving Forward and Proposed Timeline

The Task Force will meet on February 5, 2010 to:

- Review the refined participation data.
- Learn more about the research study in progress under the direction of Dr. Susan Madsen from Utah Valley University focusing on why Utah women under-enroll and under-complete at our institutions.
- Present and discuss other state participation strategies.

February-May

- Meet at least twice--Data and definition refinement, explore issues, strategies, collaborations that affect participation, and begin discussions on realistic and incremental statewide and individual institution benchmark and goals.

#### June-September

- Meet at least twice-Benchmark and goals refinement, development of dashboard to chart progress, and compile data and recommendations.
- Report on progress at June's Board of Regents meeting.

#### October

- Conclusions and recommendations will be reported to the Council of Presidents and the Board of Regents.

#### Commissioner's Recommendation

This is an information item only; no formal action by the Board is required. However, the Board is encouraged to read and take note of the information in this memorandum, and note that further follow-up will be handled by the Commissioner's Office as part of the Board's Participation strategic objective.

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William A. Sederburg, Commissioner



January 7, 2010

MEMORANDUM

TO: State Board of Regents

FROM: William A. Sederburg

SUBJECT: USED-IES-NCES-SLDS Grant Program

Background

In early December 2009 an application for the 2009 USED-IES-NCES-SLDS Grant was written and submitted by the Utah State Office of Education. The purpose of the grant money is to build a State Longitudinal Data System (SLDS) that will facilitate research from pre-K through the workforce. The grant requires cooperation and collaboration from multiple Utah State agencies, such as USOE, USHE, UCAT, UEN, UEPC, and DWS.

If funded, the grant will provide over \$9,000,000 to build, maintain and conduct research using a new State Longitudinal Data System over the next three years (see attachments). A decision on the Grant application by the U.S. Department of Education is anticipated by March or April of 2010.

Commissioner's Recommendation

This item is for information only.

WAS/CKM /JAC  
Attachments

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William A. Sederburg, Commissioner

## Utah Application for 2009 USED-IES-NCES-SLDS Grant Program Utah Data Alliance (UDA)

Utah has a well-established history of strong student longitudinal data systems in the K-12 range of public education. Utah public education systems fulfill, in part or completely, most of the seven capabilities and twelve elements that the statewide longitudinal data system (SLDS) request for application prescribes. The objectives and outcomes of this Utah Data Alliance (UDA) project can be summarized as the fulfillment of the entire set of SLDS requirements. Some of these requirements must be completed while others need improvements-- most notably in the availability of data for decision-making.

The fulfillment of these requirements brings several state agencies together, first to share their de-identified data, and then to coordinate the analysis and research using those data. This work allows the partner agencies to answer questions about their policies, programs and practice. One can visualize the resulting system as a hub-and-spoke configuration with the partner agencies on the ends of the spokes and shared data at the hub.

The Utah Education Network (UEN) will build and manage the Utah Data Alliance Data Share (UDADS) to maintain those data, while the other agencies provide and consume needed data from UDADS. The Utah Education Policy Center (UEPC) also plays a key role in the project. The UEPC provides overall data and research coordination functions while pursuing its own and contracted research projects using the UDADS.

This application describes the development and delivery of numerous tangible outcomes (e.g. human resources, tools, databases, organizational and management structures, and processes) that complete all seven capabilities and twelve elements prescribed by the grant request for applications. These tangible or enabling outcomes provide the capacity to achieve answers to multiple categories of education and workforce policy, practice and program questions. The application describes those questions the UDA partners will address with the resources provided by the UDA. The enabling outcomes include:

- 1) **Human resources are the major component of the project** - Numerous positions and roles are needed. Business and systems analysts will define the needed systems, processes and procedures. IT specialists working with the analysts will build the data warehouse. Trainers will ready the data analysts and researchers so they can effectively use the data. Moreover, those data analysts, statisticians and researchers will answer the policy, practice and program questions.
- 2) **UDADS** - UDADS is the project's primary technical and enabling outcome. It will be constructed and updated through scheduled import of data from partner agencies. UDADS will transform, clean and load the data and integrate them into an accessible and timely data store for the analysts, statisticians and researchers.
- 3) **Project management and data governance** - Management of UDA's data, processes and procedures is vital not only in the initial development phases of the project, but in the following years as the teams in the partner agencies work on individual research questions and collaborate on shared outcomes. During the initial period, this work will take the form of project management. As the UDADS becomes operational, management roles will shift towards data governance and the coordination of data access and research. The UDA will emphasize sound data management and governance practice throughout the project.
- 4) **Training and staff development** - Those using the data need to understand the semantics and the structure of the data as well as the business intelligence tools used to work with those data. Training and staff development must be ongoing throughout the project.

### Budget Information Non-Construction Programs (ED 524) – Section C

Budget Category	UDA Partner	Position/Resource	rate unit	FTE units	Yrs	Year 1	Year 2	Year 3	Total
SALARIES	USOE	Data Analyst/Statistician	\$33/hr	1.00	2.00		68,640	68,640	137,280
		Information Analyst/Trainer	\$27/hr	1.00	2.00		56,160	56,160	112,320
		IT Analyst	\$32/hr	1.00	2.00	66,560	66,560		133,120
		Research Asst	\$23/hr	1.00	3.00	47,840	47,840	47,840	143,520
		<b>Total USOE Salaries</b>		<b>4.00</b>		<b>114,400</b>	<b>239,200</b>	<b>172,640</b>	<b>526,240</b>
	UCAT	Data Analyst/Statistician	\$33/hr	1.00	2.00		68,640	68,640	137,280
		Information Analyst/Trainer	\$27/hr	0.50	1.00	28,080			28,080
		IT Analyst	\$32/hr	0.50	2.50	33,280	66,560	66,560	166,400
		Research Asst/Intern	\$23/hr	0.50	2.00		23,920	23,920	47,840
		<b>Total UCAT Salaries</b>		<b>2.50</b>		<b>61,360</b>	<b>159,120</b>	<b>159,120</b>	<b>379,600</b>
	USHE	Data Analyst/Statistician	\$33/hr	1.00	2.00		68,640	68,640	137,280
		Information Analyst/Trainer	\$27/hr	0.50	1.00		28,080		28,080
		Research Asst/Intern	\$23/hr	0.50	2.00		23,920	23,920	47,840
		IT Analyst	\$32/hr	1.00	2.50	33,280	66,560	66,560	166,400
		<b>Total USHE Salaries</b>		<b>3.00</b>		<b>33,280</b>	<b>187,200</b>	<b>159,120</b>	<b>379,600</b>
	DWS	Data Analyst/Statistician	\$33/hr	1.00	2.00		68,640	68,640	137,280
		Information Analyst/Trainer	\$27/hr	0.50	1.00	28,080			28,080
		IT Analyst	\$32/hr	0.50	2.50	33,280	33,280	16,640	83,200
		<b>Total DWS Salaries</b>		<b>2.00</b>		<b>61,360</b>	<b>101,920</b>	<b>85,280</b>	<b>248,560</b>
	UEN	Mgr	\$32/hr	1.00	3.00	67,000	69,000	71,000	207,000
		Warehouse Data Architect	\$42/hr	1.00	3.00	88,000	91,000	94,000	273,000
		Warehouse Data Architect	\$42/hr	1.00	3.00	88,000	91,000	94,000	273,000
		(ETL)	\$34/hr	1.00	3.00	70,000	72,000	74,000	216,000
		(ETL)	\$34/hr	1.00	3.00	70,000	72,000	74,000	216,000
		Systems Administration	\$33/hr	1.00	3.00	69,000	71,000	73,000	213,000
		Data Quality Auditor	\$32/hr	1.00	3.00	67,000	69,000	71,000	207,000

	<b>Total UEN Salaries</b>	<b>7.00</b>	<b>519,000</b>	<b>535,000</b>	<b>551,000</b>	<b>1,605,000</b>
<b>UEPC</b>	Director	0.25 3.00	28,500	28,500	28,500	85,500
	Research Coordinator/Grant Mgr	1.00 3.00	75,000	75,000	75,000	225,000
	Data Analysts/Statisticians	2.00 3.00	130,000	130,000	130,000	390,000
	Research Executive Assistant	1.00 3.00	40,000	40,000	40,000	120,000
	Research Associate	0.50 3.00	22,500	22,500	22,500	67,500
	Graduate Research Assistants (2)	1.00 3.00	48,000	48,000	48,000	144,000
	<b>Total UEPC Salaries</b>	<b>5.75</b>	<b>344,000</b>	<b>344,000</b>	<b>344,000</b>	<b>1,032,000</b>
<b>ALL SALARIES TOTALS</b>		<b>24.25</b>	<b>1,133,400</b>	<b>1,566,440</b>	<b>1,471,160</b>	<b>4,171,000</b>

<b>BENEFITS</b>	<b>USOE</b>	Data Analyst/Statistician	36%	1.00 2.00	0	24,710	24,710	49,421
		Information Analyst/Trainer	36%	1.00 2.00	0	20,218	20,218	40,435
		IT Analyst	36%	1.00 2.00	23,962	23,962	0	47,923
		Research Asst/Intern	36%	0.70 3.00	17,222	17,222	17,222	51,667
		<b>Total USOE Benefits</b>		<b>3.70</b>	<b>41,184</b>	<b>86,112</b>	<b>62,150</b>	<b>189,446</b>

<b>UCAT</b>	Data Analyst/Statistician	30%	1.00 2.00	0	20,592	20,592	41,184
	Information Analyst/Trainer	30%	0.50 1.00	8,424	0	0	8,424
	IT Analyst	30%	0.50 2.50	9,984	19,968	19,968	49,920
	Research Asst/Intern	30%	0.50 2.00	0	7,176	7,176	14,352
	<b>Total UCAT Benefits</b>		<b>2.50</b>	<b>18,408</b>	<b>47,736</b>	<b>47,736</b>	<b>113,880</b>

<b>USHE</b>	Data Analyst/Statistician	30%	1.00 2.00	0	20,592	20,592	41,184
	Information Analyst/Trainer	30%	0.50 1.00	0	8,424	0	8,424
	IT Analyst	30%	1.00 2.50	9,984	19,968	19,968	49,920
	Research Asst/Intern	30%	0.50 2.00	0	7,176	7,176	14,352
	<b>Total USHE Benefits</b>		<b>2.50</b>	<b>9,984</b>	<b>56,160</b>	<b>47,736</b>	<b>113,880</b>

<b>DWS</b>	Data Analyst/Statistician	30%	1.00 2.00	0	20,592	20,592	41,184
	Information Analyst/Trainer	30%	0.50 1.00	8,424	0	0	8,424
	IT Analyst	30%	0.50 2.50	9,984	9,984	4,992	24,960

	<b>Total DWS Benefits</b>		2.00		18,408	30,576	25,584	74,568
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<b>UEN</b>	Mgr	36%	1.00	3.00	24,120	24,840	25,560	74,520
	Warehouse Data Architect	36%	1.00	3.00	31,680	32,760	33,840	98,280
	Warehouse Data Architect	36%	1.00	3.00	31,680	32,760	33,840	98,280
	Warehouse Population (ETL)	36%	1.00	3.00	25,200	25,920	26,640	77,760
	Warehouse Population (ETL)	36%	1.00	3.00	25,200	25,920	26,640	77,760
	Systems Administration	36%	1.00	3.00	24,840	24,840	25,560	75,240
	Data Quality Auditor	36%	1.00	3.00	24,120	25,560	26,280	75,960
	<b>Total UEN Benefits</b>		<b>6.00</b>		<b>186,840</b>	<b>192,600</b>	<b>198,360</b>	<b>577,800</b>

<b>UEPC</b>	Director	36%	0.25	3.00	10,260	10,260	10,260	30,780
	Research Coordinator/Grant	36%	1.00	3.00	27,000	27,000	27,000	81,000
	Data Analysts/Statisticians	36%	2.00	3.00	46,800	46,800	46,800	140,400
	Research Executive Assistant	36%	1.00	3.00	14,400	14,400	14,400	43,200
	Research Associate	36%	0.50	3.00	8,100	8,100	8,100	24,300
	Graduate Research Assistant	10%	1.00	3.00	4,800	4,800	4,800	14,400
	<b>Total UEPC Benefits</b>		<b>5.75</b>		<b>111,360</b>	<b>111,360</b>	<b>111,360</b>	<b>334,080</b>

<b>ALL BENEFITS TOTALS</b>			<b>22.45</b>		<b>386,184</b>	<b>524,544</b>	<b>492,926</b>	<b>1,403,654</b>
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<b>TRAINING AND TRAVEL</b>	<b>USOE</b>	BI Training	\$9,000	5	18,000	27,000		45,000
		SSI Training			15,000	15,000	15,000	45,000
		Yearly SLDS meetings	\$1,250	2	2	2,500	2,500	7,500
		<b>Total Training &amp; Travel</b>			<b>35,500</b>	<b>44,500</b>	<b>17,500</b>	<b>97,500</b>

<b>UCAT</b>	<b>BI Training</b>	<b>\$9,000</b>	<b>5</b>		<b>45,000</b>			<b>45,000</b>
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<b>USHE</b>	BI Training	\$9,000	5			27,000	18,000	45,000
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	Professional Conference	\$2,500	2			5,000	5,000
	<b>Total Travel &amp; Training</b>			0	27,000	23,000	50,000

<b>DWS</b>	<b>BI Training</b>	\$9,000	5	18,000	18,000	9,000	45,000
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<b>UEN</b>	Mgr	\$4K/yr	1	3	4,000	4,000	4,000	12,000
	Warehouse Data Architect	\$4K/yr	1	3	4,000	4,000	4,000	12,000
	Warehouse Data Architect	\$4K/yr	1	3	4,000	4,000	4,000	12,000
	Warehouse Population (ETL)	\$4K/yr	1	3	4,000	4,000	4,000	12,000
	Warehouse Population (ETL)	\$4K/yr	1	3	4,000	4,000	4,000	12,000
	Systems Administration	\$4K/yr	1	3	4,000	4,000	4,000	12,000
	<b>Total UEN Training and Travel</b>				24,000	24,000	24,000	72,000

<b>UEPC</b>	HML Licenses				2,500			2,500
	Geographic Information Syst	500	4		2,000			2,000
	Conferences to report findings				7,500	7,500	7,500	22,500
	Reseach Seminars				3,500	3,500	3,500	10,500
	<b>Total UEPC Training</b>				15,500	11,000	11,000	37,500

<b>ALL TRAIN &amp; TRAV TOTALS</b>					<b>138,000</b>	<b>124,500</b>	<b>84,500</b>	<b>347,000</b>
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<b>EQUIPMENT</b>	<b>USOE</b>	Laptops	\$2,000	4	8,000			8,000
		SSI Assessments			198,000	99,000	99,000	396,000
		<b>Total Equipment</b>			<b>206,000</b>	<b>99,000</b>	<b>99,000</b>	<b>404,000</b>

<b>UCAT</b>	Laptops	\$2,000	3	6,000				6,000
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<b>USHE</b>	Laptops	\$2,000	4	2,000	6,000	0		8,000
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<b>DWS</b>		Desktops	\$1,500	3	4,500			4,500
<b>UEN</b>		ETL - Software Solutions			300,000	60,000	60,000	420,000
		Metadata Repository/Data Dictionary Management			250,000	50,000	50,000	350,000
		Warehouse DB Software			400,000	80,000	80,000	560,000
		BI Tools, Analytic, and other software*			0	0	0	0
		Production/Development Server Hardware			90,000	13,500	13,500	117,000
		Storage 10TB			80,000	8,000	8,000	96,000
		Backup/Recovery Client						
		License for DBs			10,000	2,000	2,000	14,000
		Data Center Racks. Power, Cooling	\$6000/yr	2 3	12,000	12,000	12,000	36,000
		Telcom support Equipment	\$1000/yr	3 3	3,000	3,000	3,000	9,000
		PC/Laptop	\$3,500	6	21,600			21,600
		<b>Total UEN Equipment</b>			1,166,600	228,500	228,500	1,623,600
<b>UEPC</b>		HLM Licenses			2,500			2,500
		Geographic Information Systems Licenses	250	4	1,000	1,000	1,000	3,000
		Desktop equipment	1,500	4	6,000			6,000
		<b>Total UEPC Equipment</b>			9,500	1,000	1,000	11,500
<b>ALL EQUIPMENT TOTALS</b>					<b>1,394,600</b>	<b>334,500</b>	<b>328,500</b>	<b>2,057,600</b>
<b>SUPPLIES</b>	<b>UEPC</b>	<b>Office supplies and production costs</b>			5,000	5,000	5,000	15,000
<b>CONTRACTS</b>	<b>USOE</b>	SSID/SIS Integration			400,000	200,000		600,000
		Discipline data added			120,000	50,000		170,000
		Additional pre-K data			148,750			148,750
		<b>Total USOE Contracts</b>			668,750	250,000	0	918,750

UEN	Consulting	\$100/hr	100,000	50,000	25,000	175,000
ALL CONTRACTS TOTALS			768,750	300,000	25,000	1,093,750
ALL CATEGORIES GRAND TOTALS			3,825,934	2,854,984	2,407,086	9,088,004

**Notes:**

1. In preparing this spreadsheet the USOE understood the RFA asked the percents effort of each position. These columns were omitted to control the complexity of the spreadsheet. Since there are only one to three years involved for a given position the portions of the budget expended by year are apparent by reviewing the dollar amounts per year and the total to all three.