CCHE Agenda

February 7, 2003
Red Rocks Community College
Lakewood, Colorado
1:00 p.m.

I. Approval of Minutes

II. Reports

A. Chair's Report – Lamm
B. Commissioners' Reports
C. Advisory Committee Reports
D. Public Comment

III. Consent Items

A. Proposal: Theater (BA/BFA) at Metropolitan State College of Denver – Kuepper

IV. Action Items

A. University of Colorado Health Sciences Center 2002 Supplementals to Master Plan – Johnson (90 minutes)
B. 2003-2004 Student Financial Aid Budget Parameters – Lindner (10 minutes)
C. Four University of Colorado Health Sciences Center at Fitzsimons Projects for FY 2003-2004 and FY 2002-2003 Funding – Hoffman (15 minutes)
D. Freshman Student Housing Project - Colorado State University – Johnson (15 minutes)
E. "Quality for Colorado" Tuition Increases – Burnett (45 minutes)

V. Items for Discussion and Possible Action

A. Proposal: Doctor of Philosophy in GeroPsychology at the University of Colorado at Colorado Springs – Kuepper

VI. Written Reports for Possible Discussion

A. FY 2003 Student Fee Analysis – Mullen
B. Concept Papers
   (1) Master of Science and Doctor of Philosophy in Biomedical Engineering at Colorado State University – Kuepper
C. Degree Program Name Changes – Evans

TOPIC: CHAIR'S REPORT

PREPARED BY: PEGGY LAMM

This item will be a regular monthly discussion of items which the Chair feels will be of interest to the Commission.

TOPIC: COMMISSIONERS' REPORTS

PREPARED BY: COMMISSIONERS

This item provides an opportunity for Commissioners to report on their activities of the past month.

TOPIC: ADVISORY COMMITTEE REPORTS

PREPARED BY: ADVISORY COMMITTEE MEMBERS

This item provides an opportunity for Commission Advisory Committee members to report on items of interest to the Commission.

TOPIC: PUBLIC COMMENT

PREPARED BY: TIM FOSTER

This item provides an opportunity for public comment on any item unrelated to the meeting agenda. A sign-up sheet is provided on the day of the meeting for all persons wishing to address the Commission on issues not on the agenda. Speakers are called in the order in which they sign up. Each participant begins by stating his/her name, address and organization. Participants are asked to keep their comments brief and not repeat what others have said.

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TOPIC: **PROPOSAL: THEATRE (BA/BFA) AT METROPOLITON STATE COLLEGE OF DENVER**

PREPARED BY: **WILLIAM G. KUEPPER**

I. SUMMARY

Metropolitan State College of Denver (MSCD) has submitted a proposal for a degree in Theatre Bachelor of Arts (B.A.) and Bachelor of Fine Arts (B.F.A.) degree program. MSCD currently offers a Theatre concentration within its existing Speech Communication degree program. The proposed degree program prepares students to enter the arts and entertainment profession with a broad set of skills, enabling them to pursue several career options, primarily in theatre, film, and television, and other entertainment industries. The B.A. option is a liberal arts degree while the B.F.A. is a professional course of study.

MSCD's Theatre degree program is designed to be completed in 120 hours. All students will take a common 30-credit core of Theatre courses and 36 hours of general education courses. Students pursuing the BA will take another 12 credit hours of Theatre electives. Students doing the BFA will take 46 credits in Theatre courses to complete the major. The balance of credits are free electives.

The program expects to enroll 46 students in its initial year. At full implementation it projects an enrollment of 66 and 11 graduates per year. The majority of the students are expected to complete the BFA option.

Several factors support the establishment of the proposed program, including:

1. A long history of a successful theatre program at MSCD. It has received solid adjudications by theatre critics and was selected to perform a recent production at the Rocky Mountain Theatre Association.
2. The Denver metropolitan area is an important center in the entertainment industry offering excellent opportunities for practica, apprenticeships, and employment.
3. Current faculty are sufficient in number and well qualified to implement the program.
4. Minimal fiscal impact since this proposal merely splits an existing degree program into two separate degrees.
5. The King Center on the Auraria campus offers excellent teaching facilities and performance venues for the program.

MSCD submitted the Theatre proposal to the Commission in October 2001. Because of potential duplication of theatre programs on the Auraria campus, the Commission asked MSCD and UC-Denver to resolve the duplication issue before the proposal would be

considered. The discussions have led to an agreement to collaborate and share courses as well as complementary specializations in the Theatre degree programs of the two institutions (Attachment A).

Commission staff recommend that the Commission approve Metropolitan State College of Denver's proposed degree program in Theatre (BA/BFA).

II. BACKGROUND

The proposal for the B.A. and B.F.A. in Theatre at Metropolitan State College of Denver was submitted in October of 2001. MSCD utilized the services of two external reviewers in reaching their decision to proceed with planning a Theatre degree program. The external experts -- Dr. Donald Seay, of the Department of Theatre/Dance at the University of Central Florida, and Professor James Clauser of the Theatre Arts Department at the University of North Texas -- reviewed the theatre program, assessed the potential for a degree program, and made recommendations on what the institution needed to do if it were to proceed with a degree program in theatre.

Metropolitan State College of Denver has had an active theatre program for over twenty years. It has offered this program as a concentration within the Speech Communication or Communication Multi-major. The recent completion of the King Performing Arts Center on the Auraria campus provides the opportunity for MSCD to develop and implement a B.A. and B.F.A. degree program in theatre.

The proposed Theatre degree program is intended to prepare students to enter the arts and entertainment profession with a broad set of skills, enabling them to pursue several different career options, primarily in theatre, film and television, and other entertainment industries. The flexibility offered by the major's BA or BFA tracks, will allow students to pursue a major that best meets their interests or needs.

The BA theatre degree is offered for students whose potential goal is to attend graduate school, to teach in secondary school, or to pursue related work in theatre other than those emphases offered in the BFA.

The BFA degree will be a professional course of study that will provide students with specialized training in technical/design and musical theatre that will enable them to develop the necessary skills to enter the theatre job market. The BFA degree in theatre has become recognized as the standard professional degree in many areas of the arts and entertainment industry.

The general goals of this program are to provide:

1. An increased number of graduates to meet the demand for trained theatre professionals in Denver and in Colorado;
2. Professional, specialized, entry-level training for students who wish to pursue a theatre career immediately upon graduation;
3. Opportunities for discovery-based learning in several areas of theatre for individuals beginning careers, changing careers, or seeking advanced skill training for their present theatre careers;
4. An opportunity for students studying theatre at the state's community colleges who wish to transfer to MSCD to continue their course of study (to facilitate this, articulation agreements are being developed);
5. A solid foundation for graduate work in theatre in other institutions, especially the graduate theatre programs at Colorado institutions;
6. Enhancement of present K-12 partnerships with public schools, local professional organizations, and professional and non-professional theatres;
7. Preparation for teacher licensure in drama.

The degree program also has several specific outcomes of its graduates. According to the degree proposal, a student completing either the B.A. or B.F.A. in Theatre will be able to:

1. Demonstrate a solid understanding of the business of theatre as it applies to their chosen concentration, especially an understanding of how to secure and maintain employment;
2. Demonstrate the ability to exercise the skills of their chosen concentration in cooperation with the other theatre skill areas;
3. Utilize theatre as a unifying principle to order and integrate their learning in other disciplines;
4. Demonstrate the ability to think logically and critically, apply accepted principles of art criticism, and verbalize and write coherent and insightful criticism of dramatic literature and theatre production;
5. Articulate the role of the arts, and theatre specifically, in diverse cultures represented in the city, state, and country;
6. Work effectively and productively as members of groups;
7. Demonstrate the necessary discipline, attitude, perseverance, and focus necessary for a career in the theatre;
8. Demonstrate problem-solving skills in the application of their theatre skills to both laboratory experiences and public-performance opportunities.

A student completing the B.F.A. will be able to:

1. Demonstrate basic professional skills in one of two areas: technical/design or musical theatre.

2. Provide professional portfolios demonstrating their experience, knowledge, and skills. Students applying to the program will be subject to all MSCD admissions, transfer and graduation requirements. While there are no additional admission requirements for entry into the BA program, students wishing to enter the BFA program will need to demonstrate their skills and be accepted into the program by a jury panel. Students may move from the BA to the BFA program after meeting the appropriate criteria and acceptance by the jury panel. The BA will have no enrollment limitations, but admission into the BFA will be limited: 20 students per year in the Music Theatre program and 20 students per year in the Applied Theatre Technology and Design. Transfer articulation will be developed with appropriate community colleges.

Either option is designed to be completed in 120 credits. The curriculum consists of a 30-credit core taken by all students in the program. Students pursuing the BA will take another 12 credit hours of Theatre courses for a total of 42 credits. BFA students, in addition to the common core, will take a 17 credit-hour BFA core and an additional 29 credits in either Music Theatre or Applied Theatre Technology and Design for a total of 76 credits in the major. While the program is designed for incoming freshmen, transfer students who meet the admission requirements may be admitted to either the B.A. or B.F.A. program.

Graduation Requirements for B.A. in Theatre		Subtotal	Total
		36	
General Studies	33		
Multicultural	3		
Major		42	
Theatre Common Core Courses	30		
Theatre B.A. Electives	12		
Minor		18	
Electives		24	
Total for the B.A. in Theatre			120

Graduation Requirements for B.F.A. in Theatre		Subtotal	Total
		36	
General Studies	33		
Multicultural	3		
Major		76	
Theatre Common Core Courses	30		
….B.F.A. Required Courses	17		
Theatre Concentration	29		
Electives		8	
Total for the B.F.A. in Theatre			120

Theatre Core

			Semester Hours
ENG	1120	Introduction to Drama	3
THE	2201	The Speaking Voice in Performance	2
THE	2210	Introduction to Theatre	3
THE	2220	Techniques of Acting I	3
THE	2240	Introduction to Stagecraft	3
THE	3200	Oral Interpretation	3
THE	3280	Stage Directing	3
THE	4200	Reader's Theatre (Senior Experience)	3
THE	4260	Theatre: Practicum I	1
Pooled Courses from University of Colorado–Denver (UCD)			
THTR	3610	Theatre Development I (Theatre History)	3
THTR	4610	Theatre Development II (Theory and Criticism)	3
Subtotal			30

Theatre Major for Bachelor of Arts (B.A.)

			Semester Hours
THE	2980	Beginning Internship: Theatre	1-12
THE	3220	Stage Movement	3
THE	3240	Theatre Improvisation Techniques	3
THE	3980	Advanced Internship: Theatre	1-12
THE	4210	Variable Topics in Theatre (maximum of 9 credit hours)	1-3
THE	4220	Creative Dramatics for the Classroom Teacher	3
Subtotal of Electives*			12

Theatre Major for Bachelor of Fine Arts (B.F.A)

			Semester Hours
THE	2260	Music Theatre History and Performance	3
THE	2270	Production Analysis: Process and Technology	3
THE	3980	Advanced Internship: Theatre	6
THE	4270	Theatre: Practicum II	2
Subtotal			14

Theatre Major for Bachelor of Fine Arts with a Concentration in Music Theatre

			Semester Hours
HPL	1160	Jazz Level I	2
HPL	1240	Tap Dance I	2
MUS	1110	Music Theory I	3
MUS	1120	Music Theory Lab I	1
MUS	1130	Music Theory II	3

MUS	1140	Music Theory Lab II	1
MUS	161B	Class Piano I	1
MUS	162B	Class Piano II	1
MUS	171A	Private Instruction I–Voice	2
MUS	172A	Private Instruction II–Voice	2
Select 2 hours from the following:			
MUS	2810*	Ensemble	1
MUS	3810*	Ensemble	1
THE	2230	Techniques of Acting II	3
THE	3220	Stage Movement	3
THE	3230	Acting III: Styles of Acting	3
Subtotal			**29**

*Ensembles must be chosen from those appropriate to the student's concentration. Students majoring in music performance must enroll in an ensemble during each semester of full-time residence.

Theatre Major for Bachelor of Fine Arts with a Concentration in Applied Theatre Technology and Design (ATTD)

Required Courses			Semester Hours
ART	1100	Basic Drawing I	3
ITS1430	Industrial Drawing		2
THE	2250	Stage Management	3
THE	3250	Introduction to Production Design and Scenography	3
THE	3270	Introduction to Stage Lighting and Sound	3
Subtotal			14

Elective Courses (19 credit hours)			
THE	3210	Scene Painting	3
THE	4210	Variable Topics in Theatre (maximum of 9 credit hours)	1-3
THE	4240	Advanced Stage Craft and Applied Scene Technology	3
THE	4250	Advanced Scene Design: Applied Technology	3
THE	4280	Advanced Lighting: Applied Technology and Design	3
THE	4290	Advanced Sound: Applied Technology and Design	3
Pooled Courses from University of Colorado–Denver (UCD)			
THTR	2740	Costume Design and Make-Up	3
Subtotal of Electives*			19

II. STAFF ANALYSIS

In analyzing the concept paper and the program proposal, Commission staff considered the

role and mission of MSCD, program duplication, program need, and quality issues including curriculum, and resources.

Role and Mission and Program Duplication

The concept paper for the proposed degree was on the Commission agenda at its meeting of October 7, 1999. Commission noted at that time that the proposed program was consistent with the institution's role and mission as an urban state college.

The Commission did raise questions about program duplication with UC-Denver and asked that these issues be discussed in the full proposal. After a 1 1/2 year of lengthy discussions and differentiation involving the Provosts of both institutions, the Commission staff believes that the duplication issue has been adequately addressed in the full proposal. Agreement was reached on the focus and scope of the theatre programs at the two institutions. The results of those discussions and negotiations are contained in a comprehensive report submitted to the Commission in December 2002. After reviewing this report, Commission staff believe that the issue of duplication has been addressed to the satisfaction of the two institutions and that resolution is responsive to the concerns of the Commission.

Program Need and Demand

The proposed program will have the greatest impact on the supply of persons trained in the technical and production side of the performing arts. The Denver metropolitan area is a major center in the entertainment industry. The proposal notes that the Denver Center for the Performing Arts alone has over 100 artistic/technical staff.

Describing the national scene in his external review of the MSCD program, Dr. Donald Seay writes:

> There are shortages of trained personnel in several specialized theatre areas. These shortages are most pronounced in musical theatre/dance and all areas of design and technical theatre. These shortages are even more acute with regard to recruiting trained personnel from under-represented areas. Colleges and Universities who have strong programs in musical theatre/dance and design and technical theatre will find ready employment for their graduates.

The Colorado Business Committee for the Arts, October 1998 executive summary: *The Economic and Social Impacts of the Arts in Metro Denver*, states that "scientific and cultural organizations are responsible for many types of impacts on the metropolitan Denver community. As an industry, these organizations create sales, employment and earnings for the regional economy. In the drive for artistic excellence and accessibility, the arts contribute to the quality of life in metropolitan Denver."

It is expected that most MSCD's graduates will be employed in Colorado. According to the

Colorado Business for the Arts, there were 27,000 artists and workers in the state of Colorado. This 27,000 accounted for 1.5 percent of the state's labor force.

The proposed program responds to student interest. An average of nine students per year graduate from the program. The projections of enrollment in the program (Attachment B) show an initial enrollment of 46 students. This is based on current enrollments in the theatre concentration. Because of the number of part-time students at MSCD, the graduation numbers do not approximate those from an institution at which most students attend full time.

If the new program is approved, the theatre concentration in Speech Communication will be discontinued, with students in that concentration will be given the option of transferring to the new program or will be allowed to complete the concentration.

Program Quality and Resources

The governing board is required to consider the quality of the proposed program, the capacity of the institution to offer the new degree, and the cost-effectiveness of the program. Commission staff rely substantially on governing board staff involvement and the quality of its review.

The program was planned with assistance of two external reviewers. It has been designed to comply with National Association of Schools of Theatre (NAST) standards. Accreditation will be sought.. The technical standards of the United States Institute of Theatre Technology (USITT) and the Entertainment Services and Technology Association (ESTA) have been utilized to shape the technical BFA. There are plans to eventually seek teacher licensure in drama for the BA.

The program can be mounted without the need of additional space. The King Center provides outstanding instructional space, including a black-box theatre for the exclusive use of MSCD. The Center also has excellent performance venues for theatre productions.

The current size of the Theatre faculty is adequate to implement the proposed degree program. The budget proposed for the program seems appropriate. (see Attachment C)

IV. STAFF RECOMMENDATION

That the Commission approve Metropolitan State College of Denver's request for a Bachelor of Arts (B.A.) and Bachelor of Fine Arts (B.F.A.) degree program in Theatre.

Attachment A

COLLABORATIVE THEATRE DEGREE PROGRAMS AT MSCD and UCD

December 3, 2002

Metropolitan State College of Denver (MSCD) and the University of Colorado at Denver (UCD) have a long history of offering collaborative degree programs in Theatre and related disciplines on the Auraria Campus. While not coordinated degrees in the strictest of CCHE's definitions, these collaborative programs make exceptionally efficient use of Auraria facilities, faculty, and instructional resources. This document describes these efficient uses, each institution's distinctive degree focus, and the opportunities available to students to diversify their degrees by taking coursework on a space-available basis through the common pool of courses at each institution. This document also describes initiatives designed to further focus each institution's programs.

MSCD's strength rests in its commitment to theatre as a liberal art, its established program in music theatre, and its ability to prepare technicians for work in a variety of entertainment technology-related careers. UCD's strength rests in its pre-professional preparation of actors, directors, writers and designers who can move between the live theatre and film, video and television environments. The differences in mission between the two programs yield a different mix of theatre careers among graduates (see Appendices 1 & 2). A large number of MSCD Theatre graduates are working in applied technology and theatre management careers while a large number of UCD Theatre graduates are working in performance related careers.

Employment opportunities abound for students from both programs. Theatre students develop multiple skills that are applicable to working in all areas of the arts community. A recent report by the Colorado Business Committee for the Arts (CBCA) stated that $1.083 billion in Denver-area economic impact was generated in 2001 with 9.1 million people attending cultural events. The study notes that "Cultural organizations employed nearly 7,700 people in 2001. Collectively, cultural institutions are the 6th largest non-government employer in the Denver area." It should be noted that this report is based on data collected from member organizations of the Scientific & Cultural Facilities District (SCFD) and therefore does not include people employed in governmental and non-SCFD cultural organizations nor those employed in arts-related positions in public primary, secondary, and higher education institutions.

Program Requests

Considering the above, MSCD and UCD seek the approval of the Colorado Commission on Higher Education to offer the degree programs listed below on the Auraria campus. MSCD is requesting one new degree with two degree titles: Theatre (BA/BFA). UCD is requesting a change of name and an additional degree title for a currently existing degree: Theatre (BA) becomes Theatre, Film and Television (BA/BFA). The currently existing UCD degree in Fine Arts (BFA) remains the same

except the Film/Video Production concentration moves to the degree with the changed title.

MSCD Proposed Program

Name of Program: Theatre [New Program]
Degree Titles: BA/BFA

BA (Theatre)
- A liberal arts curriculum
- 30 hour core (same core as BFA, identical courses)
- Requires a minor

BFA (Theatre)
- A professional curriculum with two concentrations
- 30 hour core (same as BA core, identical courses)
- No minor required
- Concentrations:
  - Music Theatre
  - Applied Theatre Technology

MSCD Currently Approved Theatre-Related Programs

- BA in Speech Communication with a concentration in Theatre (requires a minor)
- Individualized Degree Program with an emphasis in theatre

The proposed program is are currently offered under the Theatre concentration in the Speech Communication (BA) degree program or as IDPs. Students would like their degree name to be theatre. Enhanced levels of personnel, operation, equipment, scholarships, and facility resources for this program have been a funding priority for the School of Letters, Arts and Sciences since 1987.

There are currently 50 students pursuing the Theatre concentration. MSCD's proposal for this degree program has been scrutinized and approved at all prior levels and is now awaiting final CCHE approval.

UCD Proposed Programs

Name of Program: Theatre, Film and Television [Change of Name]
Degree Titles: BA/BFA [Additional Degree Title: BFA]

BA (Theatre, Film and Television)
- A liberal arts curriculum

- 34 hour basic core (same basic core as BFA, identical courses)

BFA (Theatre, Film and Television)
- A professional curriculum with six concentrations
- 34 hour basic core (same basic core as BA, identical courses)
- Concentrations
  - Performance — combined theatre and film
  - Design & Technology — combined theatre and film
  - Production Development — combined theatre and film
  - Writing and Directing — combined theatre and film
  - Cinematography & Videography — film
  - Post Production — film

Name of Program: Fine Arts [Currently Existing Program]
Degree Title: BFA

- This program would remain with five concentrations:
  - Drawing
  - Multimedia Studies
  - Painting
  - Photography
  - Sculpture

UCD Currently Approved Theatre-Related Programs

- BA in Theatre with three concentrations:
  - Acting/Directing
  - Design/Technology
  - Integrated Studies

- BFA. in Fine Arts with six concentrations:
  - Drawing
  - Film/Video Production
  - Multimedia Studies
  - Painting
  - Photography
  - Sculpture

The above programs would be created from existing programs as follows:

1. The current degree in Theatre (BA) would be renamed Theatre, Film and Television (BA/BFA).

2. Current Theatre concentrations in Acting/Directing, Design/Technology, and Integrated Theatre would be phased out and combined with other related emphasis areas in film/video as indicated above. BA/BFA degree titles would be used as appropriate for each concentration.
3. The current degree in Fine Arts (BFA) would be retained for visual arts students (painting, drawing, photography, sculpture, multimedia studies, 3-D graphics and digital animation). Current BFA students who are emphasizing film and video production (writing/directing, cinematography/videography, post production) would be moved into the appropriate concentrations in the renamed Theatre, Film and Television degree.

Program Descriptions

MSCD

The Theatre Program at The Metropolitan State College of Denver focuses on giving students a firm foundation in the Theatre discipline, on developing skills for a variety of theatrical and non-theatrical careers, and educating lifelong learners.

The Bachelor of Arts (BA) program serves the needs of a wide range of students. The BA is a strong liberal arts degree that prepares students to enter the workforce immediately on graduation, to enter graduate school in theatre or a related field, or to seek secondary teacher licensure.

The Bachelor of Fine Arts (BFA) program allows students to specialize either in *Music Theatre or Applied Theatre Technology.* Graduates may enter the theatre job market where there is a large demand for professionals who understand and can apply the increasingly sophisticated areas of theatre technology. As the only higher education member of the *Entertainment Services Technology Association* (ESTA), the program is designed to educate the many professionals who work on and off-stage in successful amateur and professional productions.

The Music Theatre concentration is a rare partnership between MSCD's Music and Theatre programs, both of which are mature programs. The Music Program has been accredited by the National Association of Schools of Music (NASM) for 26 years. The Theatre Program has been carefully built since 1987 by Dr. Marilyn Hetzel, director of the program.

The curriculum of the BA/BFA degree has the following structure:

- All students are required to complete a unified core of 30 semester hours;
- All BA students will complete 12 additional semester hours in addition to the 30-hour common core. These are electives from arts-related fields. In choosing classes, students

can be advised into specialized theatre areas. The core and these electives complete the 42-hour major.

- All BFA students must complete a BFA core of 17 semester hours, in addition to the 30-hour common core, and another 33 semester hours in their area of concentration, whether Music Theatre or Applied Theatre Technology. In all, the BFA students have an 80-hour major. BFA academic majors in other colleges and universities range from 65-98 semester hours.

UCD

The Department of Theatre, Film and Television and the University of Colorado is committed to the development and production of new work, nurturing theatre, film and television makers for the 21st Century. UCD offers a conservatory studio-based curriculum for its theatre, film and television students. New students and transfer students are enrolled in a foundation studio during the first year that provides an in-depth study of the aesthetics and basics of the arts of theatre, film and television. Additional foundation discipline-specific courses are taken concurrently with the foundations studio in the first year. In the second year, all theatre, film and television students are enrolled in a sophomore studio that will further examine the various theatre, film and television disciplines and their relationship to and intersections with one another. Additional discipline-specific courses are taken concurrently with the sophomore studio. In the junior and senior years, the theatre, film and television students will branch into more specialized discipline-specific studios that will center around the theatre production program (for theatre students) and the film and television production program (for film and television students). Additional discipline-specific courses will be offered at the upper division, with a focus on the intersection of the various skills as they relate to theatre, film and television. Because of the nature of a studio program, most skill-developing classes double the contact hour per credit hour.

The curriculum of the BA/BFA degree has the following structure:

- All students are required to complete a unified core of 34 semester hours
- All students are required to complete 9 hours of allied arts classes
- All BA students will complete 15 additional semester hours in addition to the core and allied art classes. These are electives from specialized theatre, film and video production television areas. The core and these electives complete the 58-hour major.
- All BFA students must complete an additional 36 semester hours in their area of concentration. In all, the BFA students have a 79-hour major. BFA academic majors in other colleges and universities range from 65-98 semester hours.

Summary of Curricula

	MSCD		UCD	
	B.A.	**B.F.A.**	**B.A.**	**B.F.A.**
Core	30	30	34	34
Allied Arts			9	9
B.F.A Core		17		
Additional B.A.	12		15	
Concentration		33		36
Total	**42**	**80**	**58**	**79**

Accreditation

The National Association of Schools of Theatre (NAST) requires a minimum of 78 hours in a BFA Theatre major for accreditation. To complement MSCD's Music accreditation, MSCD's Theatre Program hopes to pursue NAST accreditation after the program is fully approved. The UCD Theatre program will pursue NAST accreditation beginning with the 2003-04 academic year.

MSCD/UCD Overview of Collaboration

The variety of faculty, curriculum, course work, pedagogical approaches, and productions—driven by differing institutional missions—provides a uniquely enriching campus theatre environment. Together the collaborative theatre programs at MSCD and UCD provide a broader array of opportunities and choices for Auraria theatre students than can typically be found on a campus with only a single theatre program.

Courses

Courses that can be taken as part of the common pool are listed in the following sections titled Foundation-Level Common Pool Courses and Specialized Common Pool Courses. MSCD and UCD will publish a joint four-year theatre course rotation list that will facilitate progress toward graduation. In addition, students' ability to use courses from either institution to meet their degree requirements is summarized in *Impact of the Shared/Pooled Courses on the Requirements for the Theatre Majors.* Further details are in Appendix 4.

Productions

Students from either theatre program may participate in productions and performance projects given by both institutions.

Presentations and Workshops

Guest artists, faculty, and other theatre presentations and workshops are made available to students from both institutions. Because of the existence of two collaborative theatre

programs on the campus, students have opportunities to attend a much broader number and spectrum of activities (at least a dozen events per year).

Programs
Faculty, staff, and students have worked and continue to work collaboratively on special joint projects such as the Rocky Mountain United States Institute for Theatre Technology conference (Spring 1999), the King Center Grand Opening (October 2001), and the upcoming Rocky Mountain Theatre Association Festivention (February 2003).

Facilities
The MSCD/UCD Theatre programs make exceptionally efficient use of Auraria facilities by sharing common production facilities and support spaces (with the CCD Theatre program as well) in the King Center and Arts building. Detailed advance planning and creative scheduling provide the foundation for effective, successful collaboration between the theatre programs. All theatre facilities on the campus are being fully utilized by these existing programs.

Advising
This collaborative degree approach provides an abundance of opportunities or pathways for students who enroll at the Auraria campus. First-year and transfer students may matriculate to either institution, depending on their ability to meet differing admission requirements, level of financial need, level of preparation, and experience and emphasis area in theatre and/or theatre, film and television. Students who enter knowing that they have an interest in music theatre performance or applied theatre technology would be advised to matriculate to MSCD, providing the student meets basic admission requirements. Students who enter with a professed interest in directing, acting, writing, or design in theatre, film and television would be advised to matriculate to UCD, providing the student meets basic admission requirements. Students who are undecided about their area of emphasis, or who are pursuing a broad-based liberal arts degree would be advised that either institution would provide that experience through their respective BA programs.

Foundation-Level Common Pool Courses

MSCD foundation courses are taught as discrete and independent courses in a traditional liberal-arts based lecture/lab format that meets for three contact hours per week. UCD courses are pre-professional, conservatory-based studio courses that meet for six contact hours per week. The content and experience in MSCD courses will focus on developing skills and experience for the live theatre. UCD foundations coursework will focus on content and experience for live theatre, film and video.

Specialized Common Pool Courses

Under this proposal, MSCD and UCD agree that students may take one or the other of the following courses on a space-available basis through the common pool of courses to meet degree requirements, thereby offering students at both institutions a variety of training perspectives.

UCD THTR 2520 or MSCD THE 2201	Voice and Diction I
UCD THTR 2531 or MSCD THE 2210	Acting I
UCD THTR 3530 or MSCD THE 2230	Acting II
UCD THTR 3540 or MSCD THE 3280	Directing I
UCD THTR 3520 or MSCD THE 3220	Movement I

In order to offer a range of course options in theatre and theatre-related disciplines unparalleled in any single college or university in the state, the use of the Common Pool concept on the Auraria campus will enable MSCD and UCD to share their non-duplicated course offerings on a space-available basis with students seeking degrees at the sister institution. Under this proposal, the following courses would be placed in the common pool of courses open to students from either institution:

MSCD Common Pool Offerings for UCD BA/BFA Theatre, Film and Television majors

HPL 1160	Jazz Level I
HPL 1240	Tap Dance I
THE 2260	Music Theatre History/Performance
THE 2250	Stage Management
THE 3210	Scene Painting
THE 3250	Introduction to Production Design and Scenography
THE 3270	Introduction to Stage Lighting and Sound Technology
THE 4210	Variable Topics in Theatre
THE 4240	Advanced Stage Craft & Applied Scene Technology
THE 4260	Practicum I
THE 4270	Practicum II
THE 4280	Advanced Applied Lighting Technology

UCD Common Pool Offerings for MSCD BA/BFA Theatre Majors

THTR 3610	History of Theatre
THTR 4610	Drama Theory and Criticism
THTR 2740	Costume and Makeup Design
THTR 3730	Scene Design
THTR 4730	Advanced Scene Design
THTR 2720	Lighting Design

THTR 3720	Advanced Lighting Design
THTR 4540	Directing II
THTR 4550	Playwriting I
THTR 3560	Topics in Theatre
THTR 4760	Topics in Design
FILM 3100	History of Film Production and Technology

Impact of the Shared/Pooled Courses on the Requirements for the Theatre Majors

The pooled courses listed above can be used to satisfy the requirements for MSCD's theatre program in the following ways. More specific details are in an appendix.

MSCD		Credits at MSCD	Credits at UCD	Credits at Either	Total
B.A.	Basic Core	16	6	8	30
	Electives			12	12
	Total for the B.A.	**16**	**6**	**20**	**42**
B.F.A Music Theatre	Basic Core	16	6	8	30
	B.F.A. Core	6		11	17
	Other required	23		10	33
	Total for the B.F.A in Music Theatre	**45**	**6**	**29**	**80**
Applied Theatre Technology	Other required	8		6	
	Electives	7		12	
	Total for the B.F.A in Applied Theatre Technology	**37**	**6**	**37**	**80**

UCD		Credits at UCD	Credits at MSCD	Credits at Either	Total
B.A.	Basic Core	32	0	2	34
	Other Required	18	0	9	27
	Total for the B.A.	**50**	**0**	**11**	**61**
B.F.A Performance	Basic Core	32	0	2	34
	Other required	24	0	21	45
	Total for the B.F.A in Performance	**56**	**0**	**23**	**79**
	Other required	24	0	21	45
	Total for the B.F.A in Design & Tech.	**56**	**0**	**23**	**79**

The areas of **Production Development, Writing & Directing, Cinematography & Videography,** and **Post Production** are currently being coordinated between the two areas in Theatre, Film and

Television.

Current Enrollment

MSCD enrollments (Speech Communication, Theatre Concentration and Theatre minors):

Year	Speech: Theatre		Theatre Minors	Total
2002	50		17	67

UCD enrollments (includes students enrolled in the current Bachelor of Arts in Theatre, BFA majors who are pursuing the emphasis in film/video production, and Theatre minors–there are currently no film/video minors at UCD):

Year	BA Theatre	BFA (Film)	Theatre Minors	Total
2002	53	34	4	91

Graduation Trends

MSCD Speech Communication majors who concentrate in Theatre:

Year	Speech:Theatre		Total
1999	14		14
2000	6		6
2001	8		8
2002	10		10

UCD Bachelor of Arts in Theatre and Bachelor of Fine Arts with a concentration in Film and Video Production:

Year	BA Theatre	BFA (Film conc.)	Total
1999	3	0	3
2000	3	3	6
2001	5	1	6
2002	14	8	22

Reporting Enrollment and Graduation data to CCHE

MSCD and UCD will report enrollment and graduation data for their respective programs collectively, without separating BAs from BFAs, because the concentrations are simply differing paths within a single degree program at each institution.

APPENDIX 1: Employment related to Degree: 1998-2002 Graduates
University of Colorado at Denver

The University of Colorado at Denver graduated students with a joint degree (the Bachelor of Arts) in Communication and Theatre from 1973-1998 in the College of Liberal Arts and Sciences (CLAS). This program was similar to the program currently offered by MSCD through its Speech Communication major with a Theatre concentration. In 1998, with the creation of the College of Arts and Media (CAM) separated its Communication and Theatre degree into a Bachelor of Arts in Communications, which was retained in CLAS, and a Bachelor of Arts in Theatre in CAM. The individuals listed below comprise the complete list of those who graduated with the Bachelor of Arts in Theatre and the Bachelor of Fine Arts in Fine Arts with an emphasis in Film and Video Production during the first four years of this degree program.

BA in Theatre Graduates (1998-2002)

Spring 1999

Scott Bellot, *3rd Year Graduate student in Acting (University of South Carolina) and will be completing his internship at the Shakespeare Theatre, Washington DC*
Elizabeth Nelson, *Local actress seen various theatres*
Staci Wetzler, *Small business owner and founder of dinner theatre in Northern Colorado*

III. Fall 1999

Chris Tyus, *Performer with Opera Colorado, Completing his teaching certification in Theatre*

IV. Spring 2000

Molly Mook, *3rd Year MFA student at U of Iowa. Performed Summer 2002 at the Moscow Art Theatre in The Cherry Orchard*
Jessica Shepard, *Actress in Kaiser Permanente's touring bilingual performing troupe*

V. Summer 2000

Andrea Snell, *Local actress seen at various theatres*

VI. Spring 2001

Fanny Andrade, *Local actress with Su Teatro*
Jennifer Callender, *Entering Graduate School in Performance*
Emilee Cooper, *Costumer with the Denver Center Theatre Company*
Cassandra Whetstein, *Works in Customer Service for First Data Corp (ecommerce)*

VII.

VIII. Fall 2001

Melissa Beach, *Theatre teacher at South High School in Denver*
Aaron Schettler, *Technical Director with the Denver Civic Theatre*
Mio Nagashima, *Performing in Japan (her native country)*

IX. Spring 2002

Jenifer Alonzo, *Graduate student at Towson University on Costume Assistantship*
Rachel Archenhold, *Actress and support staff for PHAMALY and other physically-challenged performers in Denver*
Andy Bock, *Performer with Disney World in Orlando, Florida*
Hugo Carbajal, *Actor and support staff with Su Teatro; 1st year student in the new MFA program at Naropa in La Coque Movement training*
Lisa Franz, *Theatre teacher with Denver Public Schools*
Carolina Gonzalez, *Local actress with Su Teatro*
Jennifer Hickerson, *Local actress seen at various theatres*
Charlene Madrid, *Local actress seen at various theatres*
Kim Mathis, *Managing Director of Curious Theatre Productions*
Theatre teacher at Aurora Public Schools
Anastasia Ricketts, *Scene Shop Foreman with the King Center*
Stephanie Schmidt, *Local actress seen at various theatres*
Deborah Skinner, *Applying to graduate programs in Theatre Design*

BFA in Film and Video graduates employment information

X. Spring 2000

Andrea Jo Mauro, *unknown*
Larry McLaughlin, *Advanced to the round of 250 in Miramax Films Competition of Project Greenlight as a director*

Fall 2000

Lori DuPont, *Graduate pharmaceutical school*

Summer 2001

Wendy Copp, *Working in lighting in Los Angeles. She is currently working in sales in telecommunications and is in the process of moving to Kansas City.*
Kimberly Shively, *Showing her film in Denver area nightclubs, last known working for Dewey Obenchain, production company*

XI. Fall 2001

Zachary Manness, *Won $12,000 competitive grant for original script from Mayor's Office for Art Culture & Film for permanent exhibit at DIA, in the cutting stage*

XII. Spring 2002

Christopher Brunn, *unkown*
Brandon Gaschler, *Working in LA animation house (Creative Capers) for Sue Shakespeare, is currently working on a music video for a jazz musician as director, director of photography and editor*
Ryan Morrison, *unknown*
Rebecca Nassar, *unknown*
Chad Strader-Rylan, *Working in independent productions locally*
Matthew Twardy, *Working as Director of Photography in independent productions locally*

Summary of Types of Positions and Number of Graduates in General Areas (UCD)

Design and Technology	3
Musical Theatre	2
Theatre Management/Business	2
Teaching	4
Actors	13
Graduate School	7
Film Production	7
Unknown Employment	4
TOTAL	42*

**some graduates are working in more than one area*

APPENDIX 2: Employment related to Theatre Concentration in the Speech Communication major: 1995-2002 Metropolitan State College of Denver

Larry Mitchell***, Radio City Music Hall in NY– personnel budget management (also doing television character bits and off-Broadway acting jobs)***
Jeanann Harris, *Radio City Music Hall in NY – accounting and performance*
Joaquin Liebert, *Leader of and performer in rock band, also works in Denver Library and worked in storytelling program there*
Dave Shirley, *Co-owner of the new Denver Rattlebrains improvisation company – this company includes a former music student who performed in musicals: Mike O'Shea*

Kristi Coleman, *Theatre Teacher (Adams County)*
Susan Rossman, *Theatre Teacher (DU- High School) – also owns theatre company with her husband, Seth Rossman*
Cindy Compton, *Theatre Teacher in Colorado*
Jean Favre, *(IDP) Graduate School in Ireland*
Theresa Dwyer, *Completed Graduate School in Scotland, currently performer in Denver*
Kristi Gleason, *Banking, performing on side in Colorado*
Susi Ross, *Owner of company that trains food servers (waiters and waitresses) proper techniques (including theatre improvisation skills) in Colorado*
Lea Goodrich, *Middle School Teacher in Colorado*
Craig Rencke, *New York – Musical Theatre*
Tim Rogers, *LA – seeking acting jobs while working towards massage therapist certification*
Lou Metzger, *Worked in applied theatre technology for Denver Center and Country Dinner Playhouse – planning to return to school*
Thomas Witkowski, *Working with applied theatre technology at Arvada Center*
Sara Keeley, *Working in business, playwriting in Chicago*
Eric Schnitger, *Working in applied theatre technologies – looking for acting jobs in Chicago*
Tim Salmans, *Applied Theatre Technology work in Colorado*
Sara Giot, *Applied Theatre Technology work with Club Med company (formerly based in Florida, but has traveled to several areas)*
Tobias Smith, *Works with half-way house for teens and free-lances to direct plays with community theatres in Colorado*
Peter von Payens, *After working in LA, has returned to Denver to perform in local theatre scene*
Sky Walker, *(IDP) Storyteller – runs her own business in Iowa as artist in the schools and community*
Gwen Harris, *Equity actress, teaches theatre to teens in Colorado*
Dave Brown, *Theatre Lighting in Colorado*
Jim Miller, *Teacher, performer in musical theatre, freelance costumer in Colorado*
Angela Burnett, *Freelance costumer, part time work in human services in Colorado*
Sara Hardesty, *Teaching Theatre in Colorado*
Katherine Coons, *Teaching and facilities management Colorado and California*
Jason Sweat, *Actor in LA*
Missy Guisinger, *Performer, lighting, stage manager on National Tour with Scooby Doo*
Roy Ferguson, *Theatre teacher in New Mexico*
Jen Williams, *Acting in Chicago*
Melissa Meck, *Production Assistant in Chicago*

The MSCD Theatre faculty have compiled the above list. Since Theatre is an emphasis area within Speech Communication, it is harder to track students. However, the faculty and students communicate well and the following list indicates where the alumni of the Theatre Concentration are employed.

Several music students have gone on to continue working in musicals, but they are not theatre graduates. Many also work with music and performance in their churches. There are many students who also combined the Human Services major with theatre minor. They are now employed in social work arenas.

As noted in the detail of the list above, some students are doing more than one thing, e.g., acting and owning a company or performing in groups while working in another area.

Summary of Types of Positions and Number of Graduates in General Areas (MSCD)

Technical, including Production Assistant and Costumer	10
Musical Theatre	3
(See note. Graduates now working in Musical Theatre were most likely Music majors and Speech Communication minors.	
Theatre Management/Business	10
Teaching	7
Professional (Equity) Actors/Designers	4
Graduate School	2
Other	2
(including Banking and Social Work. See note above for Social Work areas. At least one, but others in Social Services areas not tracked.)	
TOTAL	38

APPENDIX 3: Current and Future Theatre Program Collaborations

For over a quarter century, theatre programs and curricula have co-existed at the Metropolitan State College of Denver and the University of Colorado at Denver. In many instances, these programs have not only operated contiguously on the Auraria campus, they have also collaborated on projects and shared facilities and equipment. The design, construction and operation of the new Kenneth King Academic and Performing Arts Center is the best example of how these two programs can work effectively as collaborative partners sharing spaces, shops and dressing rooms while operating independent and fundamentally different programs.

Future Curricular Collaborations

The programs agree to begin discussions about a realistic joint MSCD/UCD summer program using the King Center, including small productions, short courses, workshops for teachers and talented

students, and K-12 partnership work.

The programs agree to develop and share information about their rotation of courses, so students know four years in advance when courses will be offered.

The programs agree to share official syllabi course outlines, and other class materials annually to ensure that courses are meeting objectives, and so that faculty can be even more knowledgeable as they recommend courses to students.

The programs agree to monitor and share information on enrollments in courses to ensure that each institution is maintaining the stated curricular objectives outlined in this proposal and keeping course duplication beyond foundation levels to a minimum.

The programs agree to explore team-teaching opportunities as well as a possible plan for a jointly enrolled special topics class that would rotate between the institutions annually.

Future Faculty Development Collaborations

The programs agree to explore the development of an agreement to offer one joint professional development opportunity each year. Examples of nationally renowned guests in the design and technology areas include Jay O'Gelerum's rigging workshop, and Randy Davidson's presentation of theatre safety.

The programs agree to offer web links from one another's website to share current information on the programs with faculty, staff and students
The programs agree to pursue the funding of joint artists-in-residence during the academic year.

Policy Development and Planning

The programs agree to continue to develop clearly distinctive seasons that align with each institution's programmatic and curricular goals.

The programs agree to continue to refine the policies and procedures for sharing spaces in the King Center, including the Courtyard Theatre, Concert Hall, Recital Hall, Dance Studio, Costume Shop, Scene Shop and Dressing Room areas.

The programs agree to share strategic plans and directions annually in a formal meeting to plan for the future and avoid duplication of efforts.

Recruiting, Advising and Community Outreach

The programs agree to work with CCD to facilitate student transfer through development of formal articulation agreements.

The programs agree to explore joint articulations with other regional community colleges.

The programs agree to conduct joint meetings of advising staff at MSCD and UCD, so that they know about the programs and how students are referred, counseled, and placed in courses.

The programs are currently working on joint hosting of the Rocky Mountain Theatre Association in fall 2003. This five-state festival will enable the programs to show the variety of offerings at Auraria.

The programs agree to pursue the planning and implementation of an annual High School Theatre Day for Denver School of the Arts, DPS as a whole, and other Metro-Denver school districts at the King Center. This event could operate as a theatre festival, offering special short workshops in topics such as make-up, auditioning, acting tips, voice analysis, technical theatre (constructing a flat, etc.)

The programs agree to continue their support of the Shakespeare in the City performances and gatherings in the King Center.

Student Opportunities/Enrichment

The programs agree to explore joint field trips and Study Abroad opportunities. Currently, MSCD offers a theatre trip to London and UCD offers an annual touring production to the Edinburgh Fringe Festival and London's Covent Garden, as well as a behind-the-scenes look at Russian Theatre, Dance and Opera in St. Petersburg and Moscow.

The programs agree to encourage students to attend performances at all three institutions and to participate in productions and workshops as possible.

APPENDIX 4: Details of Collaboration on Course Offerings

In the theatre curriculum described below, the possible use of UCD courses to meet MSCD requirements is shown in italics.

1. Description of the Curriculum

All theatre majors will have to take the following core of courses. Students seeking a B.A. must take 12 additional hours. Students seeking a BFA must take 17 hours of additional required courses

Basic Core for all Theatre Majors

Required Basic Core Courses for all Theatre Majors

Required Courses			Semester Hours
ENG	1120	Introduction to Drama	3
THE	*2201*	*The Speaking Voice in Performance*	*2*
THE	*2210*	*Introduction to Theatre*	*3*
THE	2220	Techniques of Acting I	3
THE	2240	Introduction to Stagecraft	3
THE	3200	Oral Interpretation	3
THE	*3280*	*Stage Directing*	*3*
THE	4200	Reader's Theatre (Senior Experience)	3
THE	4260	Theatre: Practicum I	1
Pooled Courses from University of Colorado–Denver (UCD)			
THTR	*3610*	*Theatre Development I (Theatre History)*	*3*
THTR	*4610*	*Theatre Development II (Theory and Criticism)*	*3*
Subtotal			30

Theatre Major for Bachelor of Arts (B.A.)

Required Courses			Semester Hours
Basic Core			30
Elective Courses			
THE	*2980*	*Beginning Internship: Theatre*	*1-12*
THE	*3220*	*Stage Movement*	*3*
THE	*3240*	*Theatre Improvisation Techniques*	*3*
THE	*3980*	*Advanced Internship: Theatre*	*1-12*
THE	*4210*	*Variable Topics in Theatre (maximum of 9 credit hours)*	*1-3*
THE	*4220*	*Creative Dramatics for the Classroom Teacher*	*3*
Subtotal of Electives*			12

*Additional Theatre and Art courses, including internships, may be selected in consultation with an approved theatre advisor within the Department of Communication Arts and Sciences.

Summary of Hours required for B.A. in Theatre:

B.A. Core	30
B.A. Electives	12
Total for the Major	**42**

Other Graduation Requirements

General Studies and Multicultural	33-36
Minor	18-29
Electives	13
Total for the B.A. in Theatre	**120**

Theatre Major for Bachelor of Fine Arts (B.F.A)

Students admitted to the bachelor of fine arts program are NOT required to complete a minor.

Required Courses for all B.F.A. Theatre Majors

Required Courses			Semester Hours
Basic Core			30
ART	1040	Art Appreciation Survey	3
THE	2260	Music Theatre History and Performance	3
THE	2270	Production Analysis: Process and Technology	3
THE	*3980*	*Advanced Internship: Theatre*	*6*
THE	*4270*	*Theatre: Practicum II*	*2*
Subtotal			47

Theatre Major for Bachelor of Fine Arts with a Concentration in Music Theatre (MT)

Required Courses			Semester Hours
HPL	1160	Jazz Level I	2
HPL	1240	Tap Dance I	2
MUS	1110	Music Theory I	3
MUS	1120	Music Theory Lab I	1
MUS	1130	Music Theory II	3
MUS	1140	Music Theory Lab II	1
MUS	161B	Class Piano I	1
MUS	162B	Class Piano II	1
MUS	171A	Private Instruction I–Voice	2
MUS	172A	Private Instruction II–Voice	2
Select 2 hours from the following:			
MUS	2810*	Ensemble	1
MUS	3810*	Ensemble	1
THE	*2230*	*Techniques of Acting II*	*3*
THE	*3220*	*Stage Movement*	*3*
THE	3230	Acting III: Styles of Acting	3
Subtotal			29

*Ensembles must be chosen from those appropriate to the student's concentration. Students majoring in music performance must enroll in an ensemble during each semester of full-time

residence.

Elective Courses Semester Hours
Additional Theatre and Arts-related courses, including internships, may be selected in consultation with an approved Theatre advisor within the Department of Communication Arts and Sciences.
Total electives for the B.F.A. in Music Theatre 4

Summary of hours required for the B.F.A. in Theatre with a concentration in Music Theatre:
B.F.A. Core 47
B.F.A. Required Courses 29
B.F.A. Electives 4
Total hours for the Major with a Concentration in Music Theatre..... 80

Theatre Major for Bachelor of Fine Arts with a Concentration in Applied Theatre Technology and Design (ATTD)

Required Courses			Semester Hours
ART	1100	Basic Drawing I	3
ITS	1430	Industrial Drawing	2
THE	2250	Stage Management	3
THE	3250	Introduction to Production Design and Scenography	3
THE	3270	Introduction to Stage Lighting and Sound	3
Subtotal			14

Elective Courses (19 credit hours)

THE	3210	Scene Painting	3
THE	4210	Variable Topics in Theatre (maximum of 9 credit hours)	1-3
THE	4240	Advanced Stage Craft and Applied Scene Technology	3
THE	4250	Advanced Scene Design: Applied Technology	3
THE	4280	Advanced Lighting: Applied Technology and Design	3
THE	4290	Advanced Sound: Applied Technology and Design	3
Pooled Courses from University of Colorado–Denver (UCD)			
THTR	*2740*	*Costume Design and Make-Up*	*3*
THTR	*3720*	*Advanced Lighting Design*	*3*
THTR	*4730*	*Advanced Scene Design*	*3*
THTR	*4760*	*Topics in Design*	*3*
Subtotal of Electives*			19

*Additional Theatre and Arts-related courses including internships may be selected in consultation with an approved Theatre advisor within the Department of Communication Arts and Sciences.

Summary of hours required for the B.F.A. in Theatre with a concentration in Applied Theatre Technology and Design:

B.F.A. Core 47
B.F.A. Required Courses 14
B.F.A. Electives 19
Total hours for the Major with a Concentration in Applied Theatre Technology & Design 80

Other Graduation Requirements

General Studies and Multicultural 33-36
Electives 4-7
Total for the B.F.A. in Theatre 120

Attachment B

ENROLLMENT PROJECTIONS

The following premises and facts were used in determining the enrollment projections.

(1) Persistence and graduation rates of theatre majors will be similar to the persistence and graduation rates of speech communication majors because theatre is currently a concentration within the speech communication major.
(2) There will be no out-of-state students.
(3) Faculty believe the number of new students per year will eventually be close to 30. Since January of 2001, the program has received 49 cards from students indicating an interested in theatre, and 30 students declared an interest at a recent Major's Fair. It was assumed that the number of new students each year would rise from 14 in year one to 30 in year five. Assuming the 32 students who have currently declared a theatre concentration will become majors and that 14 more students will declare a major in 2001-2002, the initial number of students is estimated to be 46.
(4) The retention/persistence rate of speech communication majors is 49.5%. The one year of available data for students in the theatre concentration yields a retention/persistence rate of 71%. Because the latter number is based on limited data, a conservative 55% was used as the retention rate.
(5) The graduation rate of speech communication majors for the last two years was 17.5%, and that number was used in the later projected number of graduates. Normally an MSCD student would not graduate in four years. It was estimated that four current students with a theatre concentration would switch to the theatre major and graduate by year three.
(6) MSCD students on average take 16 credits per academic year.
(7) The above assumptions lead to the following projections. At full implementation there will be approximately 66 majors in the program with approximately 11 graduating each year.

Table 1: Enrollment Projections

		2002-03	2003-04	2004-05	2005-06	2006-07	Full Implementation
1-a	In-state Headcount	46	46	49	54	60	66
1-b	Out-of-state Headcount						
2	Program Headcount	46	46	49	54	60	66
3-a	In-state FTE	25.0	25.2	26.9	29.5	32.5	35.9
3-b	Out-of state FTE						
4	Program FTE	25.0	25.2	26.9	29.5	32.5	35.9
5	Program Graduates			4	9	10	11

Attachment C

ESTIMATE OF REVENUES AND EXPENSES

EXPENSES

(1) *Faculty Expense:* Faculty expenses include the following: The 2000-2001 salaries for the two current theatre faculty, average of $58,786 including benefits; the salary for a new faculty member, which will be $56,640 with benefits, and salaries for part time faculty. It was assumed that 10 three-credit courses would be taught by part-time faculty the first year, and the number three-credit courses taught by part-time faculty would rise to 17 by year five. These resources will enable the faculty to fully implement the program.

(2) *Financial Aid:* Two types of financial aid are routinely available to theatre students: Colorado Scholars and student work-study. The program already receives $12,000 from the Colorado Scholars Fund, and based on the past two years, is awarded or has attracted $17,000 in work-study funds. Students are already receiving this aid.

(3) *Instructional Materials:* It is estimated that $1,000 will meet this need.

(4) *Program Administration:* This includes the salary plus benefits of the Theatre Production Manager - $36,875.

(5) *Other Operating Costs:* Theatre productions involve substantial costs for costumes, sets, props, publicity, scripts, programs, and other items. Based on past productions, this cost was estimated to be $57,000.

(6) *Capital construction and equipment acquisitions:* The new performing arts center has already been built. As mentioned earlier, in Spring 2001, the Provost allocated $140,000 to the theatre program to enable it to be fully functional in the King Center. Items purchased include lighting and sound equipment, large and small tools (for building and painting), tool storage equipment, sewing machines, welding equipment, seats and risers (for the KC Production Studio Theatre), and a clavinova (special synthesizer type piano). The equipment will enable to program to be functional in both the small production studio theatre and the Rawls Courtyard Theatre (or any other KC space). Any additional equipment that is found to be needed should be able to be purchased using the annual department allocations for such acquisitions.

(7) *Library:* Since this program will collaborate with several departments, there will be no significant impact on library resources or basic instructional technology (any additional theatre specific resources, including library or computer software, will be minimal and can be addressed with the current budgetary allotment).

REVENUE

(1) The *General Fund: State Support Revenue* line was generated by multiplying the in-state FTE by $3,400 – the current appropriation.

(2) *Cash Revenue: Tuition:* MSCD charges tuition per credit hour. It was assumed that students in the Theatre Program would be taking eight hours a semester. A student taking eight hours pays $589.20 in tuition. The Cash Revenue: Tuition was determined by multiplying the program headcount by two times $590.

*NOTE: The general fund and tuition revenues were calculated using the 25+ FTES generated by potential theatre majors. However, the college already offers a theatre minor and, in addition, some theatre courses satisfy the General Studies requirements In 1999-2000 courses with the THE (theatre) prefix generated 51.8 FTES. Conservatively assuming that 15 FTES will continue to be generated by non-majors, the general fund revenue alone would provide another $51,000. This source of funds is not included in the revenue calculations.

(3) *Other Funding Sources:* $111,000 is received from other sources*:*

- The Student Activities Board annually allocates funds collected for student activities to the Theatre Program since participation in theatre activities is open to all students and students can attend plays and musicals for free. The 2000-2001 allocation was $57,000.
- Money received by MSCD for Colorado Scholars is routinely allocated to the Theatre Program. The amount is $12,000.
- Student work-study money has been and will continue to be awarded to the Theatre Program. The amount is approximately $17,000.
- Historically, the Dean of Letters, Arts and Sciences has allocated the Theatre Program $12,000 a year for miscellaneous expenses. This will increase to $14,000.
- It is estimated that at least $10,000 will be generated from ticket sales for the theatre productions even though students can attend the productions for free.
- Another $1,000 comes from the Department of Communication Arts and Sciences OCE budget for paper and other instructional materials.

(4) *Reallocation:* A faculty position has been reallocated from speech communication to theatre. A search for a Technical Director is in process. The base salary for that position is assumed to be $48,000, which comes to $56,640

with benefits. Additionally, $7,500 has been and will continue to be allocated from the dean to the program from summer funds. Finally, to help implement the program for the first two years $5,000 will be reallocated by the dean to the program as Arts Initiatives funds.

Table 3: Revenue and Expenses

		Estimated Amount in Dollars				
		Year 1	Year 2	Year 3	Year 4	Year 5
Operating Expenses:						
1	Faculty	$ 193,713	$ 195,663	$ 97,643	$ 203,463	$ 207,363
2	Financial Aid specific to program	$ 29,000	$ 29,000	$ 29,000	$ 29,000	$ 29,000
3	Instructional Materials	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
4	Program Administration	$ 36,875	$ 36,875	$ 36,875	$ 36,875	$ 36,875
5	Rent/Lease					
6	Other Operating Costs	$ 57,000	$ 57,000	$ 57,000	$ 57,000	$ 57,000
7	Total Operating Expenses	$ 317,588	$ 319,538	$ 321,518	$ 327,338	$ 331,238
Program Start-Up Expenses						
8	Capital Construction					
9	Equipment Acquisitions					
10	Library Acquisitions					
11	Total Program Start-Up Expenses					
TOTAL PROGRAM EXPENSES		$ 17,588	$319,538	$321,518	$ 327,338	$ 331,238
Enrollment Revenue						
12	General Fund: State Support (see *NOTE)	85,082	85,636	91,490	100,259	110,630
13	Cash Revenue: Tuition	54,280	54,634	58,369	63,963	70,580
14	Cash Revenue: Fees					
Other Revenue						
15	Federal Grants					
16	Corporate Grants/Donations					
17	Other fund sources*	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$111,000
18	Institutional Reallocation *	$ 69,140	$ 69,140	$ 64,140	$ 64,140	$ 64,140
TOTAL PROGRAM REVENUE		$ 319,502	$ 320,410	$ 324,999	$ 339,362	$ 356,350

The MetroProject, developed in 1998, has provided and will continue to provide in-kind services from industry professionals in the areas of arts and entertainment technologies through training, materials, and workshops.

AHEC and the three institutions are conducting external fundraising efforts to enhance the new performing arts facility.

TOPIC: UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER – 2002 SUPPLEMENTALS TO MASTER PLAN

PREPARED BY: JOAN JOHNSON

I. SUMMARY

The University of Colorado Health Sciences Center has submitted the 2002 Supplementals to its Master Plan which focus on three goals: 1) reducing the total cost of the development at the Fitzsimons campus by accelerating the transition to that campus from the 9th and Colorado Boulevard campus by five years; 2) realizing the economic impact of the Fitzsimons development sooner; and 3) developing a plan to vacate and redevelop the 9th Avenue campus. The November 4, 2002, revised Transition Schedule has a total of 3,107,503 gross square feet – a 29 percent increase over the gross square footage, (2,206,650) in the November 13, 2001, Transition Schedule. The updated financial plan reflects the actual financial results from FY 2001-02 and changes made in the transition schedule. A major component of the financial plan is the Health Sciences Center's intention to request $202 million from the state of Colorado to finish building the education buildings at Fitzsimons. The $202 million is slated to be in a bill to be introduced in the 2003 Colorado Legislature which would authorize Certificates of Participation (COP) as the funding mechanism. The revenue to pay back the COP bonds would come from the state general fund. The strategy for vacating and redevelopment of the 9th Avenue campus is detailed in the University of Colorado Real Estate Center's 9th and Colorado Health Sciences Redevelopment Study, Fall 2002. Scenario 5 of the study, designated "Clean Slate Mixed-Use Redevelopment," has been endorsed by the CU Board of Regents in a resolution passed on December 19, 2002. This was also CCHE's preferred scenario for the disposition of this property.

II. BACKGROUND

The University of Colorado Health Sciences Center's Master Plan was presented to the Colorado Commission on Higher Education in December 1998. Much of that plan concentrated on eventually (by 2020 or so) moving the entire 9th Avenue and Colorado Boulevard campus to the Fitzsimons site. Since 1998, several major events have transpired, not the least of which is the faltering economy and three years of state budget cutting. Major casualties of the lack of capital construction funding since 2001 are the education buildings at the Fitzsimons campus (which have always been anticipated to be built with state capital construction funds) and the Fitzsimons Trust Fund which has been wiped out instead of earning interest over the next several years. A few of the Fitzsimons Trust Fund dollars have

been earmarked for the Fitzsimons campus (namely the Education 1B facility – Phase 1 A&E) but the rest have been used to balance both last year's and this year's state budget. The proposal for a Fitzsimons campus was first established in the mid-1990s when the federal government decided to close the Fitzsimons Army Hospital and affiliated buildings. Conveyance of the site to the state of Colorado, the assistance of the city of Aurora and the decisions to locate the University of Colorado Hospital, The Children's Hospital and the state Veterans' Nursing Facility on the Fitzsimons property have proved to be good decisions.

The Colorado Legislature, from the beginning of the Fitzsimons saga, has maintained that the Health Sciences Center could not maintain two campuses forever and that the preferred option was to vacate the 9th and Colorado campus sooner rather than later. In fact, in a letter sent to Chancellor Vincent Fulginiti on March 13, 1997, from Senator Elsie Lacy, Chairman of the Legislature's Joint Budget Committee, CU was advised that although the JBC supported the proposed move to Fitzsimons, they were concerned with the overall capital costs of operating two campuses concurrently. The letter went on to request that "all new construction for the University of Colorado Health Sciences Center and University Hospital occur at the Fitzsimons site." This has been done, with the exception of the new emergency room at the 9th and Colorado site built by University Hospital. However, since University Hospital plans to keep a 100-bed critical care hospital and the emergency room open at 9th and Colorado, this was probably a good move – just not in the spirit of the JBC as expressed in the 1997 letter. It was also the expectation of the Capital Development Committee at that time that no large amounts or ongoing maintenance funds would be spent at 9th Avenue.

III. STAFF ANALYSIS

In comparing the transition schedules for the November 2001 and November 2002 Master Plan supplementals, it was apparent that there was a dramatic increase in total square footage between the two. The table below details the comparison.

Transition Schedules – Gross Square Footage

November 2001		November 2002
Research Space	1,009,675	1,567,781
Both numbers include the Nighthorse Campbell Native Health Building		
	Difference: + 558,106 GSF – 2002 36% increase	
Education Space	500,811	738,758
	Difference: +237,947 GSF – 2002	

November 2001	November 2002
32.2% increase 200,000 is for the Academic Office Building	
Total Support 52,025 **Difference:** +26,000 GSF – 2002 33.3% increase 20,000 is for the Facility Support Building; 6,000 is for Environ. Health & Safety II	78,025
Total Renovation/ Backfill 644,139 **Difference:** +78,800 GSF – 2002 11% increase Academic Offices – Building 500	722,939
Total 2,206,650 Fitzsimons Campus **Difference:** +900,853 GSF - 2002 29% increase	3,107,503

19 buildings are listed on the 2002 Transition Schedule. Of these, three are completely finished: The Perinatal Research Facility Expansion, the Nighthorse Campbell Native Health building, and the PASCAL Facility. Of the remaining 16 projects, 6 have been identified for inclusion in the Certificates of Participation funding mechanism: Education 1B, Education 2, the Library at Fitzsimons, the Academic Administrative/Office Facility, the Environmental Health & Safety Facility II, and Facility Support.

Of these six buildings, CCHE staff has some questions.

1. The A&E portion of Education 1B has been funded (cash funds out of the Fitzsimons Trust Fund in the 2002 Long Bill). Please explain how using cash funds in this instance fits in with the COP requirement that all facilities be funded out of the same funds.

2. Please explain why you consider the Environmental Health & Safety Facility II, the Facility Support building and the Academic Administration/Office Facility "education" buildings.

Questions on other buildings listed in the 2002 Transition Schedule:

1. Please explain why the square footage has so dramatically increased in the following buildings:

   a. Academic Administration/Office Facility: 250,000 vs. 50,000 gsf
   b. Academic Offices – Building 500: 148,800 vs. 70,000 gsf

2. Although not listed on the Transition Schedule, an Education Bridge for $2,771,750 is listed in the Supplementals' narrative for inclusion in the $202 million COP bill. What is this Bridge? Some of the staff remember it being talked about as being paid for with cash funds. Is this true?

The financial plan for this accelerated time schedule is anchored by the successful passage of a bill in the 2003 Colorado Legislature which would authorize Certificates of Participation of $202 million to be repaid with General Fund Revenues in the amount of $15 million per year for 25 years. It has been confirmed that the Speaker of the House, Representative Lola Spradley and the Senate Majority Leader, Senator Norma Anderson, will sponsor a bill that contains COPs for both a new maximum-security prison in Canon City (for approximately $80 million) and the COPs for Fitzsimons.

Although COPs are a very legitimate alternative financing arrangement for getting things built, especially in times of declining revenues and budget shortfalls, CCHE staff believes there are potential issues to consider using general funds as the sole revenue stream to make the payments. The Health Sciences Center should consider an alternate plan that calls for a portion of the repayment funds to come from a different source, such as tobacco settlement monies.

In addressing the third goal of the 2002 Supplementals – the vacating and redevelopment of the 9th Avenue campus - CCHE is very supportive of the Board of Regents decision, outlined in their resolution of December 19, 2002, to move to Scenario 5 of the CU Real Estate Study of 9th Avenue. This Scenario - the Clean Slate Mixed-Use Redevelopment – forecasts $98.3 million in income and $68.3 million in expenses (mostly for building demolition) for a profit of $30 million.

CCHE staff has been told that, as of January 27, the University of Colorado owes $16 million on the property at 9th Avenue. If nothing else is owed, that would leave $14 million that could be applied to the COPs in an out-year.

Additional questions include the different scenarios for the redevelopment of 9th Avenue. One, the Supplementals call for maintenance of the existing parking structures, the BRB

building, the School of Pharmacy, the new Emergency room, and the Critical Care Tower (this is essentially Scenario 4). However, Scenario 5, endorsed by the Regents, calls for demolition of every building except the parking structures, and the Critical Care Tower and new Emergency Room. Could you reconcile these differences?

IV. STAFF RECOMMENDATIONS

1. **That the Commission, after questions posed by the staff and/or Commissioners have been answered by the University, approve the 2002 Supplementals to the University of Colorado Health Sciences Center Master Plan and the accelerated building plan;**

2. **That the Commission concurs with the University of Colorado Board of Regents decision to endorse Scenario 4: Semi Clean Slate as a transition, to Scenario 5: Clean Slate for the redevelopment of the 9th and Colorado campus of the Health Sciences Center; furthermore, the Commission requests this be included in the COP legislation;**

3. **That the Commission endorses the Certificate of Participation financing mechanism for the education facilities at the Fitzsimons campus but, at this time, does not endorse the use of state general funds as the sole source of repayment revenues and encourages the Health Sciences Center to present alternative sources of revenue to repay the bonds; such sources shall be included in the COP legislation;**

4. **That the Commission shall approve all updates to the Master Plan and all program plans, regardless of the source of funds for construction.**

Appendix A

STATUTORY AUTHORITY

23-1-106. Duties and powers of the commission with respect to capital construction and long-range planning.

(1) It is declared to be the policy of the general assembly not to authorize or to acquire sites or initiate any program or activity requiring capital construction for state-supported institutions of higher education unless approved by the commission.

(2) The commission shall, after consultation with appropriate governing boards of the state-supported institutions of higher education and the appropriate state administrative agencies, have authority to prescribe uniform policies, procedures, and standards of space utilization for the development and approval of capital construction programs by institutions.

(3) The commission shall review and approve master planning and program planning for all capital construction projects of institutions of higher education on state-owned or state-controlled land, regardless of the source of funds, and no capital construction shall commence except in accordance with an approved master plan, program plan and physical plan.

(4) The commission shall ensure conformity of facilities master planning with approved educational master plans and facility program plans with approved facilities master plans.

TOPIC: 2003-2004 STUDENT FINANCIAL AID BUDGET PARAMETERS

PREPARED BY: DIANE LINDNER

I. SUMMARY

This agenda item presents the 2003-2004 Student Financial Aid Budget Parameters. In compliance with regulations for states that participate in federal financial aid programs, the Commission annually recommends guidelines for student living expenses (room and board, transportation, books and supplies, personal, and child care expenses) for use by postsecondary institutions approved to participate in Colorado student financial assistance programs. While the state budget parameters establish a reference point, each institution may adjust the state parameters to reflect actual local costs – for example, actual cost of a two-bedroom apartment. Institutions that wish to modify the room and board costs must use actual data to support their adjusted budget and file their adjusted budgets with CCHE.

Previously, the Commission adjusted the prior year's budget parameters by the Colorado Price Index (CPI). Following the Commission's direction, CCHE staff used published data obtained from Chambers of Commerce (housing), business and industry (health and child care), and colleges and universities (for example, books) to determine budget guidelines beginning in 2001. Table 1 shows the Student Budget Base for 2003-2004 for Students Living with Parents, Students Living On Campus and Students Living Off Campus.

Table 1: Student Monthly Budget Base for 2003-2004

	Students Living with Parents	Students Living On Campus	Students Living Off Campus
Housing	$187	Actual	$470
Food/Board	$229	Actual	$305
Local Transportation	$63	$63	$63
Medical	$183	$183	$183
Personal Expenses	$100	$114	$114
Total	***$762***	***$360 +Actual Room & Board***	***$1,135***

The student monthly budget base includes monthly costs typically incurred by all students. Table 2 lists the parameters for the annual cost of books and supplies and discretionary costs that apply to certain students.

Table 2: Supplemental Student Budget Expenses for 2003-2004

	All Students
Books & Supplies Per Year	$1,163
Child Care if appropriate per month	$574
Non-local Transportation	Amount determined by Institution
Computer Allowance	$750-1,400

II. BACKGROUND

Student budget parameters are used by financial aid administrators in determining student eligibility for need-based financial aid. Need-based financial aid (i.e., grants, work-study, and loans) requires a student need analysis. The need analysis is the process of estimating the amount of assistance a student will require, supplementing the resources theoretically available from that student and his or her family. Need analysis has two basic components: (1) the student's cost of attendance which is an estimation of what it will reasonably cost the student to attend a given institution for a given period of time called the **Cost of Attendance (COA)**, and (2) an estimation of the ability of the student and his or her immediate family to contribute to that educational cost, commonly called the **Expected Family Contribution (EFC)**. The expected family contribution (EFC) is obtained by a federally approved formula that takes income, assets, number in college and other information into account. The cost of attendance (COA) is a figure determined by institutions. The difference between the COA and the EFC is the amount of financial aid for which a need-based student is eligible.

CCHE has traditionally provided guidelines and recommendations of statewide cost parameters for institutions to use in defining the COA. The United States Department of Education (USDE) interpreted the term "determined by the institution" to mean that the institution has the authority to determine reasonable cost elements, from empirical data, i.e., data based on valid student surveys, housing costs norms from a local realty board, etc. In other words, the USDE expects the institutional determination to be based on modifications of state data and adjusted for local economic conditions.

III. STAFF ANALYSIS

At the March 2000 meeting, the Commissioners requested that the staff collect primary data to establish the 2001-2002 and later year student financial aid budget parameters since the last survey was completed in 1991. To update the budget parameters, CCHE staff collected information from different sources. In 2003, web-based research was conducted to determine average rental and utility prices, computer costs and child care costs; costs of books, supplies, personal expenses and board were adjusted by CPI. CCHE collected health

insurance data from insurance companies and computer hardware costs from computer industry web-published cost comparisons. The 2003-2004 student budget parameters are listed below.

Housing Costs:

Housing budgets vary for three groups of students.

For students living in dormitories, the housing parameter is the actual room expense that the campus charges students.

CCHE's financial aid guidelines define the housing budget for students living off campus as 50 percent of the average rent for a two-bedroom apartment. CCHE collected rental costs from Denver, Boulder, Colorado Springs and Grand Junction. The data indicated that the average rent of a two-bedroom apartment was $814. CCHE staff added the average utility bill for a two-bedroom apartment ($125). The rent and utilities totaled $939, down from $1,150 for 2002-2003. Following the guidelines, half of that cost ($470) becomes the monthly housing budget parameter for students living off campus, down from $575 last year.

For students living with parents, the housing budget has been set at $122 a month since the last survey the Commission conducted in 1991. This budget parameter has been updated for 2003-2004 by inflating the $122 housing cost by the CPI in each year since 1991. The housing budget for students living with parents in 2003-2004 is calculated at $187, up $65 since 1991.

Food Expenses

For students living in dormitories, the food budget parameter is the actual cost of board.

In 2001, food expenses for students living off-campus were defined by the cost of a student meal ticket charged by institutions. The food budget parameter was increased by the estimated CPI of 3.8 percent for 2002-2003 and increased by the estimated CPI of 1.8 percent for 2003-2004. Most recent CPI data for December and January indicates the small increase in costs is accurate. CCHE's financial aid guidelines assume that food is a shared cost for students who live with their parents. The estimated food costs for a family of four averages $900 per month or $225 per family member. The food cost parameter for this group of students was set at $225 per month for 2003; an increase of 1.8 percent for 2004 yields a cost of $229 per month for students living at home. Students living off campus are budgeted a 1.8 percent increase as well, bringing their food budget to $305 per month.

Local Transportation Expenses Exclude Non-local Transportation

The Financial Aid Guidelines define local transportation expenses as the cost of owning a bike, using public transportation or sharing the operation of an automobile. CCHE set the monthly local transportation parameter at $63, the cost of a monthly regional RTD pass or the approximate cost of parking a car for $3.25 a day.

Medical Expenses

For institutions that do not have health insurance or medical care funded through student fees, CCHE establishes a maximum health expense parameter of $183 per month, up from $169 per month. This parameter is based on the average monthly HMO premium for a health plan with a $30 co-pay. The data sources included major health care providers in Colorado with presence on the web. When compared to health insurance costs of universities who offer insurance, the $183 per month aligns within the range of costs reported.

Personal Expenses

The financial aid guidelines define personal expenses to include the cost of laundry, dry cleaning, toiletries, clothing, recreation and recreational transportation. Based on typical costs in a college town, a student may expect to spend $14 a month on laundry, $25 on dry cleaning or the purchase of clothing, $21 on shampoo, toothpaste, and other toiletries, $42 a month for concerts, movies or other campus events, and $10 for transportation. In 2002-03, CCHE set the personal expense parameter at $98 for students living with parents and $112 for all other students. The only difference between the two budgets is that students living with parents do not typically pay laundromat costs. A CPI increase of 1.8 percent on each of the personal expense numbers indicates an appropriate cost of $100 for students living with parents and a cost of $114 for all other students.

Books and Supplies

The parameter for books and supplies is $1,163 based upon responses from Colorado institutions, public and private and adjusted for the estimated CPI.

Child Care

The range is the actual cost of care per child, per month, up to a maximum of $574 per child per month. This cost is up from $555. A check of costs in the Denver, Grand Junction and Colorado Springs areas yields a range from $400 per month for part time (three days per week) care in Grand Junction to $700 per month for full time infant care in Denver. The average for full time care including Colorado Springs, Denver and Grand Junction, averaging the cost of family care with care in a child care center is $574 per month. This seems to be a

reasonable number to budget as a maximum for child care. The child care figure had remained unchanged for two years.

Non-local Transportation

CCHE does not establish this parameter. Institutions may include the cost of plane fare for students who live outside a normal travel range. It is intended to finance two round trips home per year.

Computer Allowance

The cost of attendance regulations in the federal Higher Education Amendment of 1998 provide for a reasonable allowance for the documented rental or purchase of a personal computer. Institutions may include this cost in their student budget for determining eligibility for state financial aid. With the decrease in hardware prices, few students rent computers. The average cost of a desktop computer is $750, down from $1,000 last year and $1,400 for a laptop computer, down from $1,500. The data sources include web-published costs listing products and price, published January 2003.

Table 1 below shows the Student Budget Base for 2003-2004 for Students Living with Parents, Students Living On Campus and Students Living Off Campus.

Table 1: Student Monthly Budget Base for 2003-2004

	Students Living with Parents	Students Living On Campus	Students Living Off Campus
Housing	$187	Actual	$470
Food/Board	$229	Actual	$305
Local Transportation	$63	$63	$63
Medical	$183	$183	$183
Personal Expenses	$100	$114	$114
Total	***$762***	***$360 +Actual Room & Board***	***$1,135***

The student monthly budget base includes monthly costs typically incurred by all students. Table 2 lists the parameters for the annual cost of books and supplies and discretionary costs that apply to certain students.

Table 2: Supplemental Student Budget Expenses for 2003-2004

	All Students
Books & Supplies Per Year	$1,163
Child Care if appropriate per month	$574
Non-local Transportation	Amount determined by Institution
Computer Allowance	$750-1,400

IV. STAFF RECOMMENDATION

That the Commission approve the 2003-2004 Student Financial Aid Budget Parameters.

Appendix A

STATUTORY AUTHORITY

C.R.S. 23-3.3-102 Assistance program authorized-procedure-audits. (3) The commission shall administer the program with the assistance of institutions according to policies and procedures established by the commission.

TOPIC: **FOUR UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER AT FITZSIMONS PROJECTS FOR FY 2003-2004 AND FY 2002-2003 FUNDING**

PREPARED BY: **GAIL HOFFMAN**

I. SUMMARY

Four University of Colorado Health Sciences Center (UCHSC) projects have been submitted to CCHE staff for review. Three are proposed as strictly cash-funded projects, for which spending authority for FY 03-04 is being sought. The other is an SB 92-202 project, meaning that it will be built, operated, and maintained with internal resources. The projects and costs are summarized below:

Project Name	*Project Type*	*Total Project Cost*	*FY 02-03*	*FY 03-04*	*Gross Square Footage*
Barbara Davis Center, Revised Phase 2	Cash Funded	$9,637,762 Cash Funds Exempt (CFE)		$9,637,762 CFE	20,330 finish; 54,800 as shell
Center for Bioethics and Humanities	Cash Funded	$5,436,977 CFE		$5,436,977 CFE	15,887
Infrastructure, Phase 6	Cash Funded	$1,322,508 CFE		$1,322,508 CFE	N/A
Center for Oral Health	SB 92-202	$26,500,000 CFE	$26,500,000 CFE		87,560

II. BACKGROUND

The Commission decided at its October 3, 2002, meeting to postpone approval of University of Colorado Health Sciences Center at Fitzsimons projects then pending until the Commission approved the University of Colorado Health Sciences Center's latest update and supplement to the 1998 Facilities Master Plan. One of the issues was definitive action from the Board of Regents on eventual disposition of the 9th and Colorado campus. The Board of Regents formally approved a resolution to eventually sell the 9th and Colorado campus for

redevelopment on November 14, 2002, a motion that was amended on December 19, 2002. (Copies of the two Board of Regents resolutions are in Attachment A.)

The only project pending from October 3, 2003, but not on the list for consideration today, is the UCHSC Fitzsimons Library. The University of Colorado will try to finance its construction and those of other academically oriented projects through Certificates of Participation backed by General Funds, a proposal before the General Assembly. A condition of COP financing is that no cash funds can be used. (UCHSC earlier had proposed $5 million of cash funds and $29,998,669 of Capital Construction Funds Exempt for the Library.) The Center for Oral Health program plan is an addition to the list; it was not submitted to CCHE until November 15, 2003.

The Board of Regents' actions – as well as Commission action on the latest supplement to the facility master plan today – clears the way for approval of the four projects. All four projects are part of a commitment from the University of Colorado Health Sciences Center to move all functions of the 9th and Colorado campus to the Fitzsimons campus in a much shorter period than the 20 years proposed in the 1998 plan.

III. STAFF ANALYSIS

Of the three cash-funded projects – Barbara Davis Center, Revised Phase 2; Center for Bioethics and Humanities; and Infrastructure, Phase 6 – the Barbara Davis Center and the Center for Bioethics and Humanities have been revised since first submitted to CCHE.

The revised program plan for the Barbara Davis Center, Phase 2, proposes adding 54,800 gross square feet (gsf) of shelled space on two floors, as well as finishing 20,330 gsf that was to be left unfinished during Phase 1. The additional 54,800 gsf of space would be available for research to University groups until the Barbara Davis Center needs the space or until more research space is built elsewhere on the Fitzsimons campus. More detailed studies concluded that the Center needed to have in both Phases 1 and 2 a total of about 100,000 gross square feet (gsf), rather than the 53,715 gsf originally planned. Whatever groups that use the unshelled space will pay for finishing the space as part of their "lease," and the Barbara Davis Center will "buy" the space back as gifts and cash funds become available. (See Attachment B – Barbara Davis Center, Phase 2 CCHE staff evaluation for more details.)

CCHE neither approved nor disapproved the original Center for Humanities program plan in 2001; University of Colorado Health Sciences Center uncertainties about the exact location led to CCHE inaction. The revised program plan submitted for FY 2003-2004 connects the building, now renamed the Center for Bioethics and Humanities, to Education IB to realize cost efficiencies. Functions of the Center for Bioethics and Humanities for the 9th and Colorado Boulevard campus are currently located in leased space. The intent of having a dedicated building for the teaching and discussion of ethics in health care, as well as a place

to display art and other work shedding light about ethics in medicine, is to establish the teaching of ethics as a central part of the curriculum of all medical schools at the Fitzsimons campus. (Attachment C – Center for Bioethics and Humanities CCHE staff evaluation.)

Infrastructure, Phase 6, will extend new sewer lines to replace the 50-year-old lines in the central core of the campus. Initially, the sewer lines will serve Education 1B and Environmental Health and Safety. Telecommunication cables and communication equipment will be installed for both buildings in underground ducts. Four buildings will be demolished to make way for future buildings and grading and soil management will be performed. (Attachment D – Infrastructure, Phase 6 CCHE staff evaluation.)

All but one of the five projects are in the UCHSC 5-Year Capital Improvements Plan for FY 2003-2004. The exception is the Center for Oral Health, which was not planned to begin until 2007-2008. A large cash donation to help pay for a new building and a residency certificate program in orthodontics is the reason the Health Sciences Center moved up the project. One of the conditions for the University of Colorado to accept the donation was that the Health Sciences Center begins using the funds as soon as possible. Waiting for cash spending authority in the FY 2003-2004 Long Bill would delay the project too much. Therefore, the University decided to classify the project as SB 92-202 project. Such a classification would allow the University to begin spending the money on design and architectural studies as soon as approval is granted. Spending is shown for the current 2002-2003 fiscal year. The SB 92-209 classification prevents the University from ever seeking state money for operation and maintenance of the building, which will replace the School of Dentistry building on the 9th and Colorado campus. The Health Sciences Center has submitted to CCHE staff the outlines of a financing plan that will be submitted to the Board of Regents on February 20. The financing plan is a modification of one the Board of Regents approved on January 16, 2003, that proposed the use of revenue bonds. Commission approval of this program plan should be contingent upon the Board of Regents passage of an amended finance plan for the Center for Oral Health on February 20 allowing for Certificates of Participation issued by the Colorado Educational and Cultural Facilities Authority. (Attachment E – Center for Oral Health CCHE staff evaluation.)

IV. STAFF RECOMMENDATIONS

1. **That the Commission approves the following Health Sciences Center – Fitzsimons cash-funded projects for FY 03-04:**

   - **Barbara Davis Center, Revised Phase 2 ($9,637,762 CFE; 20,330 gsf finish, 54,800 gsf shell)**

   - **Center for Bioethics and Humanities ($5,436,977 CFE; 15,887 gsf)**

- **Infrastructure, Phase 6 ($1,322,508 CFE)**

2. **That the Commission approves the following Health Sciences Center – Fitzsimons SB 92-202 project for FY 02-03 contingent upon the University of Colorado Board of Regents' passage of the amended finance plan on February 20, 2003:**

   - **Center for Oral Health ($26,500,000 CFE; 87,560 gsf)**

Appendix A

STATUTORY AUTHORITY

23-1-106 – Duties and powers of the commission with respect to capital construction and long-range planning.

(5)(a) The commission shall approve plans for any capital construction project at any institution, including a community college, regardless of the source of funds; except that the commission need not approve plans for any capital construction project at a local community college or area vocational school or for any capital construction project described in subsection (9) or (10) of this section that is estimated to require total expenditures of two hundred fifty thousand dollars or less.

(9)(a) The commission shall review and approve any plan for a capital construction project that is estimated to require total expenditures exceeding two hundred fifty thousand dollars and that is to be constructed, operated, and maintained solely from student fees, auxiliary facility funds, wholly endowed gifts and bequests, research building revolving funds, or a combination of such sources, as provided in sections 25-5-102, 25-5-103, 23-5-112, 23-20-124, 23-31-129, and 23-41-117 and section 24-75-303 (3), C.R.S. Any such plan for a capital construction project that is estimated to require total expenditures of two hundred fifty thousand dollars or less shall not be subject to review or approval by the commission.

November 14, 2002, Board of Regents Resolution:

UCHSC: Redevelopment of 9th and Colorado Boulevard Campus

Moved by Regents Lucero and Steinhauer, seconded by Regent Rutledge, and carried unanimously (7-0). (Regent Robb was not present for the vote.)

Attachment 3 (3 pages) to these minutes has the material on this item, dated November 14, 2002, that was available at the meeting.

This item was discussed extensively at the board's capital planning committee meeting the previous day.

The resolution reads as follows:

RESOLVED, that the Board of Regents approves the private redevelopment of the UCHSC 9th Avenue and Colorado Boulevard campus as summarized in the Statement of Information for this regent action item under Scenario 4: Semi Clean Slate and/or Scenario 5: Clean Slate; and

FURTHER RESOLVED, that previously Board of Regents approved redevelopment priorities are replaced with Scenario 4: Semi Clean Slate and/or Scenario 5: Clean Slate; and

FURTHER RESOLVED, that Board of Regents authorizes the UCHSC Chancellor to commence a selection process for a developer that will be responsible for the redevelopment of the UCHSC 9th Avenue and Colorado Boulevard campus and provide the Board of Regents with no more than three qualified development firms from which to select a finalist; and

FURTHER RESOLVED, that proceeds from the private redevelopment of the UCHSC 9th Avenue and Colorado Boulevard campus will first be used to retire outstanding debt for existing facilities at that campus and after outstanding debt is retired for existing facilities at the UCHSC 9th Avenue and Colorado Boulevard campus, proceeds from the private redevelopment of that campus will be used until January 1, 2013, exclusively for the UCHSC transition to the Fitzsimons campus.

December 18, 2002, Board of Regents Resolution:

Moved by Regent Lucero that one emergency matter be considered, seconded by Regent Rutledge, and carried unanimously (8-0).

1. UCHSC: Revision to Redevelopment of 9th and Colorado Campus

Moved by Regent Lucero, seconded by Regents Robb and Sievers, and carried unanimously. (8-0).

Attachment 4 (3 pages) to these minutes has the material on this item, dated December 18, 2002, that was available at the board meeting. It consists of the resolution, statement of information, and previous actions.

The Resolved and first Further Resolved clauses differ from the resolution dated and approved at the November 14, 2002, board meeting as follows (deletions ~~lined through~~ ; additions in ***bold italics***):

RESOLVED, that the Board of Regents approves the private redevelopment of the UCHSC 9th Avenue and Colorado Boulevard campus as summarized in the Statement of Information for this regent action item under Scenario 4: Semi Clean Slate ~~and/or~~ ***as a transition to*** Scenario 5: Clean Slate; and

FURTHER RESOLVED, that previously Board of Regents approved redevelopment priorities are replaced with Scenario 4: Semi Clean Slate ~~and/or~~ ***as a transition to*** Scenario 5: Clean Slate; and

.

CASH-FUNDED PROGRAM PLAN EVALUATION FY 2003- 04
Colorado Commission on Higher Education

Project: Barbara Davis Center for Childhood Diabetes, Phase 2 (Revised)	**Institution:** University of Colorado Health Sciences Center
Original Submittal Date: August 8, 2002	**Revision Date:** November 15, 2002
Total Project Cost: $9,637,762 **Construction Cost:** $8,059,290 **Project Completion Date:** July 2005 **Purpose Code:** F-5	**Total Square Footage** **New Construction:** 75,130 gross square feet (gsf): finish 20,330 gsf, build a shell for 54,800 gsf **Remodel:** **Cost per Square Foot:** **New Construction:** $107.27 **Remodel:** *Comments: Unusually low cost of new construction is due to this project being one to finish space left unfinished in Barbara Davis, Phase 1, and to not finish 54,800 gsf of shelled space.*

Phased Funding:

	2003-04	2004-05	2005-06	2006-07	2007- 08	Total
CCFE						
CF						
CFE	$9,637,762					$9,637,762
FF						
Total	$9,637,762					$9,637,762

EVALUATION

Project Description:

This project would finish the square footage that would otherwise remain unfinished in the 53,715-square-foot Barbara Davis Center at the Fitzsimons campus of the University of

Colorado Health Sciences Center. The Barbara Davis Center would be located southwest of the old Fitzsimons Hospital and east of the planned Research Complex I. The design for Phase 1 for largely research programs began in June 2002. The intent of Phase 1 was to finish the 20,330 square feet for clinical purposes of Phase 2 at a future date. Phase 2 includes the Pediatrics Clinic, the Young Adult Clinic, the Eye Clinic, and related building support space. During a review of the concept design for Phase 1, the University concluded the Center eventually would need an additional 54,800 gsf for research. The space will be designed as flexibly as possible to accommodate evolving clinical program and research needs.

The revision to the program plan calls for:

- Reducing the cost of finishing 20,300 gsf to house the Center's clinical division programs from $3,395,371 to $2,194,690. Reducing professional services costs by coordinating the design of Phases 1 and 2 and funding additional moveable equipment and furnishings from the Barbara Davis Foundation, rather than the University, are the main ways the savings will be achieved.

- Increasing the Phase 2 project scope by approximately 54,800 gsf to include additional construction of two floors of shelled research space and related building support. Adding the two floors of unfinished space will total $7,443,072. The unshelled space will be finished and occupied by related campus research space until the Barbara Davis Center needs the research space and when other research space becomes available in the Research Complex 2 facility, which is expected to be finished in June 2008. A future program plan to finish the space for research programs the Chancellor identifies will be submitted to CCHE later.

As originally designed, the Barbara Davis Center at Fitzsimons would have had mechanical and storage in the basement, clinical programs (Phase 2) on the first floor and research on the second floor (Phase 1). As a result of the revised Barbara Davis Center, Phase 2, program plan, the building would have mechanical and storage in the basement, clinical programs on the first floor, shelled research and building support space on the second and third floors, and finished research space on the fourth floor, with a penthouse for mechanical space.

Total estimated cost of the completed Barbara Davis Center would increase from $20,133,31 ($16,737,941 Phase1; $3,395,371 Phase 2) to $26,375,703 ($16,737,941 Phase 1, $9,637,762 Phase 2).

The entire Barbara Davis Center for Childhood Diabetes is expected to relocate from the 9th and Colorado Boulevard campus to the Fitzsimons campus by July 2005. When completed, the Barbara Davis Center, Phases 1 and 2, will have about 108,500 square feet, of which 54,800 gsf would be unfinished shelled space.

Project Justification:

Adding shell space to the Barbara Davis Center will expedite the relocation of other campus research programs to the Fitzsimons site. The University of Colorado Health Sciences Center institutional master plan projects the need for about 1.4 million gsf of research space at

Fitzsimons -- including wet laboratories, animal research, laboratory support and research office space -- to adequately support an estimated $400 million in sponsored research awards by 2007. The research space will be constructed in the Research Complex 1 (600,000 gsf), Research Complex 2 (400,000 gsf), and Research Complex 3 (400,000 gsf). This compares to 700,000 gsf available for research at the 9th and Colorado campus. Early access to the additional research space in the Barbara Davis Center, Phase 2, will make it possible for research space to relocate to Fitzsimons much faster. During fiscal year 2002, for example, research awards to the Health Sciences Center totaled $294.6 million; for the Barbara Davis Center, the awards came to about $10 million.

CCHE Staff Recommendation:

The revised program plan for the Barbara Davis Center, Phase 2, project should be approved when the update to the University of Colorado Health Sciences Facility Master Plan is approved. CCHE program plan approval will permit the University to seek cash-spending authority from the General Assembly in the Long Bill for FY 03-04. Program plan approval also will permit the Fitzsimons campus to go forward with its intent to move from the 9th and Colorado campus to Fitzsimons campus much faster, as called for in the Urban Land Institute study of development of the Fitzsimons campus. Adding additional shelled-in research space seems reasonable given the projected need for research space at the Fitzsimons campus and the economies that would result from building the shelled-in space now rather than later.

CCHE Comments:

Relocation from 9th and Colorado: Although sited directly next to the University of Colorado Hospital at the 9th and Colorado campus, the Barbara Davis Center has no program or physical relationship with the hospital. Therefore, relocating the center to Fitzsimons away from the hospital should have no impact on the numbers of persons using the clinic. The clinical part of the Barbara Davis Center, the subject of this program plan, has its own self-contained laboratory services and patient education functions. (Construction of Phase 2 of the University of Colorado Hospital at Fitzsimons should be completed by December 2003. That will include construction of a 101-bed hospital with emergency services in a new 12-story inpatient tower. Of the 475,000-square-foot total, 230,000 square feet will be finished and 230,000 square feet will be shell space. Phase 3, completing the shell space, is expected to be done in June 2006.)

Project Timing: The program plan for Barbara Davis Center, Phase 2, was submitted earlier than planned because of the need to design both phases 1 and 2 together to ensure sufficient space for both clinical and research programs and coordinate building schedules. Relocating both the research and clinical functions to Fitzsimons as soon as possible will eliminate the need to lease 6,800 gsf off site for clinical research, as well as facility operating costs for two structures.

Facility and Program Requirements:

Over the last 22 years, the Barbara Davis Center at the 9th and Colorado campus has grown from a Pediatric Clinic caring for 400 children to a complex institution that cares for more than 4,000

patients and leads the nation in childhood diabetes research. The focus of the Barbara Davis Center has been the treatment of children with Type 1, or insulin-dependent, diabetes. Clinical revenues have been growing 11-12 percent annually over the past three years. However, clinical income sources account for only 26 percent of the Center's Clinical Division financial resources. The remainder of the funding comes from clinical research grants and contracts (46%), fund-raising (25%) and other sources (3%). Without the additional finished space represented by Phase 2, the clinical division space will need to remain at the 9th and Colorado Boulevard facility, resulting in divided research and clinical programs. The new Fitzsimons facility will allow the Barbara Davis Center to increase the range of clinical services provided to children and adults, as well as allow research growth in autoimmunity and transplantation.

This table drawn from the budget documents shows the growth in clinical visits. The program plan states that by the time Barbara Davis Center moves to Fitzsimons in 2005-06, the number of clinical visits is expected to reach 21,500 due to the increase in clinical space and the efficient clinical and amenity design of the new Fitzsimons facility.

Clinical Visits to Barbara Davis Center, Actual and Projected

	99-00 Actual	Projected 01-02	Projected 04-05
Pediatric Clinic	4,411	5,951	7,449
Young Adult Clinic	1,792	2,502	3,213
Eye Clinic	1,173	1,200	1,250

As planned now, the second floor (one of the two shelled floors) would support future clinical research and dry lab functions and the third floor would house basic science wet laboratory functions. Each of the two shelled floors would have:

- Heating, ventilation, and air conditioning capacity;
- A hallway between the two stair towers;
- Rough-in of toilets and environmental service closets;
- Rough-in of telecom services; and
- Electrical subpanels.

The building would have a six-stop service elevator and a four-stop passenger elevator.

Full access to electronic medical information will be available in every examination and treatment room. Clinical faculty and staff offices will be located close to the examination and treatment areas. Each of the three clinics will need somewhat separated reception areas.

The space needs for Phase 2 are:

Barbara Davis Center, Phase 2, Space Needs

Function	*ASF*	*GSF*
Phase 2 Finished Space		
Pediatric Clinic	2,575	
Young Adult Clinic	1,870	
Eye Clinic	740	
Clinical Research	1,990	
Offices	5,730	
Building Support (Reception, lunch, infectious wastes etc.)	1,230	
		20,300
Phase 2 Unfinished Space		
Shell for Floor 2		22,600
Shell for Floor 3		24,200
Penthouse (Mechanical)		8,000
Total	***13,215***	***75,130***

Building Functional Uses:

The building functional uses are obvious: clinics, offices, and building support, as well as shelled-in space for future research.

Building Efficiency Factor/Space Utilization:

For the first floor, the building efficiency factor will be 64.9 percent (13,215 asf/20,330 gsf), above the CCHE building efficiency of 63 percent for hospitals or infirmaries, the closest the guidelines come to clinics. The building efficiency for the total building can't be determined due to the amount of unfinished space that will be left on the second and third floors. Space utilization of Phase 2 will be about 50 hours a week for patient care and 65 hours a week for clinical research.

Facility Alternatives:

Alternatives to Phase 2 discussed in the program plan, with the arguments against each, include:

- Continue to use the existing 9th and Colorado Boulevard campus for the clinical portion of the Barbara Davis Center—This would result in a divided research and clinical program, with the research portion at Fitzsimons and the clinical portion at 9th and Colorado. This separation would have negative effects on both the research and clinical portions of the Barbara Davis Center because the two are intertwined.

- Lease of Space—This alternative also would result in an inefficient, split program and would perpetuate leasing expenses.

Consistency with Institutional Master Plan:

This project is consistent with the University of Colorado Health Sciences Center Institutional Master Plan and its supplements. The master plan specifically states that the Health Sciences Center strives to improve human health through education of health professions; delivery of both health care and community services; and the advancement of knowledge through research in the health sciences. The new Barbara Davis Center, Phase 1 and Phase 2, will integrate clinical care with clinical research to encourage more effective use of discoveries to the benefit of diabetic patients.

Consistency with Institutional 5-Year Capital Improvement Plan Schedule:

This program is included in the 5-Year Capital Improvement Plan Schedule submitted for FY 03-04.

Appropriateness of Funding:

Relying on cash funds exempt for Phase 2 seems reasonable given the current state funding restrictions. The University of Colorado System, according to an agenda item presented to the Board of Regents on November 14, 2002, would finance up to $21 million of the Barbara Davis Center, Phases 1 and 2. That amount will be repaid in a combination of private gifts, indirect cost recoveries, and federal funds. The increased borrowing (up from the $12 million originally anticipated) will increase the campus debt capacity ratio by 0.23 percent from 6.22 percent to 6.45 percent in 2004, the first full year debt service payments. If all the Health Sciences Center projects in the 5-Year Capital Improvement Plan for 2004-2008 were financed as planned, as well as the Center for Oral Health (which was recently added for FY 2002-2003), the debt capacity ratio would increase an additional 0.35 percent to 7.05 percent in FY 2004 and an additional 0.24 percent from 6.87 percent to 7.11 percent in FY 2008.

For the Barbara Davis Center, Phase 2, total cost of $9.637 million, $7,443,082 will come from debt instruments and $700,000 in cash funds.

Research programs related to the Barbara Davis Center that would occupy the second and third floors would pay for finishing the floors; those expenses would be considered the cost of their interim "leases." The Barbara Davis Center would be allowed to "buy back" space on the second and third floors for its clinical or research program expansion as cash and gift funds become available.

Governing Board Approval:

The Board of Regents of the University of Colorado System approved this revised program plan on November 15, 2002.

CASH-FUNDED PROGRAM PLAN EVALUATION FY 2003-04
Colorado Commission on Higher Education

Project: Center for Bioethics and Humanities (Center for Humanities)	**Institution:** University of Colorado Health Sciences Center - Fitzsimons
Original Submittal Date: August 2002	**Revision Date:** Note: This is a new program plan done in response to concerns CCHE staff raised about a similar program plan reviewed in 2001.
Total Project Cost: $5,436,977 **Construction Cost:** $4,045,140 **Purpose Code:** F-5	**Total Square Footage** N/A **New Construction:** 15,887 gsf **Remodel:** **Cost per Square Foot:** **New Construction:** $220 **Remodel:**

Phased Funding:

	2003-04	2004-05	2005-06	2006-07	2007- 08	Total
CCFE						
CF						
CFE	$5,436,977					$5,436,977
FF						
Total	$5,436,977					$5,436,977

EVALUATION

Project Description:

The University of Colorado Health Sciences Center wants to move the Center for Humanities (to be renamed the Center for Bioethics and Humanities) from leased space off the 9th and Colorado campus to the Fitzsimons campus physically connected, but architecturally separate from, Education Facility 1B in the education zone. The new facility would house faculty offices, a board room, and a library seminar room on the second floor, and a secure exhibit space, a 100-seat circular room called the Forum, and other meeting and seminar facilities on the first floor. The overall intent is to provide an architecturally distinctive building where discussions,

seminars, and meetings about ethical issues in health care, research, and policy can take place. The Center for Bioethics and Humanities faculty teach the only course required of all medical students, "Ethics in the Health Professions."

Project Justification:

Center for Humanities faculty offer the only course required of all medical students, "Ethics in the Health Professions," that draws students from all four professional schools: Medicine, Dentistry, Nursing, Pharmacy. The graduate school also uses the Center for Humanities resources. The 2002 enrollment in the course is just more than 370 students. Center faculty educates medical residents and fellows about ethical issues in medicine. In addition, the faculty provides the bulk of ethics expertise to staffs of University of Colorado and Children's hospitals. The faculty works with the public and other health care organizations to promote greater awareness of ethical issues in health care and to craft solutions to these issues. The Center in its leased space off the 9th and Colorado campus has no space for convening large groups, and no secure exhibit space for art depicting various perspectives on healing and health. Its isolated location off the 9th and Colorado campus hampers its ability to focus attention on ethical issues in health care.

The program plan indicates that the Center provides programs for the entire student body at the Health Sciences Center, the faculty, and the community. For that reason, the plan includes both students and faculty as beneficiaries of the Center for Humanities project.

Projected and Actual University of Colorado Health Sciences Center Students and Faculty

	Actual FY99-00	Actual FY00-01	Actual FY01-02	Projected FY 02-03	Projected FY 03-04	Projected FY 04-05
Total Students	2,345	2,360	2,367	2,464	2,544	2,573
Total Faculty	2,698	2,750	2,822	2,918	2,977	3,036

CCHE Recommendations:

This program plan should be approved once the Commission approves the update to the Health Sciences Center.

CCHE Comments:

Relationship to Previous Program Plan: The 2001 program plan for this project proposed connecting this building to the old Fitzsimons auditorium. CCHE had previously approved the renovation plan for the auditorium. At about the time CCHE staff reviewed the Center for Humanities project in 2001, however, Health Sciences Center officials became convinced that renovating the auditorium would be more costly than anticipated, and that the Center for Humanities should be a separate project. Due to uncertainty about the future of the auditorium, CCHE staff recommended approval of the plan should be withheld. This program plan is

essentially proposing the same project, but in a different location and connected or adjacent to different buildings.

Fundraising Status: The Center for Humanities voluntary board and development director have identified potential donors (foundations, organizations, corporations, and others), established fund raising targets, submitted proposals to foundations, and designed a letter writing campaign To date, $1 million (or about 20% of the necessary funds) has been raised for this project.

Program and Facility Requirements:

The Center expects to eventually offer a graduate degree program in bioethics, a change that would help increase the staffing from its current 3.75 full-time core faculty and six part-time associate faculty (the associate faculty collectively make up one full-time faculty) to nine full-time faculty. This program plan would accommodate this growth in faculty, which would be partially in response to the increasing importance of ethical issues in health care. The Forum would provide dedicated space for the convening of meetings at which ethical matters related to health care delivery, research, and policy would be discussed and deliberated. Gallery spaces for the display of the visual arts expressing the humanistic dimensions of health care are needed. Meeting rooms also are required for graduate seminars, and breakout rooms for small-group discussions. All learning spaces should be equipped for a variety of educational technologies, such as audio/visual aids and computer graphics. The building must have access to a centralized computer network/fiber optics system. Because most of the courses in bioethics and humanities would be taught in lecture halls and classrooms in Education Facility 1B and Education Facility II, no space in the Center would be specifically dedicated to classrooms. However, some small seminars would take place in the Center's seminar room. The Forum and breakout rooms, although intended for problem solving and conferences, may be used for some courses if they are available and appropriately sized.

The space needs for the Center involve 6,000 assignable square feet (asf) on the first floor and 3,850 asf on the upper floor, for a total 9,850 asf, or 15,887 gross square feet (gsf). These are the space needs as depicted in the program plan:

Space Needs for Center for Humanities

Ground Level	*Total ASF*
Forum -Auditorium	2,250
Projection & IT Room	150
Breakout Rooms (4)	800
Exhibit Gallery	2,000
Restrooms	400
Kitchen/Storage	250
Miscellaneous	150
Subtotal	*6,000*

Upper Level	*Total ASF*
Director Suite	300
Faculty Offices (9)	1,350
Senior Staff Office	125
Junior Staff Offices (3)	300
Reception	100
Board Room	800
Library/Seminar Room	300
Restrooms	300
Copy/Storage	175
Misc. & IT	100
Subtotal	*3,850*
Total ASF	***9,850***

Information technology networking and equipment comes to $137,400, and includes 12 port interface jacks, portable audio-visual equipment, seminar and board room projection and sound systems, a control screen for the Forum, and audio-visual equipment for the Forum.

The physical "bridge" connecting Education 1-B with the Center for Bioethics and Humanities will have space for break-out rooms. The rooms will be available to students and faculty using instructional space in the Education 1-B facility.

Building Functional Uses:

The Center will be used for classes, meetings, seminars, faculty offices, and support.

Building Efficiency Factor/Space Utilization:

The Center will have a building efficiency factor of 62 percent. CCHE guidelines suggest a building efficiency factor of 68 percent for classroom and office buildings. However, the Center for Bioethics and Humanities is not truly a classroom building.

Appropriateness of Funding:

The use of University of Colorado Hospital and University of Colorado Health Sciences Center cash funds is an appropriate source for this project, particularly in these times of limited state capital construction dollars. The University of Colorado Health Sciences Center intends to get the cash funds from donor gifts.

Facility Alternatives:

Alternatives discussed in the program plan, and the arguments against them, include:

- Continue to Lease Current Space—This option doesn't provide sufficient space to meet the needs of the program and would be too inaccessible at its location away from the 9th and Colorado campus. No forum, only a small amount of display space in the library, insufficient offices for faculty and staff, and ongoing lease expenses would result.

- Lease Other Space—While leasing other space may provide sufficient space, an off-campus location would continue ongoing lease expenses and still be inaccessible to many of its potential users.

- Construct Less Space—Constructing a building with less space could result in a structure with insufficient display space, not enough offices for faculty and staff, or a large gathering space a few years from now.

Consistency with Institutional Master Plan:

The program plan is consistent with the master plan for the Health Sciences Center. The Health Science Center Master Plan annual updates have included the Center for Bioethics and Humanities as a result of the efforts of the community-based Advisory Board for the Center.

Consistency with Institutional 5-Year Capital Improvement Plan Schedule:

This program plan is in the 5-Year Capital Improvement Plan Schedule submitted for FY 03-04.

Governing Board Approval:

The Board of Regents of the University of Colorado approved the program plan on August 8, 2002.

CASH-FUNDED PROGRAM PLAN EVALUATION FY 2003-04
Colorado Commission on Higher Education

Project: Infrastructure, Phase 6	**Institution:** University of Colorado Health Sciences Center – Fitzsimons
Original Submittal Date: August 2002	**Revision Date:**
Total Project Cost: $1,322,508 **Construction Cost:** $1,044,470 **Purpose Code:** F-3	**Total Square Footage** N/A **New Construction:** **Remodel:** **Cost per Square Foot:** **New Construction:** **Remodel:**

Phased Funding:

	2003-04	2004-05	2005-06	2006-07	2007- 08	Total
CCFE						
CF						
CFE	$1,322,508					$1,322,508
FF						
Total	$1,322,508					$1,322,508

EVALUATION

Project Description:

The University of Colorado Health Sciences Center is proposing a series of improvements to the 50-70-year-old infrastructure at Fitzsimons to accommodate the following building projects during its Mid Term Development, 2002-2004:

- The University of Colorado Hospital, a 475,000-square-foot facility (with about 245,000 square feet shell space): The first phase consisting of 101 beds and some ancillary space will be occupied in November 2003. To completely relocate the University of Colorado Hospital from 9th and Colorado to Fitzsimons will require about 1 million gross square feet.

- The Center for Humanities, a 15,887-square-foot facility: Spending authorization is being sought for FY 03-04; project completion date is anticipated to be 2005.

- Environmental Health and Safety, a 12,025-square-foot facility: Scheduled for occupancy in summer 2004; and

- The Children's Hospital, a possible affiliate project: The board has not yet acted on the final proposal to relocate to Fitzsimons, but current plans are to start infrastructure development in 2003 and to occupy facilities in the summer of 2007.

Specific projects in Phase 6, with the engineer's estimate of their costs in parentheses, include:

- Sanitary sewer—A new, 10-inch PVC sanitary sewer main west of the new Environmental Health and Safety facility, running west down 19th Avenue to Ursula to not only serve the new Environmental Health and Safety facility but other structures in the Education Zone will be installed ($175,000).

- Telecommunications—Telecommunication cables and communications equipment for the Environmental Health and Safety and Education buildings. The new cabling will be installed in existing ducts that were put in during Phase 2 ($150,000).

- Building demolition—Buildings 422, 506, 508, and 527 will be demolished to make room for parking ($479,470).

- Grading and soils management—A common location for soil removed for building excavations needs occasional re-grading, erosion control, and temporary irrigation, as well as movement of soil. Maintaining the soil on site eliminates disposal and soil import costs ($240,000).

Some of the infrastructure improvements that were intended for the state-supported Infrastructure, Phase 5b, but were not funded have been included in Phase 6.

Project Justification:

The projects are needed to serve the utility requirements of the new buildings for which construction is expected to begin before July 1, 2005. Early completion of the infrastructure projects in this program plan will minimize requirements and costs for temporary utilities. The sewer main is critical for the Environmental Health and Safety facility and for further development of the Education Zone. Building demolition for Phase 6 is needed to clear space for parking.

CCHE Recommendations:

This project should be approved once the Commission approves the update to the University of Colorado Health Sciences Center.

CCHE Comments:

None

Program and Facility Requirements:

Phase 6, as did Phases 1-5a, follows the physical plant program guidelines established for Fitzsimons. The guidelines are:

- Construction of an infrastructure and utility system that will support buildout of the campus and provide necessary support to provide health care, education, research, and community service.

- Construction of an infrastructure and utility system that will provide utility services needed for daily operations of constituents and that can be maintained in a manner that continues operations without interruption.

- Installation of an infrastructure and utility system that will be a financial and physical asset to the campus, and that can be managed, adapted, modified, and upgraded to meet operational needs of the campus. The infrastructure must be considered an investment in the future and must be adaptable, flexible, economical, easy to maintain, and have a long life.

Building Functional Uses:

Not applicable to an infrastructure project.

Building Efficiency Factor/Space Utilization:

Not applicable to an infrastructure project.

Appropriateness of Funding:

The use of University of Colorado Hospital and University of Colorado Health Sciences Center cash funds is an appropriate source for this project, particularly in these times of limited state capital construction dollars.

Facility Alternatives:

The program plan states there are no alternatives to meet the program and facility requirements for this project because the current infrastructure can't support the planned development at Fitzsimons. Without the infrastructure improvements, Fitzsimons development can't occur as planned. The program plan states that the University of Colorado Health Sciences Center will consider "alternative project delivery approaches." Those alternatives are contracting with a larger project where possible to gain efficiencies, design/build, or other approaches depending on cost and schedule.

Consistency with Institutional Master Plan:

The program plan is consistent with master plan for the Health Sciences Center and with the Infrastructure Master Plan.

Consistency with Institutional 5-Year Capital Improvement Plan Schedule:

This program plan is in the 5-Year Capital Improvement Plan Schedule submitted for FY 03-04.

Governing Board Approval:

The Board of Regents of the University of Colorado approved the program plan on August 8, 2002.

SB 92-202 PROGRAM PLAN EVALUATION FY 2002-03
Colorado Commission on Higher Education

Project: Center for Oral Health	**Institution:** University of Colorado Health Sciences Center - Fitzsimons
Original Submittal Date: November 15, 2002	**Revision Date:**
Total Project Cost: $26,500,000 **Anticipated Project Completion Date:** May 2005 **Construction Cost:** $20,229,466 **Purpose Code:** F-5	**Total Square Footage** **New Construction:** 87,560 gross square feet (gsf) **Remodel:** **Cost per Square Foot:** **New Construction:** $231.13 **Remodel:** *Comments: Very high square-footage costs are due to utility and plumbing costs associated with provision of clinic space.*

Phased Funding:

	2002-03	2003-04	2004-05	2005-06	2006- 07	Total
CCFE						
CF						
CFE	$26,500,000					$26,500,000
FF						
Total	$26,500,000					$26,500,000

EVALUATION

Project Description:

The University of Colorado Health Sciences Center plans to move the School of Dentistry to the Fitzsimons campus through the construction of a 87,560 gsf Center for Oral Health building. The building will be known as the Lazzara Center for Oral-Facial Health in honor of a major donor, Gasper Lazzara, Jr. D.D.S. Located in the education zone of the Fitzsimons campus

southeast of the old Fitzsimons Veterans Hospital and just south of the Education 1B building, the Center would replace the 60,980 gsf School of Dentistry building, providing about 43 percent more square feet than the current facility, or about 26,652 gsf. The three-story Center would be designed to give dental and dental hygiene students practical experience, in addition to having a lecture hall and some seminar rooms. The clinics would include:

- Main Comprehensive Clinic
- Oral Surgery
- Pediatric Dentistry
- Orthodontic
- Emergency Dental Care
- Geriatric Dental Care
- Special Care (for developmentally challenged patients)
- Radiology

The Center for Oral Health also will house:

- A pre-doctoral dental program
- Pre-clinical education laboratories to instruct students about fabricating crowns, bridges, and other dental parts
- A patient simulation clinic where beginning dental students can practice on dummies
- A baccalaureate dental hygiene clinical program

Reception and waiting areas, equipment sterilization and dispensaries, patient consultation rooms, scheduling areas, seminar rooms, clinical laboratories to make dental materials, and storage areas for supplies and contaminated wastes would be provided. Offices for at least 35 faculty and 80 clinical coordinators and assistants also are planned

The main clinics with the most visitor and staff traffic and the lecture hall would be on the first floor; specialty clinics (surgery, orthodontics, emergency, geriatric/special care, and radiology) and a simulation clinic, second floor; and the faculty and staff offices and other support functions, third floor.

This project is classified as an SB 92-202 one, because all construction, operation, and maintenance will be funded from internal cash sources. The SB 92-202 process was chosen to expedite approval, a condition of the large cash donation to the Center for Oral Health.

Project Justification:

The larger size of the Center for Oral Health as compared to the current School of Dentistry is due to enrollment growth and the need to correct the many spatial inadequacies in operating the School of Dentistry in 2003 in a building constructed in 1976. About one-third of the additional 26,652 gsf will be needed for dedicated, unshared space for the graduate program in orthodontics, one-third to correct current spatial inadequacies, and about one-third to

accommodate projected increases in enrollment. Estimated enrollment growth as compared to current enrollment is shown below.

School of Dentistry Enrollment, Current and Future

	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12
DDS	160	160	160	170	180	190	200	200	200	200
Graduate			16	32	32	32	32	32	32	32
International			10	20	20	20	20	20	20	20
MS*								4	8	8
PhD*								2	4	6
Dental Hygiene	40	40	40	50	60	60	60	60	60	60
Total	*200*	*200*	*226*	*272*	*292*	*302*	*312*	*318*	*324*	*326*

** Pending CCHE approval in 2007 for degree-granting programs; certificates would be awarded if degree-granting approval is not given.*

The present School of Dentistry has structural; heating, ventilation, and air conditioning; electrical; plumbing; and code compliance problems that would cost an estimated $2,539 million in today's dollars to correct. Relocating the School of Dentistry to the Fitzsimons campus is part of the overall accelerated time schedule for moving all Health Sciences Center programs to the Fitzsimons campus.

The School of Dentistry is the only dental school in Colorado and in the entire Rocky Mountain Region. It has dental, dental hygiene, and general practice residency programs, as well as a pediatric dentistry residency program in collaboration with Children's Hospital. An orthodontic and dentofacial orthopedics program is being developed.

Increased enrollment is planned to address dental professional shortages projected as more retire and are not being replaced at a high enough rate to keep up with population growth. The *Colorado Report: A Study of the Relationship Between the University of Colorado School of Dentistry and the Supply of Dentists in Colorado* cited in the program plan projects that Colorado's ratio of dentists per 100,000 people will decline from 64 in 2000 to 53 in 2025. Another factor is the closure of dental schools from which Colorado dentists have graduated in the past: Northwestern University, Washington University, and Loyola University.

Increasing the supply of dental professionals will not necessarily translate into more dental professionals in underserved, rural or lower-income counties, but it may help. The School of Dentistry's Advanced Clinical Training and Service Program (ACTS) inspires some graduates to consider practicing in such underserved areas. Already, dental students while in the ACTS Program account for 27 percent of all dental care services provided in those areas; larger class sizes will result in more services through ACTS. The program is a national model for dental school service.

CCHE Recommendations:

This program plan for the Center for Oral Health should be approved once the Commission passes the University of Colorado Health Sciences Center's master plan update. CCHE Commission approval should be contingent upon the University of Colorado Board of Regents' passage of the amended finance plan on February 20, 2003.

CCHE Comments:

Area Competition for Dental Students: The states of North and South Dakota, New Mexico, Wyoming, Montana, Idaho, Utah, and Arizona currently have no dental schools. Nevada recently established a dental school. In Arizona, a private dental school is scheduled to accept students soon. Although many of the graduates of the School of Dentistry remain in the state to practice, some return to their states of origin, either as a condition of receiving financial help or as a personal preference.

Dentistry Programs at UCHSC - Fitzsimons: Not all the School of Dentistry programs will be located in the Center for Oral Health. The School of Dentistry's Biomaterials Research Center and the Healthy Smiles Clinic (for oral health needs of low-income pediatric dental patients) are already located at Fitzsimons and will not move to the Center for Oral Health. Dental students will take much of their coursework at the adjacent education buildings.

Program and Facility Requirements:

The Center for Oral Health would be designed to fit with the School of Dentistry's new educational initiatives:

- Strengthen educational programs through increased use of technology and teaching methods to include examples such as a state-of-the-art patient simulation clinic and the addition of online and distance education courses;

- Increase class sizes for the dental and dental hygiene educational programs to respond to growing dental professional shortages in several Colorado counties; and

- Create advanced education programs in the dental specialties to address dental workforce shortages.

The building will large enough to accommodate 450 people in the building at one time: 200 dental students, 60 dental hygiene students, up to 150 patients in the dental chairs or in the reception areas; 35 faculty, and 80 clinical, professional, and administrative staff. It will have access to a centralized network/fiber optics system. All offices will be equipped with wiring for computer and telephone; and all learning areas will be ready for audio/video and computer graphics.

Space requirements for the Center for Oral Health are depicted below. The intent of the School of Dentistry is to use specialized spaces for general dentistry when scheduling allows; to share

support areas; and to make clinical seminar space in the building open to all dental students, as well as to medicine, pharmacy, and nursing students.

Program	**GSF**	**ASF**
Main Clinic	14,037	10,040
Core Support Main Clinic	4,446	2,968
Emergency	671	460
Radiology	1,331	865
Front Office	2,769	1,845
Surgery	4,470	2,975
Geriatric & Special Care	1,739	1,185
Orthodontics	13,829	9,547
Pediatrics	603	440
Instructional (Clinical)	6,266	4,500
Instructional	6,938	4,510
Administrative	15,877	10,320
Building Support Materials	5,455	3,880
Building Support Other	9,131	6,175
Total	*87,560*	*59,710*

Because dental and dental hygiene students will take basic science courses in Education Facility 1B and other courses in Education Facility II, the building will be located immediately south of both buildings. The lecture hall in the Center for Oral Health is considered a key component. It will be used for lectures to clinical dental students and dental residents; for students, residents, faculty, and staff in medicine, pharmacy, and nursing when involved in oral health courses and other multidisciplinary clinical education; for professional clinical continuing education; and for patient education programs for the general public.

Telecommunications will be extended from Building 500, the old Fitzsimons Veterans Hospital, to the structure, and natural gas extended from the center of Fitzsimons development. Utilities (sanitary sewer, potable water) are provided through the City of Aurora. Over time, much of the sanitary sewer system on the Fitzsimons campus will need to be replaced because it is at least 50 years old. Steam and chilled water are available from the Central Utility Plant at minimal cost.

Equipment costs will amount to $1,290,375 in new equipment; about $3.8 million worth of equipment ranging from office furniture to simulators will be moved from the 9th and Colorado campus as well. Technology costs will come to $278,500.

Building Functional Uses:

The building will have clinic, clinic support (reception and waiting areas, equipment sterilization and dispensaries, patient consultation rooms, scheduling areas, seminar rooms, clinical laboratories, storage areas, and offices for faculty, clinical coordinators, and assistants), a 100-seat lecture hall, and two temporary classrooms, one seating 30 and the other 60. The temporary classrooms eventually would become additional clinics.

Building Efficiency Factor/Space Utilization:

The building would have a building efficiency of 68 percent (59,710 asf/87,560 gsf); space utilization is expected to be far more than 40 hours a week. The building efficiency is in line with CCHE guidelines of 68 percent for classroom buildings and 63 percent for hospitals.

Appropriateness of Funding:

Due to limited availability of state funding, cash funds exempt is a reasonable source of funds for this building. The University of Colorado intends to finance the construction through 30-year certificates of participation issued by the Colorado Educational and Cultural Facilities Authority. The University will repay the loan through lease payments. Funds raised for the lease will come partly from annual 30-year payments of $1.25 million from a large gift (intended to help pay for construction of the building) and partly from other campus resources. Included in the gift will be an initial $3 million gift that will be made available in March 2003. About $1.6 million of that $3 million will be used for capital equipment purchases and $1.4 million will pay for annual lease payments.

The gift from Gasper Lazzara, Jr., D.D.S., of Eagle County includes:

- The one-time gift of $3 million to be available to the CU Foundation in March 2003;
- An initial payment of $270,000 to start the orthodontics program;
- Annual payments of $1.25 million for 30 years to be used to support the orthodontics program and to help pay off the certificates of participation;
- Approximately $900,000 a year for scholarships for students who agree to work for Lazzara's Orthodontic Education, Ltd., a Florida-based limited partnership; and
- Approximately $420,000 a year for stipends of $35,000 each for the 12 students receiving scholarships.

The Board of Regents approved a financing plan on January 16, 2003, that proposed the use of revenue bonds. Since then staff has concluded that Certificates of Participation issued by the Colorado Educational and Cultural Facilities Authority and paid off from the Lazzara gift would be a more appropriate funding mechanism. The amended financing plan is to go to the Board of Regents on February 20, 2003.

The operation and maintenance costs of the Center for Oral Health are estimated at $640,663 or more annually, including $289,706 in utility costs and $350,958 in other operating and maintenance costs. As an SB 92-202 project, these costs will be paid for from internal resources, such as fees paid to the school for dental work and tuition for continuing education orthodontic classes. Information the University of Colorado Health Sciences Center submitted indicates that the revenue streams will be sufficient to pay for operation and maintenance.

Facility Alternatives:

The program plan contains three alternatives to building this new building, and the arguments against each:

Expand the School of Dentistry's current building at the 9th Avenue campus: Converting administrative space to clinical space and adding another floor onto the existing structure would require costly disruption of the entire building, and would not relocate the School of Dentistry to Fitzsimons, as called for in the University of Colorado Health Sciences Center facilities master plan.

Lease an off-campus facility near Fitzsimons: Leasing a site off campus (assuming a large, suitable space could be found) would make many of the Center's programs inaccessible to many of its constituents and bring about unnecessary lease payments when the University of Colorado already owns an appropriate site at Fitzsimons.

Construct a new facility on a different site within the Fitzsimons campus: The Oral Health Oversight Committee considered six sites. Five of the six sites were considered less favorable due to higher infrastructure costs, delayed schedule considerations, distance to such amenities as parking, and concerns about how permanent the sites could be due to likely expansion of adjacent programs.

Consistency with Institutional Master Plan:

Moving the School of Dentistry to Fitzsimons has been in the University of Colorado Health Sciences Center Master Plan and its updates and supplements since 1998 under such names as the Student Dental Clinic, Clinical Education Facility, and Center for Oral Health. The size and the schedule for the Center have varied over the years, but the need for the clinical education facility has grown in importance.

Consistency with Institutional 5-Year Capital Improvement Plan Schedule:

The Center for Oral Health was in the 5-Year Capital Improvement Plan Schedule submitted for FY 03-04 to begin in FY 06-07. Substantial cash donations made with the understanding the project will proceed as quickly as possible caused the project to be submitted to CCHE several years earlier than originally planned.

Approved by Governing Board:

The Board of Regents approved the program plan on November 14, 2002. The Board of Regents approved a financing plan for this project on January 16, 2003, and is expected to act on an amended financing plan on February 20, 2003.

TOPIC: PROPOSAL: DOCTOR OF PHILOSOPHY IN GEROPSYCHOLOGY AT THE UNIVERSITY OF COLORADO AT COLORADO SPRINGS

PREPARED BY: WILLIAM G. KUEPPER

I. SUMMARY

The Regents of the University of Colorado have submitted a proposal for a Doctor of Philosophy (Ph.D.) in Geropsychology at the University of Colorado at Colorado Springs (UCCS). The proposed degree program is a clinical program designed to prepare "specialists in the normal and abnormal psychological processes that accompany aging." Graduates will be prepared to work as both scientists and practitioners with the ability to "enhance the interplay between science and practice."

The degree will require a minimum of 120 credits beyond the baccalaureate degree, with 70 of those credits beyond the master's degree. Of these at least 30 will be thesis credits. A student must complete and defend both a Master's thesis and a doctoral dissertation.

The proposed program would admit its first students for the 2004-05 academic year. At full implementation, it is projected to have eleven students and three graduates per year with an annual budget of $375,000.

No institution in Colorado offers a Ph.D. in Geropsychology. Colorado State Univeristy (CSU) and University of Colorado at Boulder (UCB) offer a Ph.D. in Psychology but neither has a specialization on aging. UNC has programs in gerontology at the baccalaureate and master's levels.

Reasons supporting approval of the proposed degree program include:

1. The need for specialists in the field of aging will continue to grow with the aging of the population.
2. UCCS has a successful Master's degree program in psychology.
3. The proposed curriculum is well-designed and, the external reviewer notes, the curriculum meets graduate study guidelines for clinical geropsychology.
4. UCCS has a strong faculty in psychology with, according to the external reviewer, an "unusually large number" with a primary or secondary research focus on aging
5. The program will have an excellent clinical site and research facilities at the CU Center for the Aging, a community clinic in Colorado Springs. In addition, UCCS has a Center on Aging on campus which supports interdisciplinary teaching, research, and outreach in gerontology.

CCHE identified several issues for the Board of Regents to discuss and resolve prior to taking action on this proposal. The issues include student demand, capacity of the institution to offer the degree, and the cost effectiveness of the program:

1. Student Demand. Given the history of enrollments in doctoral programs at UCCS, the enrollment and graduation numbers may not reach projections and, almost certainly, will not reach levels necessary to support the program. The CU staff analysis cites the student demand for the University of Southern California's Psychology degree. It is difficult to draw conclusions regarding enrollment when institutions are not peer institutions and the degree programs have different scopes.

2. Capacity to Offer the Program. In terms of faculty resources, the external consultant agrees with UCCS' statement in the proposal that the department should hire three new faculty in order to adequately staff its existing undergraduate and master's programs and implement the proposed Ph.D. Space requirements as stated in the proposal necessitate that UCCS construct 3,000 square feet. It currently leases 2,000 square feet. (Attachment E).

3. Cost Effectiveness. In general, doctoral degrees require at minimum $500,000 annually to support the degree program. Using the 3rd year budget projections, UCCS projects that Geropsychology Ph.D. degree will incur $375,000 in expenses annually. Of this amount, only $65,000 will be covered by tuition, fees and state general fund. The budget projections indicate that this degree will not be self-supporting. In contrast, the Regents may need to support the Geropsychology degree long term at approximately $150,000 per year. Compounding this problem, tuition calculations seem overstated (Attachment F).

   Commission staff is concerned that there is strong possibility that funds on which the program is counting will not be available when needed. The University of Colorado transmitted the request for approval to the Commission on January 21, 2003. The Regents' Strategic Planning Committee discussed the proposal on November 13 while awaiting the external consultant report. Because all discussions occurred prior to budget rescissions, it is unclear if the Regents had sufficient information to deliberate the resource commitment prior to forwarding the degree proposal to the Commission, especially in light of the changing fiscal environment.

This item will return for Commission action in March. This meeting provides as opportunity for the Regents to explain their understanding of the resource issues and their intent to provide long-term financial support. Staff will prepare a recommendation based on the outcome of this discussion.

II. BACKGROUND

The concept paper for the degree proposal was on the Commission agenda at its meeting of October 4, 2001. Several matters were raised by the Commission staff in its analysis of the concept paper. The response to these issues was included in the full proposal. The full proposal was submitted to an external reviewer, Professor Alfred Kaszniak, Director of Clinical Neuropsychology at the University of Arizona. His report is appended as Attachment A. The Regents approved the proposal at their November 14, 2002, meeting. CCHE received the full proposal together with the institution's response to the report, and to questions raised by Commission staff on January 21, 2003 (Attachment B).

The following section summarizes information contained in the degree proposal.

Geropsychology is that branch of clinical psychology that deals most directly with health care for older adults. Although a relatively new specialization, the proposed program's external reviewer points out that the foundational scientific base for geropsychology has been developing for over 50 years. In 1998, the American Psychological Association formally recognized clinical geropsychology as a specialty area.

The proposal documents the dramatic demographic shift toward an older population this country is experiencing. By 2020, 20 percent of the population will be over 65. The trend in Colorado will be even more dramatic. Projections by the state demographer, cited in the proposal, show an 80 percent increase in those over sixty-five in the two decades from 1998 to 2018. Similar growth is projected for El Paso and Teller counties, the primary service area of UCCS. A recent article in Professional Psychology suggests a considerable unmet need for psychological care and the American Psychological Association estimates that 5,000 doctoral-level geropsychology practitioners will be needed by 2020. The proposal projects that Colorado will need 65 gerospsychologists.

The proposal contends that student demand for doctoral programs in psychology are strong within the state and nationally. Data from 1999 employed in the proposal show that CSU and UC-Boulder had 900 applicants and accepted 26 students in their doctoral programs. Two institutions that offer a clinical aging specialty (geropsychology) as part of their doctoral programs --(the University of Southern California and Washington University of St. Louis -- show a 6:1 ratio of applicants to those admitted.

The proposed doctoral program at UCCS builds on its M.A. in Psychology that graduates 15 students per year. On average, the masters' degree has 90 applicants for the 12 slots annually available – a 9:1 ratio. The primary goal of UCCS's master's degree in Psychology is to prepare students for doctoral training. The masters' program offers two tracks: a clinical master's degree and a general master's degree with various subspecialties such as neuropsychology, social psychology, program evaluation, psychology and the law,

personality theory, psychometric theory, memory and aging, and cognitive and personality development. A survey of graduates of that program show that over half of the graduates stated they would like to have gone on to a Ph.D. in gerontology if one had been available at UCCS.

The general goal of the proposed program is to prepare geropsychologists who can provide services, teach, and conduct research. Specifically, students will:

- know how aging affects basic psychological processes such as memory, emotions, problem-solving, self-esteem, relationship development, and mental health.
- know how to conduct and evaluate the efficacy of assessments and interventions used in clinical work with older adults and their families.
- obtain advanced knowledge about the paradigms for studying aging and human behavior within core sub-disciplines of psychology (e.g., cognitive, physiological, motivational, personality, developmental, social) in order to develop expertise in a focused area.
- be skilled in research paradigms, methodologies, and techniques (e.g., statistics, research methods, and measurement) that are needed to examine age-related changes in psychological functioning and the effects of interventions.
- be skilled in applying basic research and theory to current problems faced by older adults.
- be socialized into the professional values and standards of conduct in the field, including ethical standards of professional behavior for service providers, professors, and researchers.
- be trained to work in a wide variety of settings, including clinical practices, state agencies, nursing homes, and colleges and universities.

Admission to the program will be based on an applicant's undergraduate GPA, the score on the Graduate Record Exam, an undergraduate degree in psychology, and career goals that are consistent with a specialization in geropsychology. Transfer students may be accepted into the program.

The degree will require a minimum of 120 post-baccalaureate credits. Of these, at least 70 must be earned after completing a master's degree. Courses taken at another university may count toward meeting degree requirements (Attachment D).

The program will employ three "primary mechanisms" of instruction and training: (1) coursework; (2) clinical practica, including an internship; and (3) research apprenticeships. A significant part of the coursework, i.e., the didactic part of the requirements, will utilize courses already in place for the master's degree program. Eleven courses identified with asterisks will be developed specifically for the new program.

The following courses constitute the program curriculum which, according to the external reviewer, "fully meets" the graduate study guidelines for clinical geropsychology. An

asterisk indicates a course developed for the new program. Course descriptions are listed in Attachment G.

Course Number	New	Course Name	Credit Hours
PSY 521	*	Psychology of Aging 1	3
PSY 522	*	Psychology of Aging 2	3
PSY 571		Clinical Skills Laboratory	4
PSY 582		Research Statistics & Methods I	4
PSY 582		Research Statistics & Methods II	4
PSY 588		Multivariate Analysis	3
PSY 589		Multivariate Methods II	3
PSY 603		Research Practicum	3
PSY 610		Proseminar: Developmental	3
PSY 611		Proseminar: Cognition	3
PSY 612		Proseminar: Neuropsychology	3
PSY 614		Proseminar: Personality	3
PSY 641	*	Aging Seminar (Special Topics	3
PSY 642	*	Aging Proseminar	3
PSY 651	*	History of Psychology	3
PSY 661	*	Clinical Geropsychology I	3
PSY 662	*	Clinical Geropsychology II	3
PSY 667		How to Teach More Effectively	1 – 3
PSY 672	*	Professional Development 1	3
PSY 673	*	Professional Development 2	3
PSY 674	*	Practicum in Clinical Psychology	1 – 3
PSY 678		Advanced Psychopathology	3
PSY 685		Assessment 1 – Clinical Interviewing	3
PSY 686		Assessment 2 – Objective Testing in Clinical Psychology	3
PSY 687	*	Clinical Neuropsychology	2
PSY 688	*	Clinical Neuropsychology Lab	1
PSY 692		Seminar: Psychotherapy	3
PSY 700		Master's Thesis	6
PSY 703		Research Practicum	3
PSY 800		Dissertation	30

III. STAFF ANALYSIS

In analyzing the concept paper and the program proposal, Commission staff considered UCCS's role and mission, program need and demand, and quality issues such as curriculum and resources. In addition the staff reviewed UCCS's enrollment and graduation patterns.

Role and Mission and Program Duplication

The statutory mission statement of UCCS includes authorization to offer, "such graduate programs as will serve the needs of the Colorado Springs metropolitan area," while the mission statement recommended by the Blue Ribbon Commission in its report refers to "a limited number of *masters'* and *doctoral* degree programs." The latter statement implies UCCS's doctoral authority but does raise the question as to which doctoral programs are appropriate for UCCS under its "limited" authorization.

There is no other Ph.D. program in Geropsychology in Colorado. None of the current Ph.D. programs in psychology in the state have a specialization in that field. CSU and UCB offer a Ph.D. in Psychology; each graduating 15 students a year. Neither has a specialization on aging. UNC has programs in gerontology at the baccalaureate and master's levels and 2 doctoral programs in Educational Psychology.

Few Geropsychology programs exist in the United States. Many of the existing Clinical Aging or Geropsychology tracks, including the ones at the University Southern California and Washington University at St. Louis, are offered as specializations on aging within a general Psychology degree.

Program Need and Demand

The proposal contains data on the need for specialists in geropsychology and the student interest in such programs. The external reviewer supports these arguments in his report. Commission staff takes no exception to these arguments but believes it important to look at program need and demand in the context of the history of doctoral programs at UCCS.

That history is a checkered one. UCCS has failed to achieve sufficient enrollment for viability in its Computer Science Ph.D. degree and enrollments are not strong in the Ph.D. in Electrical Engineering. Despite strong supportive testimony when the degree proposals were submitted to CCHE, interest in doctoral programs has been insufficient to sustain these doctoral degrees.

It should be noted that two other potential Ph.D. programs are included in UCCS' academic planning report. While these are described as coordinated degrees with UC-Denver, their implementation would still have significant budget implications for UCCS.

Student demand was one of the issues raised by the Commission at the concept paper stage. (projections are appended as Attachment C). As noted above, there are few such doctoral programs nationwide. The external reviewer predicts that the program may receive " a very large number of applications for admission," assuming that the area from which students would be attracted would be larger than the local region. UCCS projects few out-of-state students. Instead, it bases its projections on the number of graduates from UCCS's masters' degree as potential candidates for the proposed Ph.D.

Counterbalancing these factors is the history of poor doctoral enrollments at UCCS, and the small number of applicants to existing doctoral programs focusing only on aging. While the applicant pools to well-established programs in general or clinical psychology are often large, these programs usually include several specializations for students to pursue. Clinical doctoral programs preparing students to work with the aged, such as the proposed program at UCCS, typically are one of the specializations in these larger programs. This is the case, for example, at the two institutions, the University of Southern California and Washington University of St. Louis, cited in the external reviewer's report. The response to the Commission's questions cites the enrollment trends at the University of Southern California as evidence that UCCS will be able to attract sufficient enrollment to sustain the Ph.D. However there are several differences: (1) USC is a comprehensive research university with over 30 approved doctoral degree programs, (2) USC's clinical aging specialization is only one of four specializations. Consequently, USC has a broader recruitment base, and (3) USC's doctoral degree requires 76 credits to graduate in contrast to the 120 credits required at UCCS.

Program Quality and Resources

In assessing potential quality of the proposed program, the capacity of the institution to offer the new degree, and the cost-effectiveness of the program, Commission staff rely substantially on governing board involvement. The governing board is required to consider these matters when it considers the program proposal and provide assurances to the commission that it has done so. The Regents staff have indicated that no Regent raised concerns regarding the staff analysis of quality, cost-effectiveness, and capacity to offer the degree.

All graduate program proposals also must have an external review. The external reviewer was very supportive of the proposal. He praised the curriculum, noted the high quality of the psychology faculty at UCCS and the high proportion of that faculty with research agendas in the field of geropsychology. He commented, however, on the importance of the three additional positions proposed for the psychology department to allow it to continue to meet its substantial undergraduate teaching demands as well as implementing the proposed doctoral program.

The proposal does not contain a solution to the projected space needs of the program. The external reviewer notes the need for additional facilities in his report. Commission staff asked the institution to address that issue in its response to the report. The response indicates that new space will not be available for at least five years.

The budget projections indicate that this degree will not be self-supporting for the foreseeable future. The Regents will need to support the Geropsychology degree at approximately $150,000 per year. Using the 3rd year budget projections, UCCS projects that Geropsychology Ph.D. degree will incur $375,000 in expenses annually. Of this amount, tuition, fees and state general fund will cover only $65,000. According to the proposal, the difference will be covered by community support, corporate support, and institutional reallocation.

The Commission may wish to have clarification from the Regents of the following resource issues:

1. The proposal indicates that the Coleman Institute will provide $120,000 of corporate funds for 3 years. Since the CU Foundation has loaned the dollars to cover the Coleman grants in the past year, we assume that the CU Foundation will cover the Coleman pledge.

2. With the recent decline in corporate donations, what data indicates that Colorado Springs business community will be able to contribute new money to UCCS for this degree program. We assume that the Regents will assume the liability for any shortfall that may occur if the $15,000 annual program donations do not materialize.

3. In the current budget environment, is $18,000 of indirect cost recovery money available to support this degree program in 2003-04? Will $36,000 be available in 2004-05?

4. The budget indicates that $24,000 will be transferred from the New Tuition Scholarship. Is this scholarship tied to Quality for Colorado?

5. How will UCCS accomplish a $50,000 annual institutional reallocation? What existing program budgets will be reduced to support a Geropsychology Ph.D.?

IV. SUMMARY

This item will return for Commission action in March. This meeting provides as opportunity for the Regents to explain their understanding of the resource issues and their intent to

provide long-term financial support. Staff will prepare a recommendation based on the outcome of this discussion.

Attachment A

EXTERNAL REVIEW
PROPOSED PH.D. IN GEROPSYCHOLOGY
THE UNIVERSITY OF COLORADO AT COLORADO SPRINGS
Professor Alfred W. Kaszniak
Director of Clinical Neuropsychology
University of Arizona

I. Quality of Proposed Program:

The proposed Ph.D. program focuses on the rapidly developing field of Clinical Geropsychology. Although this is a somewhat newer area of specialization within Clinical Psychology, the foundational scientific base has been accumulating for over 50 years. As described within the proposal, guidelines (e.g., from conferences and committees organized by the American Psychological Association) have been developed for education and training in Clinical Geropsychology. In my view, and that of a large number of colleagues who specialize in the psychological study of aging, the field of Clinical Geropsychology is sufficiently well developed at this point to warrant a Ph.D. program in this specialization. The proposed curriculum at The University of Colorado – Colorado Springs (UCCS) fully meets the graduate study guidelines for Clinical Geropsychology that have been developed, and I consider the proposed curriculum to be at the cutting edge in this field. It should also be noted that the proposed curriculum is consistent with requirements for accreditation by the Committee on Accreditation of the American Psychological Association, and will prepare graduates to qualify for the licensure examination in professional psychology in Colorado (as well as in most other states).

The proposed curriculum will employ a combination of didactic courses, supervised clinical practica, and mentored research experience to accomplish its instructional goals. The combination of these methods is standard and necessary for the type of Ph.D. program being proposed, and the resources available to support these methods appears excellent at UCCS.

Much of the didactic portion of the proposed curriculum will rest on already developed courses at UCCS within their psychology Master's degree program. This Master's degree program has established a national reputation for academic excellence, and attracts a large number of applications annually. Additional courses on the Psychology of Aging, Clinical Geropsychology, Clinical Neuropsychology, Professional Development, and the History of Psychology, plus seminars on aging-related topics, will be developed specifically for the proposed Ph.D. program. The UCCS psychology faculty members are clearly qualified to teach the existent and proposed courses within the curriculum.

In addition to didactic courses, there are also dissertation research requirements and clinical practica that will be required for the proposed Ph.D. program will be facilitated by existence of the UCCS multidisciplinary Center on Aging, which brings together faculty from across the campus who study aging. This Center is a major asset for the proposed Ph.D. program, since it expands the available research resources beyond those that will be made available by faculty within the Psychology Department of UCCS (i.e., 4 faculty members who focus their research primarily on aging, and an additional 3 with a secondary focus on aging). Three proposed additional three tenure-track appointments and one replacement hire (over the next four years) would additionally strengthen the faculty research resources.

The provision of clinical supervision in the proposed clinical practica within the curriculum will be supported by the CU Aging Center, a community clinic that already provides a training site for current students in the Master's degree program. The volume of services that have been rendered to older adults through this clinic, since it opened in January of 1999, appears more than adequate to support the proposed clinical practica. Other collaborations (e.g., with the Pikes Peak Mental Health Center) will provide additional clinical supervision resources for the proposed program. Finally, specialized courses (e.g., in psychopharmacology) can be made available within the proposed program through teaching collaborations with the University of Colorado Health Science Center. Such collaboration will be particularly useful, given the extent to which psychological and physical problem complexly interact in older adults.

The various processes proposed for the continuing evaluation of the program (including comprehensive examinations of students; Master's thesis and dissertation defenses; evaluation of students via clinical supervision; national accreditation review; tracking of graduates and their accomplishments; and student ratings of the program) will help to maintain high quality.

II. Capacity of UCCS to Offer the Proposed Program:

The UCCS Psychology Department has an unusually large number of faculty members, given its total faculty size, who have a primary or secondary focus on aging in their research programs (see comments above). The proposed addition of three tenure-track appointments and one replacement hire over the next four years, bringing the faculty size to 16 tenure-track positions, will create a faculty that is both adequate to deliver the proposed Ph.D. program (while continuing to meet its large undergraduate teaching demands), and comparable in size to established Ph.D. programs in clinical geropsychology (e.g., those at the University of Southern California and at Washington University in St. Louis, MO). Current UCCS Psychology Department faculty members have been quite active in research and scholarly publication concerned with aging, and in securing external grant support for their research.

The level of faculty research productivity appears more than adequate to support the research requirements for students in the proposed Ph.D. program. As noted above, the additional faculty support available from within the UCCS Center on Aging is a definite plus.

As also noted above, the other resources necessary for the program, including clinical supervision within community practicum sites, are also in place. The proposal does state that modest increases (i.e., at a cost of $7,500 per year for FY 2005 through FY 2007) in UCCS library holdings will be necessary to support the program.

The proposed additional space (laboratory, office, and general use) for the program appears important, given space limitations of the UCCS Psychology Department at present. The additional space should create adequate physical facilities for the program. Although it is difficult for an outsider to evaluate how realistic the cost estimates are for the proposed program, those listed in Table 3 of the proposal appear reasonable and modest, although certainly adequate, for a high-quality Ph.D. program. Projected costs for the proposed program are modest largely because relatively few new courses will need to be added to the existent M.A. program curriculum, and practicum training within the community clinic generates revenues that contribute to program support. The projected costs for the proposed program are consistent with rough estimates based on my current experience in administering a large (100 students) psychology Ph.D. program.

III. Student Interest and Demand for a Ph.D. in Clinical Geropsychology:

As documented within the proposal, there appears to be a relatively high level of local interest in the kind of Ph.D. program being proposed. Further, the national need for psychologists who are well trained in both research and service for older adults is great and largely unmet at present. The growing numbers of individuals over the age of 65, throughout the nation, and particularly in Colorado and other Western States, coupled with the psychological challenges of aging, indicate that this need will only increase over the next few decades. Undergraduate students, through both coursework and their general exposure to trends within the country, are aware of these changing demographics. Many are drawn to both the increasing employment opportunities in work involving services to older adults, and to the inherent satisfactions that such work can provide. As documented within the proposal, other institutions offering Ph.D. programs in clinical geropsychology have experienced a high demand for admission to their programs. Given the relative paucity of other institutions offering Ph.D. specializations in clinical geropsychology across the nation, I would anticipate that the proposed program would receive a very large number of applications for admission. The UCCS Psychology Department has documented within their proposal an already substantial demand from among M.A.-level professionals within their local community. Applicants from throughout Colorado, the Western United States, and other areas of the country are likely to attract to the proposed program.

IV. Demand and Need for Graduates in Clinical Geropsychology:

Ph.D. psychologists with expertise in clinical geropsychology have available to them a number of employment options, in academic, hospital, clinic, and other settings, even in the presently constrained economy. Graduates of the program would be highly employable both presently and into the foreseeable future. Several recent studies have documented the large national need for mental health professionals, including psychologists, who are trained to deliver services older adults and contribute to research and teaching in this area.

V. Potential Economic Impact:

Graduates of the proposed program, assuming that they establish their professional careers in Colorado, will contribute to the local and State economy through the purchasing power and taxes that will accompany their earnings. Ph.D. psychologists, particularly those with clinical training, are able to command respectable professional salaries or practice incomes.

In addition, there are indirect impacts to be considered. Increased availability of skilled psychological services for older adults in Colorado can be expected to reduce excess disability in persons with chronic medical conditions, and return many persons with primary mental disorders (e.g., depression) to functional independence within their home and community settings. Greater functional independence should translate into greater participation of these older adults within their local communities, with the concomitant impact on local economies (e.g., going out to restaurants, spending on entertainment, etc.). Further, to the extent that a physically and/or psychologically impaired older adult is returned to more independent functioning, family caregivers (spouse, adult children) may be freed from some of their care giving responsibilities and able to participate more fully in their paid occupations, with a consequent positive economic impact. A final economic impact to be considered concerns potential cost savings to Colorado that could occur with increased availability of skilled psychological services in the State. One area where clinical geropsychologists make an important practical contribution is in the differential diagnosis of psychological and behavioral problems in older adults. Errors in the diagnosis of such problems, documented to be at a surprisingly high level among primary care medical practitioners, can result in substantial costs to individuals and third-party payers. For example, a potentially treatable depression that is misdiagnosed as a dementing illness due to neurological etiology (a rather common misdiagnosis) can result in the patient being prescribed inappropriate and expensive medications, and sometimes being placed in expensive long-term residential care. The contributions of clinical geropsychologists in diagnostic assessment can help to minimize such diagnostic errors.

VI. Additional Reviewer Comments:

A. Potential for National Recognition.

Several of the faculty members within the UCCS Psychology Department already have national reputations for the high quality of their research and scholarship in the psychology of aging. Development of the proposed Ph.D. program would likely result in a significant increase in national recognition of the UCCS Psychology Department, particularly with the planned small increase in faculty size. There are only a small number of other programs nationally that offer a Ph.D. with specialization in clinical geropsychology. This suggests that it is likely that the proposed UCCS program will gain national recognition more quickly than is typically the case for new Ph.D. programs.

B. Unique Contribution to Statewide Need.

The proposed Ph.D. program would be unique within Colorado and the adjacent Western States. As documented within the proposal (and verified by the present reviewer), no other existing Ph.D. psychology program in Colorado offers a specialty focus in clinical geropsychology. In my view, the proposed program would not be duplicative of what is offered in other Ph.D. psychology programs within Colorado.

Alfred W. Kaszniak, Ph.D.
Head of Psychology
Director of Clinical Neuropsychology
Professor of Psychology, Neurology, and Psychiatry
University of Arizona

Attachment B

Proposed Ph.D. Degree in Geropsychology
Response to External Reviewer
January 14, 2003

This addendum to the program proposal responds to the comments of the external reviewer, Professor Alfred W. Kaszniak of the University of Arizona. Dr. Kaszniak's report was extremely positive. The review supported the need and likely demand for the program that were detailed in the proposal, indicated that the capacity was present to deliver the program as resources were outlined in the proposal, and noted that the program as proposed would meet current accreditation requirements.

Based on the report of the external reviewer, Bill Kuepper of the CCHE staff asked the campus to state specifically its commitment to the faculty positions and facilities needed to support the program, and to describe the strategies necessary to provide them.

Based on the campus commitment to the program, the three positions will be reviewed through the campus budget process. The campus clearly understood the resource implications of this degree program as it was moving through the approval process on campus. We anticipate approval of all three positions. However, based on state budget circumstances, the mix of support for the three positions may shift among the state general fund, external grant budgets, and endowments that results from planned fundraising. Should the addition of the three new faculty positions be delayed for a few years, or phased in more slowly than planned, because of state budgetary problems, the current faculty in the department will be able to offer all the courses needed to initiate the program. When the program is fully developed, in terms of student enrollments, however, these new faculty lines will be needed.

The needed facilities will be addressed within the next five year campus Capital Construction Program, and necessary space will be derived either from the renovation of existing space, reallocation of space within University Hall (formerly the Compassion International Building), or through lease-rental, as needed to address the evolving needs of this program. The campus criteria used in assigning space ensure that a high priority will be assigned to these requests.

Attachment C

UNIVERSITY OF COLORADO SYSTEM
Boulder • Colorado Springs • Denver • Health Sciences Center

II. Office of the Vice President for Academic Affairs and Research

Campus Box 51
Boulder, Colorado 80309-0051
(303) 492-8911
FAX #: (303) 492-0330

MEMORANDUM

TO: Timothy Foster, Executive Director
Colorado Commission on Higher Education

FROM: Jack O. Burns, Vice President for Academic Affairs and Research

DATE: January 20, 2003

SUBJECT: Analysis of Quality, Capacity, and Cost-Effectiveness of Proposal for Ph.D. in Geropsychology at UCCS

As part of the process of recommending a degree proposal to the Colorado Commission on Higher Education, the Office of the Vice President for Academic Affairs and Research for the University of Colorado system provides an analysis of the quality, capacity, and cost-effectiveness of the full proposal. This memorandum provides that analysis. It is based upon review of the proposal and discussion with the Board of Regents and with involved campus faculty and administrators.

Quality of Proposed Program

The proposed program for a Ph.D. in Geropsychology is a rigorous course of study for doctoral students in clinical Geropsychology. The program of study meets the guidelines that have been developed by the American Psychological Association. It combines well-constructed course sequence and supervised clinical practica. UCCS's Center on Aging provides a clinical setting for clinical training, as well as research opportunities for students and faculty. The external evaluator from the University of Arizona called the proposed curriculum "at the cutting edge of this field."

The faculty members are a source of strength for the proposal. They are active in research and scholarly publications and will provide their students the proper model of the engaged faculty who combine teaching, clinical practice, and research. The evaluator Dr. Alfred Kaszniak finds the current level of faculty productivity "more than adequate to support" the program. The existing M.A. program has an excellent national reputation and attracts fine students from across the country. Based on the reputation of the M.A., the Ph.D. should also be able to attract outstanding students. The growing demand for geropsychologists, as the populations continues to age, will help to guarantee the employability of graduates. The availability of attractive careers will contribute to attracting an academically excellent pool of candidates for the program.

Capacity of Institution to Offer Program

Because of the department's existing strength in the psychology of aging, UCCS has the human resources needed to offer this degree. The degree program builds upon existing coursework from the master's program. The development of the successful Center on Aging provides vital additional resources for faculty and students involved in clinical study. The planned addition of three more faculty members, built into the academic strategic plan of the college, will provide further expertise as the program grows. The department, dean, chancellor, and the Board believe that the current faculty can successfully offer this program and sustain the existing high quality masters and baccalaureate programs.

Cost-Effectiveness of the Program

This program builds upon an existing master's program. Significant elements of the curriculum are already in place; this contributes to the cost-effectiveness of this program. The Center on Aging contributes to the cost effectiveness of the program by providing space, clients needed for clinical training and study, and even modest income from the diagnostic services offered.

Economic Impact

There is ample evidence that our expanding aging population will require the services and research advances that geropsychologists and others in the arena of gerontology can provide. This fact indicates that students trained in this program should be able to find employment. Beyond that, no major economic impact is claimed for this proposed new degree.

Summary

UCCS has provided the Board of Regents and the Vice President for Academic Affairs and Research evidence of its ability to offer a strong and innovative Ph.D. in Geropsychology of appropriate academic rigor and excellent quality; it has provided evidence of its capacity to offer the program and of the cost-effectiveness of the proposal. The system administration and the Board both support the creation of the Ph.D. in Geropsychology on the Colorado Springs campus.

University of Colorado at Colorado Springs
Office of the Chancellor
1420 Austin Bluffs Parkway
P.O. Box 7150
Colorado Springs, Colorado 80933-7150
719-262-3436
Fax: 719-262-3656

January 17, 2003

Jack Burns, Vice President
Academic Affairs and Research
University of Colorado
Campus Box 51
Boulder, CO 80309-0051

On behalf of our campus, I am writing to express unqualified support for the proposal to offer a PhD in Geropsychology at the University of Colorado at Colorado Springs.

The proposed program is consistent with both our existing, as well as the revised campus role and mission under development, and will enhance the quality of our academic programs. Indeed, it is community needs that have driven this proposal from the outset.

The proposal has been in the planning phase for several years, and over time it has been greatly refined and improved, to the point where it now describes a truly excellent program that will enhance the status of our institution and meet the needs of our community and the State. The proposal was developed by the Department of Psychology, approved by our College of Letters, Arts, and Sciences. It has also been approved by both the Graduate School Executive Committee and the Academic Planning Committee of the campus.

The campus clearly understood the resource implications of this proposal as it moved through the approval processes. Should the addition of new faculty and/or the acquisition of new space be phased in more slowly than planned, due to the State's budgetary constraints, the existing faculty and space are clearly sufficient to initiate and deliver the early stages of this program. Then as the program expands, new faculty and space will be added using a variety of resources, as warranted by this expansion. The campus is fully committed to providing the necessary resources to deliver this excellent program.

I would therefore request the support of your office in putting forth this very fine proposal. It has my strongest endorsement.

Sincerely,

Pam Shockley-Zalabak
Chancellor

c: G. Thomas Bellamy, Interim VCAA
David K. Schmidt, Dean, Graduate School

Attachment D

ENROLLMENT PROJECTIONS

Name of Program: Ph.D. in Geropsychology

Name of Institution: University of Colorado at Colorado Springs

DEFINITIONS:

Academic year is the period beginning July 1 and concluding June 30.

Headcount projections represent an unduplicated count of those students officially admitted to the program and enrolled at the institution during the academic year.

FTE is defined as the full-time equivalent number of those students majoring in the program, regardless of the classes enrolled, during the academic year.

Program graduate is defined as a student who finishes all academic program requirements and graduates with a formal award within a particular academic year.

SPECIAL NOTES:

To calculate the annual headcount enrollment, add new enrollees to the previous year headcount and subtract the number who graduated in the preceding year. Adjust by the anticipated attrition rate.

To calculate FTE, multiply the number of students times the projected number of credit hours students will be typically enrolled in per year and divide by 30.

The data in each column is the annual **unduplicated** number of declared program majors. Since this table documents program demand, course enrollments are not relevant and shall not be included in the headcount or FTE data.

		AY2005	AY2006	AY2007	AY2008	AY2009	Full Implementation
1a	In-state Headcount	2	5	7	9	10	10
1b	Out-of-State Headcount	1	1	1	1	1	1
2	Program Headcount	3	6	8	10	11	11
3a	In-state FTE	2.13	5.33	8.53	11.73	11.73	11.73
3b	Out-of-state FTE	1.07	1.07	1.07	1.07	1.07	1.07
4	Program FTE	3.2	6.4	9.6	12.8	12.8	12.8
5	Program Graduates	0	0	0	1	2	3

The program will admit three students per year. This number of students can be supported by foreseeable financial aid. Additional students may be admitted if additional sources of financial support are identified, or if some students apply who do not require financial support.

It is anticipated that there will be more out-of-state than in-state applicants. However, tuition differentials mean that the financial support needs of in-state students are more likely to be met. It is assumed that out-of-state students will become Colorado residents by the second year.

The average credit hour load per student will be 32 hours (summer-fall-spring).

Master's-prepared entering students will graduate with PhD in hand in 4 years. Baccalaureate prepared students will graduate in 5 years.

Drop out rates are based on the experience of the PhD in Psychology program at the University

of Colorado at Boulder.

Attachment E

PHYSICAL CAPACITY ESTIMATES

Name of Program: Ph. D. in Geropsychology

Name of Institution: University of Colorado at Colorado Springs

Purpose: This table documents the physical capacity of the institution to offer the program and/or the plan for achieving the capacity.

ASSIGNABLE SQUARE FEET	TOTAL NEEDED	AVAIL-ABLE	RENOVATION		NEW CONSTRUCTION		LEASE/ RENT	REVENUE SOURCE*
TYPE OF SPACE	asf		Immed.	Future	Immed	Future		
Classroom	0							
Instructional Lab	1,920	150				1,770		CCF
Offices	1,060	150				910		CCF
Study	0							
Special/General Use	2,250	0				250	2,000	CCF, AUX
Other	270	150				120		CCF
TOTAL	5,500	450				3,050	2,000	CCF

* Capital Construction Fund (CCF), Research Building Revolving Fund (RBRF), Gift (GIFT), Grant (GR), Auxiliary Fund (AUX)

Attach a narrative describing the institutional contingency plan that addresses the space requirements of the proposed program or alternative delivery options, in the event that the request for capital construction or renovation is not approved.

Narrative in Support of Physical Capacity Estimates

The immediate needs reflected in Column 2 will be reallocated from existing space.

The needed space as reflected in Column 4 will be programmed as part of an existing project on our current "Five Year Capital Construction Program-FY 2004 to FY 2008". Specifically, renovated space in our existing Science Building will include space for the new Geropsychology program, or space for a program that will be displaced from another building to accommodate the Geropsychology program. The program plans for these buildings did not specifically address this program, but the reallocation of space in the renovated existing Science Building was to be driven primarily by needs in the social sciences. In addition, the delay in starting the new Science Building, and some intervening changes in other needs for that space, will necessitate a revisiting of the program plans for those buildings that will create the opportunity to explicitly program this high-priority need. If Capital Construction Funds are not available, we will pursue a lease/rental arrangement, in conjunction with reallocations from existing space.

The space in Column 5 is for the CU Aging Center (clinical practice site), which is already being leased.

Attachment F

PROJECTED EXPENSE AND REVENUE ESTIMATES

PURPOSE:

This table documents what the program will cost and how the institution plans to cover the costs. All cost and revenue projections should be in constant dollars (do not include an inflation factor).

		ESTIMATED AMOUNT in DOLLARS				
		FY2004	**FY2005**	**FY2006**	**FY2007**	**FY2008**
Operating Expenses:						
1	Faculty	$44,316	$88,632	$132,948	$132,948	$132,948
2	Financial Aid specific to program	$44,000	$66,000	$88,000	$68,000	$48,000
3	Instructional Materials	$10,000	$20,000	$30,000	$30,000	$30,000
4	Program Administration	$78,350	$78,350	$78,350	$78,350	$78,350
5	Rent/Lease	$22,000	$22,000	$22,000	$22,000	$22,000
6	Other Operating Costs	$20,177	$23,127	$23,127	$23,127	$23,127
7	Total Operating Expenses	$218,843	$298,109	$374,425	$354,425	$334,425
Program Start-Up Expenses:						
8	Capital Construction					
9	Equipment Acquisitions					
10	Library Acquisitions		$7,500	$7,500	$7,500	
11	Total Start-Up Expenses		$7,500	$7,500	$7,500	
TOTAL PROGRAM EXPENSES		$218,843	$305,609	$381,925	$361,925	$334,425
Revenue						
12	General Fund: State Support	$11,473	$28,683	$45,892	$63,102	$63,102
13	Cash Revenue: Tuition	$38,339	$57,664	$76,960	$96,256	$96,256
14	Cash Revenue: Fees	$1,500	$3,000	$4,000	$5,000	$5,500
15	Federal Grants		$10,000	$10,000	$15,000	$15,000
16	Corporate Grants/Donations	$15,000	$15,000	$10,000	$10,000	$5,000
17	Other fund sources *	$80,000	$106,000	$112,600	$99,860	$84,519
18	Institutional Reallocation**	$72,531	$85,263	$112,473	$84,000	$84,000
TOTAL PROGRAM REVENUE		$218,843	$298,109	$381,925	$373,925	$346,425

* If revenues are projected in this line, please attach an explanation of the specific source of the funds.

** Attach an explanation of the amounts reported in line 18 that identifies the specific departments whose budgets will be decreased due to the reallocation and the impact the dollars will have on these departments or programs.

Notes on Table 3:

Line 1: Includes staffing for required courses in the PHD not offered for existing master's program. The FTE amounts are computed as a fraction computed as # new courses/5, yielding the following projections: FY04 = 3/5, FY05 = 6/5, FY06-FY08 = 9/5. The average faculty FTE cost is $73,860.

Line 2: This will take the form of positions as research or teaching assistants, and a limited amount of tuition scholarship. The campus has committed new financial aid as the first three cohorts of students are added. Additional financial support for students from grants and other outside sources will be sought to insure that the program reaches its projected enrollments.

Source of Funds

	2004	2005	2006	2007	2008
Enrollment	3	6	8	11	11
UCCS TA's	24,000	36,000	48,000	48,000	48,000
Coleman RA	20,000	40,000	40,000	20,000	
Total	44,000	76,000	88,000	68,000	48,000

Line 3: Ongoing costs in library, based on materials costs of resources not currently on campus, but deemed necessary by the department. These costs will recur every year.

Line 4: Includes departmental ($17,250) and clinic ($22,000) staff support and clinic director ($38,400).

Line 5: Lease costs for clinic.

Line 6: Includes clinic and department supplies, department phone lines and faculty travel, and clinic GAR.

Line 10: One-time costs for library materials. These costs, once paid, will not be required in the future.

Line 12: Anticipated rate for enrollments new to campus in FY2004 is $5,378/SFTE, based on University of Colorado allocation policy.

Line 13: Anticipated tuition for in-state students is $201/SCH; for out-of-state students $797/SCH (one full-time out-of-state student each year).

Line 14: Student fee to support access to clinic, based on $500/year/student.

Line 16: Donations from community organizations and individuals for work of the clinic, based on

past history and current commitments.

Line 17: Includes clinic fees ($25,000 in ’04 to $33,275 in ’08) and service contracts ($20,000 in ’04 to $32,210 in ’08), based on current levels and expanded capacity due to student participation. Also includes a three-year commitment from the Coleman Institute of $40,000 per year for ’04 through ’06. The funds are anticipated to be used at the rate of $20,000 in ’04, $40,000 in ’05 and ’06, and $20,000 in ’07.

Line 18: Includes permanent rededication of existing graduate student assistant positions, some new tuition scholarship funding, and an allocation of indirect cost recovery income. The campus also commits $30,531 for FY04, $43,263 for FY05, and $50,473 for FY06 in reallocated funds, as documented in the attached memorandum.

Source	2004	2005	2006	2007	2008
Existing grad assistants	$24,000	$24,000	$24,000	$24,000	$24,000
New tuition scholarships			$12,000	$24,000	$24,000
Indirect Cost Recovery	$18,000	$18,000	$36,000	$36,000	$36,000
Other campus commitment	$30,531	$43,263	$50,473		
Total	$72,531	$85,263	$112,473	$84,000	$84,000

Attachment G

The following courses constitute the program curriculum which, according to the external reviewer, "fully meets" the graduate study guidelines for clinical geropsychology. An asterisk indicates a course developed for the new program.

*521: Psychology of Aging 1 (3 credits)
An advanced-level orientation to developmental research on older adulthood and aging. Students explore basic theoretical approaches, research methodology, and classic and current empirical studies on the psychology of aging. This class examines development across the lifespan in biological, neurological, sensory/perceptual, and cognitive domains. Prereq., Graduate status.

*522: Psychology of Aging 2 (3 credits)
An advanced-level orientation to developmental research on older adulthood and aging. Students explore basic theoretical approaches, research methodology, and classic and current empirical studies on the psychology of aging. This class examines development across the lifespan in personality, social, and health domains. Age-related pathologies will also be considered. Prereq., Graduate status

571: Clinical Skills Laboratory (3 credits)
An introductory practicum course which emphasizes psychotherapy skills and concepts related to therapeutic interaction. A prerequisite for Psy 671. Prer., Psy graduate status.

581: Research Statistics and Methods I (4 credits; 3 credit lecture and 1 credit computer lab)
Advanced statistical techniques and research methodology for psychological research. Focuses on methods for use with experimental research design, including factorial, repeated measures, and mixed design ANOVA models. Computer lab focuses on use of statistical packages for analysis of data.

582: Research Statistics and Methods II (4 credits; 3 credit lecture and 1 credit computer lab)
Advanced statistical techniques and research methodology for psychological research. Focuses on methods for use with nonexperimental research design, including correlation and multiple regression. Measurement issues are covered, including reliability and validity. Computer lab uses statistical packages for analysis of data.

588: Multivariate Methods I (3 credits)
Multivariate statistical methodology and design for psychological research. Includes topics of test construction, exploratory and confirmatory factor analysis, and other selected multivariate techniques (e.g. multivariate analysis of variance, canonical correlation,

discriminate analysis, etc.). Students will be expected to use appropriate computer software to analyze multivariate data. Prerequisites: Graduate student status, Psy 581 and 582 or equivalent, SPSS skills.

589: Multivariate Methods II (3 credits)
Multivariate statistical methodology and design for the analysis of the study of change. Topics include developmental research design techniques, covariance structure analysis, multilevel modeling, and growth curve analysis. Computer programs for the analyses of these designs will be used. Prerequisites: Graduate student status, Psy 581 and 582.

603: Research Practicum (3 credits)
Students will be placed in a clinical or research program for the application phase of their psychology research training. Prer., Psychology graduate status.

610: Proseminar: Developmental (3 credits)
Overview of core theories and research in developmental psychology. Prer., Psychology graduate status or consent of instructor.

611: Proseminar: Cognition (3 credits)
Overview of core theories and research in cognitive psychology. Prer., Psychology graduate status or consent of instructor.

612: Proseminar: Neuropsychology (3 credits)
Overview of core theories and research in neuropsychology. Prer., Psychology graduate status or consent of instructor.

613: Proseminar: Social (3 credits)
Overview of core theories and research in social psychology. Prer., Psychology graduate status or consent of instructor.

614: Proseminar: Personality (3 credits)
Overview of core theories and research in personality psychology. Prer., Psychology graduate status or consent of instructor.

667: How to Teach More Effectively (1-3 credits)
Designed to help college professors become more effective teachers. Readings, discussions, and videotaped consultation. Prer., Psychology graduate status or consent of instructor.

*641: Aging Seminar (Special Topics) (1-3 credits)
Subject matter will change depending on individual instructor and time of offering. The topics for any given semester will be specified in semester schedule. May be repeated for credit. Prer., Graduate status.

*642: Aging Proseminar (3 credits)
In depth examination of theory and research on a focused topic within a core content area of psychology of aging (e.g., cognitive, personality, social). May be repeated for credit. Prer.: Graduate status and Psy 521 and 522, or consent of instructor.

*651: History of Psychology (3 credits)
An advanced level overview of the development of psychological theories since the Greek philosophies. Prereq., Psychology graduate status.

*661: Clinical Geropsychology I (3 credits)
This course will cover assessment and interventions with older adults. Specific content will include familiarization with tools designed for older adults in the assessment of mood, personality, and cognition. Specialty topics such as assessment of behavior and cognition in dementia and assessment of competency will be emphasized. Individual, institutional, and community interventions will be presented to familiarize students with empirically based interventions designed for the unique problems of the older adult. Prereq.: Psy 571, 621, 622.

*662: Clinical Geropsychology: Part II (3 credits)
This course is designed to prepare the student for work in geriatric health settings. Specific content will include health psychology applications, interdisciplinary teamwork, unique aspects of work in specific settings (e.g., primary care and long-term care settings), policy issues and community resources critical to practice with older adults. Prereq.: Psy 571, 621, 622.

*672: Professional Development 1 (3 credits)
Training in standards of professional practice including theoretical and practical aspects of ethics of clinical practice. Topics include record keeping, confidentiality, and supervision. Students will engage in 12 hours/week of direct clinical experience in a community setting under supervisors approved by the clinical faculty. Prereq.: 571, 592, and 578. For Psychology clinical Master's and Doctoral candidates only.

*673: Professional Development 2 (3 credits)
Training in standards of professional practice, including theoretical and practical aspects of ethics of clinical practice. Topics include cultural competence, self-care, … Students will engage in 12 hours/week of direct clinical experience ina community setting under supervisors approved by the clinical faculty. Prereq.: 571, 592, 578, and 672.. For Psychology clinical Master's and Doctoral candidates only.

*674: Practicum in Clinical Psychology (1-3 credits)
Direct clinical experience for M.A. and Doctoral candidates in psychology only. Students

will provide clinical services under direct supervision in community or campus training setting. May be repeated for credit. Prereq.: Psy 571, 672, and 673.

678: Advanced Psychopathology (3 credits):
An intensive survey of the major theories, research findings, and behavioral characteristics associated with deviant reaction patterns.

685: Assessment 1 – Clinical Interviewing (3 credits)
Theory and practice in interviewing for the purpose of determining a diagnosis using the DSM. Practical skill instruction in mental status exams, interviewing strategies, integration of interview with test data, and report writing. Prereq.: Psy 571, 678; For Psychology clinical Master's and Doctoral candidates only.

686: Assessment 2 – Objective Testing in Clinical Psychology (3 credits)
Course will focus on administering and interpreting objective test results commonly used in clinical psychology practice. Case study format and test battery interpretation will also be considered. Probable tests: MMPI, CATI, and others. Prer., PSY 571; Psychology graduate status only.

*687: Clinical Neuropsychology (2 credits)
Topics covered will include: basic brain-behavior relationships, principles of neuropsychological assessment, basic psychometric properties of neuropsychological assessment tools, administration, scoring, and interpretation of test materials, record review and report writing, neuropsychological intake interviewing, feedback sessions with families, evaluation of capacity, and evaluation of classic neuropsychological syndromes. Prereq., Psy 686, and coursework in bio-psychology and /or neuropsychology.

*688: Clinical Neuropsychology Lab (1 credit)
Training in practice of clinical neuropsychology through supervised experience administering, scoring, interpreting and reporting on test results. May be repeated. Prereq.: Psy 686 and 687 (may be concurrent), Psychology graduate status.

692: Seminar: Psychotherapy (3 credits)
Readings and discussion of the psychotherapeutic process from various theoretical perspectives. Prer., Psychology graduate status or consent of instructor.

700: Masters Thesis (1-6)
A research project under the supervision of the graduate faculty of the psychology department.

*703: Research Practicum (3 credits)
Students will participate in a research laboratory for instruction in research methods in psychology. Prereq.: Doctoral candidacy status, 581, 582, 587.

*800: Dissertation (1-12 credits)

950: Independent Study in Psychology: Graduate (1-3 credits)

999: Candidate for Degree (0 credits)

TOPIC: **CONCEPT PAPERS**

PREPARED BY: **WILLIAM G. KUEPPER**

I. SUMMARY

This agenda item presents staff analysis of each concept paper prepared since the last Commission meeting:

M.S. and Ph.D. in Biomedical Engineering at Colorado State University

The report includes a summary of the issues identified by CCHE staff for the concept paper and a copy of the paper. At this time, Commission staff found no issues of role and mission, program duplication, or bona fide demand that would prevent a full proposal from being developed.

II. ACTION

No action is required of the Commission at this time, but if the Commission wishes to have additional issues addressed or questions answered in the full proposal, these can be added to those in the staff report and included in the report to the governing board.

TOPIC: CONCEPT PAPER: MASTER OF SCIENCE AND DOCTOR OF PHILOSOPHY IN BIOMEDICAL ENGINEERING AT COLORADO STATE UNIVERSITY

PREPARED BY: WILLIAM G. KUEPPER

I. BACKGROUND

Colorado State University has submitted a concept paper for a Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) in Biomedical Engineering (Attachment A). The proposed degrees are intended to "create biomedical engineering professionals well grounded in the biomedical and clinical sciences with a solid foundation in engineering and excellent research skills." Graduates with the M.S. degree are expected to be able to "start-up, troubleshoot, run, and oversee biomedical manufacturing processes," while holders of the Ph.D. will be able to "perform bioengineering research, direct a laboratory, or become a (university) faculty member."

Biomedical engineering is a "relatively new discipline" that draws on engineering, chemistry, physics, and the life sciences. Currently, CSU offers undergraduate and graduate certificate programs in biomedical engineering. Graduate students at CSU interested in biomedical engineering pursue one of the related graduate degrees and add course work necessary for the certificate. This combination of traditional degree and certificate requirements results in an increased course load for students.

The proposed degrees would allow a sharper focus on biomedical engineering. The M.S. will require 30 credits and a student can expect to complete the degree in two to three years. The Ph.D. with its major research project will require 72 credits and four to six years to complete.

According to the concept paper, 100 percent of the current graduate certificate students would prefer to enroll in a program leading to a graduate degree in biomedical engineering. In addition, CSU estimates that it receives 100 inquiries per year about its graduate programs in biomedical engineering from students who decide to go elsewhere because of the absence at CSU of a degree program. While no figures have been included, the concept paper notes that a number of Colorado residents are currently enrolled in biomedical engineering graduate programs outside the state.

Employment opportunities in biotechnology are stated as good nationally and in Colorado. The U.S. Labor Bureau is projecting that employment nationally in biomedical engineering will increase over 30 percent by 2010. The concept paper notes that there are over 60 bioengineering companies in Colorado listed on the Colorado Biomedical consortium web

site. The proposed program plans to have an "industrial advisory committee" to advise the institution on the development of a program that will address the needs of Colorado.

Funding at the federal level for research in the field, already substantial, is expected to grow according to the concept paper. However, the budget problems of the State of Colorado call into question whether any state funds could be allocated to implement or sustain this program. Whether the program can be implemented without state funds could determine the possibility of its implementation.

II. ISSUES TO BE ADDRESSED IN THE FULL PROPOSAL

The issues included in this section of the agenda item will be discussed with representatives of the CSU governing board and the institution. The concept paper has been shared with the other governing boards. Any comments or concerns they have will be forwarded to Colorado State University for its consideration in developing a full proposal.

1. Whether the M.S. will be considered a terminal degree or also prepare students to continue on to a Ph.D.

2. How the inter-departmental program will be administered and the costs associated with that administration.

3. How the institution will assure that faculty from the participating departments will be available for the program as needed.

4. The admission requirements for the program and the potential need for preparatory courses.

5. How the program would provide the integration of knowledge from different fields essential to an interdisciplinary degree, e.g., inclusion in the curriculum of interdisciplinary courses that would be specific to the new program.

6. Whether the implementing of additional courses will require additional faculty and, if so, from where these resources would come.

7. The impact of the proposed degrees on existing CSU program enrollments and resources.

8. Specific information on increased employment opportunities for those holding a graduate degree in biotechnology rather than a graduate certificate.

9. What characteristics of the program will allow it to achieve regional and national recognition?

10. Given the current and prospective higher education budgets in Colorado, whether the proposed degree program could be implemented without state funding.

III. INFORMING THE GOVERNING BOARD

Following this meeting, the Commission staff shall inform the CSU governing board staff about the above matters, and any additional items that the Commission or other governing boards may raise about the proposed M.S. and Ph.D. in Bioengineering.

Attachment A

CONCEPT PAPER

MASTER OF SCIENCE AND DOCTOR OF PHILOSOPHY IN BIOMEDICAL ENGINEERING

COLORADO STATE UNIVERSITY

November 2002

Kristina Rinker, Co-Director, Biomedical Engineering Program

Donna Wheeler, Co-Director, Biomedical Engineering Program

Neal C. Gallagher, Dean, College of Engineering

Peter J. Nicholls, Provost/Academic Vice President

EXECUTIVE SUMMARY

The Biomedical Engineering Program at Colorado State University (CSU) proposes to offer Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in Biomedical Engineering. CSU has the essential elements, developed through the current biomedical engineering interdisciplinary studies certificate, to develop a successful biomedical engineering graduate degree program that will serve the needs of the state and nation: interested and qualified faculty; significant biomedical engineering research funding; core graduate biomedical engineering classes; and infrastructure. These graduate degree programs can be initiated with current faculty with little additional funding to satisfy high student demand and industry needs.

CSU has offered Undergraduate and Graduate Certificates in Biomedical Engineering since 1999. With 64 current students, the Biomedical Engineering program has been one of the most successful interdisciplinary certificate programs at CSU. A number of faculty members within the Colleges of Engineering, Veterinary Medicine & Biomedical Sciences, Natural Sciences, and Applied Human Sciences have been involved with the certificate program and are interested in participating in the proposed M.S. and Ph.D. program through research and teaching.

There are several motivating factors for establishment of M.S. and Ph.D. degrees in Biomedical Engineering at CSU.

- Student demand for graduate programs in biomedical engineering is high. One hundred percent of graduate certificate program students would prefer to be enrolled in a M.S. or Ph.D. biomedical engineering degree granting program.
- The Bureau of Labor Statistics reports that the number of biomedical engineering jobs is expected to grow 31.4% by 2010 particularly in the areas of computer-assisted surgery, cellular and tissue engineering, rehabilitation, and orthopedic engineering. CSU faculty have strong research programs in some of these areas.
- Research funding for biomedical engineering has increased significantly in the last decade and is expected to continue to rise nationally through the recent formation of the new NIH Institute for Biomedical Imaging and Bioengineering. Therefore, significant stipend support should be available for students in the program.
- The multidisciplinary nature of biomedical engineering necessitates advanced training.
- Currently, no biomedical engineering degree programs exist in Colorado, Kansas, Wyoming, Montana, Nebraska, or New Mexico.

The proposed biomedical engineering graduate degree programs will take advantage of existing courses in the College of Engineering and clinical exposure available through the top-ranked Professional Veterinary Medical Program to create biomedical engineering professionals skilled in the biomedical and clinical sciences with a solid foundation in engineering and research. Research is an important component of biomedical engineering due to the enormous amount of information in the medical sciences and the need for engineers to help use this information to generate useful medical products that can be produced in an efficient, cost-effective manner.

- M.S. degrees will allow students to participate in interdisciplinary projects in the medical or bioengineering industry. They will likely be involved in the design, regulatory approval, and manufacturing of medical products.
- Ph.D. Biomedical Engineers will likely be more involved in directing research projects or labs. They will find excellent employment opportunities in current bioengineering companies, medical companies, academic institutions, government labs, and new ventures started around technological advancement from this growing field. A core requirement for advancement of the biomedical engineering field is novel research conducted by Ph.D. level scientists. CSU plans to be a leader in supplying these individuals to both the public and private sector.

PROGRAM GOALS

The specific goals of the Biomedical Engineering M.S. and Ph.D. degree programs are:

- To provide a high quality graduate program in biomedical engineering
- To retain Colorado graduates
- To attract out-of-state students
- To create biomedical engineering professionals well grounded in the biomedical and clinical sciences with a solid foundation in engineering and excellent research skills
- To increase graduate student diversity
- To attract biomedical engineering faculty to participating departments
- To help meet the needs of the biomedical industry in Colorado and the nation
- To enhance research programs in cardiovascular disease, orthopedics, tissue engineering and other areas of biomedical engineering, which will benefit the citizens of the State of Colorado
- To complement and enhance existing graduate programs that involve biomedical engineering within the departmental framework

PROGRAM RATIONALE

Biomedical engineering is a relatively new discipline that seeks to improve human health and quality of life through the application of engineering, chemistry, physics, and the life sciences. Fueled by the generally substantial level of research support available within the medical profession and the demand for emerging medical technologies, biomedical engineering has increasingly become an important component of fundamental engineering and health science disciplines.

Funding for biomedical engineering research is high and is expected to continue to grow with expansion of biomedical engineering budgets at the National Science Foundation (NSF) and the creation of the new National Institute for Biomedical Imaging and Bioengineering (NIBIB) in 2000 at the National Institutes of Health (NIH). NIH received $23 billion for fiscal year 2002 (a 13.5% increase over 2001) compared with NSF that received $4.5 billion (a 1.3% increase). NIH has shared their increase in funding with NIBIB by allocating $274 million for the FY03 research budget that is a 99% increase over the FY01 funding.

CSU faculty members involved in biomedical engineering research have obtained significant funding from NIH, NSF, and/or industry. A difficulty for many faculty members performing biomedical engineering research is in recruiting high quality graduate students in the absence of a biomedical engineering degree program. The establishment of M.S. and Ph.D. degree programs would increase the visibility of available research opportunities and provide a single location for students to apply. Currently, a student interested in biomedical engineering graduate education must apply to multiple departments in several colleges to increase the chances of finding an advisor with available funding. Development of this proposed program will greatly enhance research programs in biomedical engineering, training of students for employment in the biomedical engineering field, and recognition of CSU as a regional leader in biomedical engineering.

The student demand for biomedical engineering continues to grow, with many students expressing a desire for a degree and currently going outside of Colorado to enroll in a program. The Biomedical Engineering program turns away over 100 students per year requesting information on Biomedical Engineering M.S. and Ph.D. programs at CSU. All of the current CSU graduate certificate program students who were surveyed would prefer to be enrolled in a M.S. or Ph.D. biomedical engineering

degree-granting program. The current certificate program at CSU has allowed graduate students to focus on biomedical engineering while maintaining their regular department affiliation. This program has been very successful and has attracted some graduate students to CSU who would have gone elsewhere in its absence. However, a combination of traditional degree and certificate program requirements results in an increased course load for the students. The current arrangement also does not allow for the students to obtain the strong foundation and breadth of knowledge that a biomedical engineering degree program would provide.

Currently, no biomedical engineering degree programs exist in Colorado, Kansas, Wyoming, Montana, Nebraska, or New Mexico. Regional competition exists from the University of Utah (B.S., M.S., and Ph.D. degrees-1974), University of Arizona (M.S. and Ph.D. degrees-1997), Arizona State University (B.S., M.S., and Ph.D. degrees-1985, 1988), University of Oklahoma (M.S. and Ph.D. degrees-2000), and University of Iowa (B.S., M.S., and Ph.D. degrees-1978, 1986). Colorado loses many top students to these programs because they offer integrated biomedical engineering educational, research, and degree opportunities.

Support for institutional mission. The Biomedical Engineering Graduate Degree Program will contribute to the mission of Colorado State University as written in the Colorado Revised Statutes 23-31-101, which states that "Colorado State University shall be a comprehensive graduate research university with high admission standards offering a comprehensive array of undergraduate programs consistent with the tradition of land-grant universities." Participating faculty members of the BE program have primary appointments in a wide range of departments from the Colleges of Engineering, Veterinary Medicine and Biomedical Sciences, Applied Human Sciences, and Natural Sciences and have active research programs. The proposed M.S. and Ph.D. degree programs directly address the University's mission by seeking to train high quality biomedical engineering professionals by applying engineering principles to the investigation of important human health issues.

Institutional strengths. CSU is poised to develop a graduate program in biomedical engineering due to the presence and co-location of strong engineering and life science departments and a top-ranked professional veterinary medical program. Veterinary medicine is an integral part of biomedical engineering training because animals are often used as models in biomedical research. CSU also has strong collaborative ties with the University of Colorado Health Sciences Center (UCHSC) in Denver.

Through the current certificate program, CSU has the experience to establish a graduate program in biomedical engineering. CSU's Biomedical Engineering Program was created in 1999 and enrolled the first students in 2000. The program offers interdisciplinary studies ("minor") certificates in biomedical engineering to Bachelor's, Master's, and doctoral students in the various colleges at CSU. There are currently 64 enrolled students, including 11 graduate students. Fourteen students have graduated from the program since 1999 and all have accepted positions in biomedical companies or graduate programs.

Outstanding facilities exist at Colorado State University for research in biomedical engineering. Essential University laboratories include the Flow Cytometry and Cell Sorting Laboratory, the Macromolecular Resources Facility, the Electron Microscopy laboratory, and a regional NMR center. This is complemented by excellent facilities in the Veterinary Teaching Hospital and individual investigator laboratories.

Diversity goals. Women are traditionally underrepresented in engineering fields. CSU's College of Engineering's current enrollment of traditional engineering majors is 18% women while enrollment for the Biomedical Engineering Certificate Program is 59% women. It is anticipated that at least 40% of the graduate students who would enroll in the M.S. and Ph.D. programs will be women. Under-represented ethnic and racial minorities will also be highly recruited.

***Impact on other programs*.** Host departments will benefit from the increased research productivity, interdisciplinary grants, and increased visibility and national recognition of faculty participating in the proposed program. The Biomedical Engineering Seminar series, initiated in Fall 2002, brings nationally recognized leaders and prominent researchers in the biomedical engineering field to CSU. This will potentially enable new collaborations and increase the visibility of the Biomedical Engineering Program and the reputation of CSU as a center for collaborative biomedical engineering research.

The proposed program will not be competing for the same students as the existing departments, since most of the students are likely to have applied to other biomedical engineering graduate programs outside of Colorado. Student recruitment should help existing departments and faculty by the addition of students who would not otherwise attend CSU. The College of Veterinary Medicine & Biomedical Sciences currently offers a M.S. degree in Biomedical Science that would be well complemented by the Biomedical Engineering M.S. and Ph.D. degrees.

DESCRIPTION OF M.S. AND PH.D. PROGRAMS

The interdisciplinary nature of biomedical engineering requires inter-departmental and inter-college collaboration in order to achieve success in both research and student education. Biomedical engineering graduate degree programs will take advantage of existing courses in the College of Engineering and clinical exposure available through the top-ranked Professional Veterinary Medical Program. Currently, six courses are offered: Biomedical Engineering (3 credits); Biomedical Clinical Practicum (2-4 credits); Biomaterials (3 credits); Biomechanics (3 credits); Bioseparations (3 credits); and Cell and Tissue Engineering (3 credits). Additional courses will be added as more graduate students enroll in the program and as more faculty members performing biomedical engineering research are hired.

Prospective students for the graduate degree program are anticipated to have B.S. engineering degrees (mechanical, chemical, electrical, computer, civil, or biomedical), however the program is structured to allow other majors to be accepted with some additional engineering prerequisites. Students enrolled in the M.S. or Ph.D. program will select a project under one of the approved advisors. Representative faculty advisors include V. Chandrasekar (Electrical Engineering), David Grainger (Chemistry), Sue James (Mechanical Engineering), Chris Orton (Clinical Sciences), Elizabeth Pluhar (Clinical Sciences), Kristina Rinker (Chemical Engineering), Raoul Reiser (Health & Exercise Science), Donna Wheeler (Mechanical Engineering), and Ranil Wickramasinghe (Chemical Engineering). The list of advisors will be updated yearly to incorporate new faculty and remove faculty no longer participating in the program. It is anticipated that most graduate students in the M.S. and Ph.D. program will be fully supported by advisor research funding, graduate fellowships, industrial funding, or teaching assistantships.

The proposed degree program is an extension of the existing interdisciplinary studies certificate program. Therefore, the infrastructure is in place to develop, administer, and promote the new

degree offerings. A full time program director will manage the program with the help of an administrative assistant and program faculty.

M.S. Program

M.S. degree graduates will likely be employed by industry to design and gain regulatory approval for products and to start-up, troubleshoot, run, and oversee biomedical product manufacturing processes. A high degree of regulatory issues are involved in medical device and drug production due to potential complications inherent in implanting, ingesting, or injecting medical devices or therapeutics. The M.S. biomedical engineering graduate will be able to be involved in the initial design phases of a technology and potentially significantly decrease the time to market. Therefore, the proposed M.S. program in biomedical engineering will provide an opportunity for the student to understand how materials and processes will affect human physiology when implemented and how to take this into account in product and process design or manufacturing. Students will be provided with a strong foundation in engineering and life science principles. The research project will allow the student to explore a particular area of biomedical engineering further, gaining the needed depth for high-tech jobs. This degree may be combined with a B.S. degree in engineering or science to provide the student an advantage in the job market. This B.S./M.S. program would help retain top in-state students. A total of 30 credits will be required for the M.S. with graduation expected within 2 to 3 years.

Ph.D. Program

Ph.D. degree graduates will likely be employed by industry, government, or academia to perform bioengineering research, direct a laboratory, or become a faculty member. As such, graduates must display competence in not only the core engineering and life sciences, but also in problem analysis, experimental design, troubleshooting, interpretation of data, and communication of results. Since these jobs require in-depth scientific knowledge, additional coursework from a broad selection of engineering and life science courses will be taken by Ph.D. candidates. Additional time is also required to perform a research project with enough depth to develop the student into an independent researcher. A core requirement for advancement of the biomedical engineering field is novel research conducted by Ph.D. level scientists. CSU plans to be a leader in supplying these individuals to both the public and private sector. A total of 72 credits would be required for a Ph.D. with graduation expected within 4 to 6 years of entering the program with a B.S. engineering degree.

MARKET

An Ernst & Young report issued in May of 2000 by the Biotechnology Industry Organization (BIO) showed that the nation's biotech/bioengineering industry had doubled in size between 1993 and 1999 and is predicted to double again within the next 5 to 8 years. According to the Bureau of Labor Statistics, the number of national biomedical engineering jobs is expected to increase 31.4% by 2010, a rate double that of all other jobs combined. Overall engineering jobs are expected to increase by only 9.4%. Reasons for the increase include a growing population of aging adults and increasing demand for cost-effective medical devices and systems. The report cited several areas as targets for significant growth: computer-assisted surgery, cellular and tissue engineering, rehabilitation, and orthopedic engineering.

There is also an upward trend in the number of awarded biomedical engineering graduate degrees as shown in reports from the American Society of Engineering Education. Between 1995 and 1999, the enrollment of biomedical engineering graduate students increased 31% in the US. In 1999, graduate enrollment out-numbered undergraduate enrollment by 47%. These statistics emphasize the importance many educators and companies place on students obtaining an undergraduate

degree in a traditional engineering field with graduate training in biomedical engineering. Cornell Professor Edmund Cranch states in a recent Journal of Engineering Education article that the U.S. should promote graduate engineering degree programs, and is uniquely positioned to do so. He writes, “the primary reasons for this are (a) the demands placed on the engineer arising from the increased rate of change of technology, (b) the need to cope with the increased breadth and complexity of modern professional practice, and (c) the impossibility of crowding ever more material into the four-year curriculum." Since many technologies emerging from the biomedical engineering industry are still at the research and development phase, employees are needed that have advanced degrees and research experience.

The bio-industry in Colorado has emerged predominantly over the last 15 years. Colorado has seen a steady stream of biotech/bioengineering start-ups and a few relocations in the state, with more than 60 bioengineering companies in Colorado currently listed on the Colorado Biomedical Consortium web site. The 2002 Colorado Biomedical Industry Survey will be available soon. Faculty members involved in CSU’s Biomedical Engineering Program have close relationships with several of these companies, including Amgen, Atrix Pharmaceuticals, Cobe Cardiovascular, and Gambro BCT. Colorado biomedical companies have responded positively to new degrees in biomedical engineering at CSU. Warren Mauter, Director of the Laboratories Group for GAMBRO BCT in Lakewood stated, “Biomedical technology is a significant and growing industry in Colorado and beyond. This growth creates a real need for trained technical staff with a fundamental understanding of biomedical technologies and the regulatory requirements that drive our industry”. Mauter also stated that additional training in the life sciences and regulatory requirements, which the proposed degree program would provide, would help companies decrease the amount of training time by 50%. Obviously, as Colorado’s biotech industry grows, the demand for M.S. and Ph.D. level graduates will increase. The program is developing a survey to determine the future demand for M.S. and Ph.D. level graduates. The Biomedical Engineering Program faculty will work closely with an industrial advisory committee to develop a graduate program that will address the needs of Colorado and the nation.

TOPIC: DEGREE PROGRAM NAME CHANGES

PREPARED BY: JOANN EVANS

I. SUMMARY

This agenda item describes the degree program changes that the Executive Director has approved during the month. This agenda item serves as public confirmation of an approved change unless the proposed action is not acceptable to the Commission.

In November 1997, the Commission adopted a policy requiring Commission approval of name changes that involve substantive changes to the curriculum, a different target market population, or expansion of the scope of the degree program. If non-substantive, the Executive Director approves the requested change.

A. Institution: University of Northern Colorado

Current Degree Program Title: Master of Arts in Elementary Education (M.A.)

Revised Degree Program Title: Master of Arts in Teaching Elementary Education (M.A.)

Approved by: Board of Trustees of the University of Northern Colorado

Rationale:

The revised degree title more accurately reflects the program's primary mission, goals, outcomes - all of which are dedicated to helping teachers become increasingly effective at helping children learn.

Scope of Proposed Change:

No change in curriculum will be made as a result of the name change. Students currently enrolled in the existing division will be notified of the change.

Proposed Action by the Executive Director:

Approve the degree title change as requested, effective immediately.

B. Institution: University of Northern Colorado

Current Degree Program Title: Bachelor of Applied Science: Allied Health (B.A.S)

Revised Degree Program Title: Bachelor of Applied Science: Public Service (B.A.S.)

Approved by: Board of Trustees of the University of Northern Colorado

Rationale:

The name change more accurately describes the original intent of the program. The name change allows for the creation of emphasis areas to train professionals in disciplines other than health. The name change allows for the creation of emphasis areas to train professionals in disciplines other than health, and allows the institution to respond to market demand in areas such as fire service, law enforcement, public policy and government.

Scope of Proposed Change:

No change in curriculum will be made as a result of the name change. Students currently enrolled in the existing division will be notified of the change.

Proposed Action by the Executive Director:

Approve the degree title change as requested, effective immediately.

C. Institution: University of Colorado at Colorado Springs

Current Degree Program Title: Ph.D. in Electrical Engineering and Ph.D. in Computer Science

Revised Degree Program Title: Ph.D. in Engineering

Approved by: Board of Regents, December 19, 2002

Rationale:

A consolidation of the two programs will offer significant advantages and improvements for the students, CU, and the state. The change will best serve the

rapidly-changing Colorado springs technology community by offering a college-wide Ph.D. in Engineering that offers a track in electrical engineering and provides a robust opportunity for customized programs of study for students seeking Ph.D. degrees.

Scope of Proposed Change:

No change in curriculum will be made as a result of the name change.

Proposed Action by the Executive Director:

Approve the degree title change as requested, effective immediately.