

FORM C - DEGREE/PROGRAM CHANGE

CIP CODE

Date: 10/10/2011

Leslie A. Danielson

(Name of individual initiating curricular change form)

Assigned by
Associate Provost
for Academic Affairs

Director, MLS Program 2-5509

(Title, position, telephone number)

LDanielson@salud.unm.edu

(Email address)

UNIT PREPARES IN QUADRUPPLICATE

Routing (All four copies)

1. College Curriculum Committee
2. College or School Faculty (if necessary)
3. College or School Dean/Dean of Instruction
4. Office of the Registrar—Catalog
5. Director of relevant Library
6. CIRT (if necessary)
7. FS Graduate Committee (graduate courses)
8. FS Undergraduate Committee (undergraduate courses)
9. FS Curriculum Committee
10. Assoc. Provost for Academic Affairs
11. Faculty Senate

MLS Program

(Department/Division/Program/Branch)

* Plan for curricular process to take at least 12 months.

Mark appropriate Program:

Undergraduate Degree Program ☒Graduate Degree Program
(For existing degree only) ☐This form is for _____ Certificate in Clinical Chemistry
Name of New or Existing ProgramThis program is or would be located in current undergraduate/graduate catalog
on page(s) _____

Mark appropriate category:

NEW

REVISION OF

DELETION

NAME CHANGE

Degree BS
Type☐Undergraduate
degree only☐☐☐

Major

☐☐☐☐

Minor

☐☐☐☐

Concentration

☐☐☐☐

Certificate

☒☐☐☐

Emphasis

☐☐☐☐

Department

☐

NA

☐☐*See New Units policy Guidelines book
available from the Provost's Office.

Give exact title and requirements as they should appear in the catalog. See current catalog for format within the respective college (attach additional sheets if necessary). Identify in bracket form what is being changed.

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Reason(s) for Request (attach additional sheets if necessary). *Please see attached

Attach statements to address Budgetary and Faculty Load Implications and Long-range planning.

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Effective Date of Proposed Change: _____ Fall _____ 2012
Semester Year

Required Signatures:

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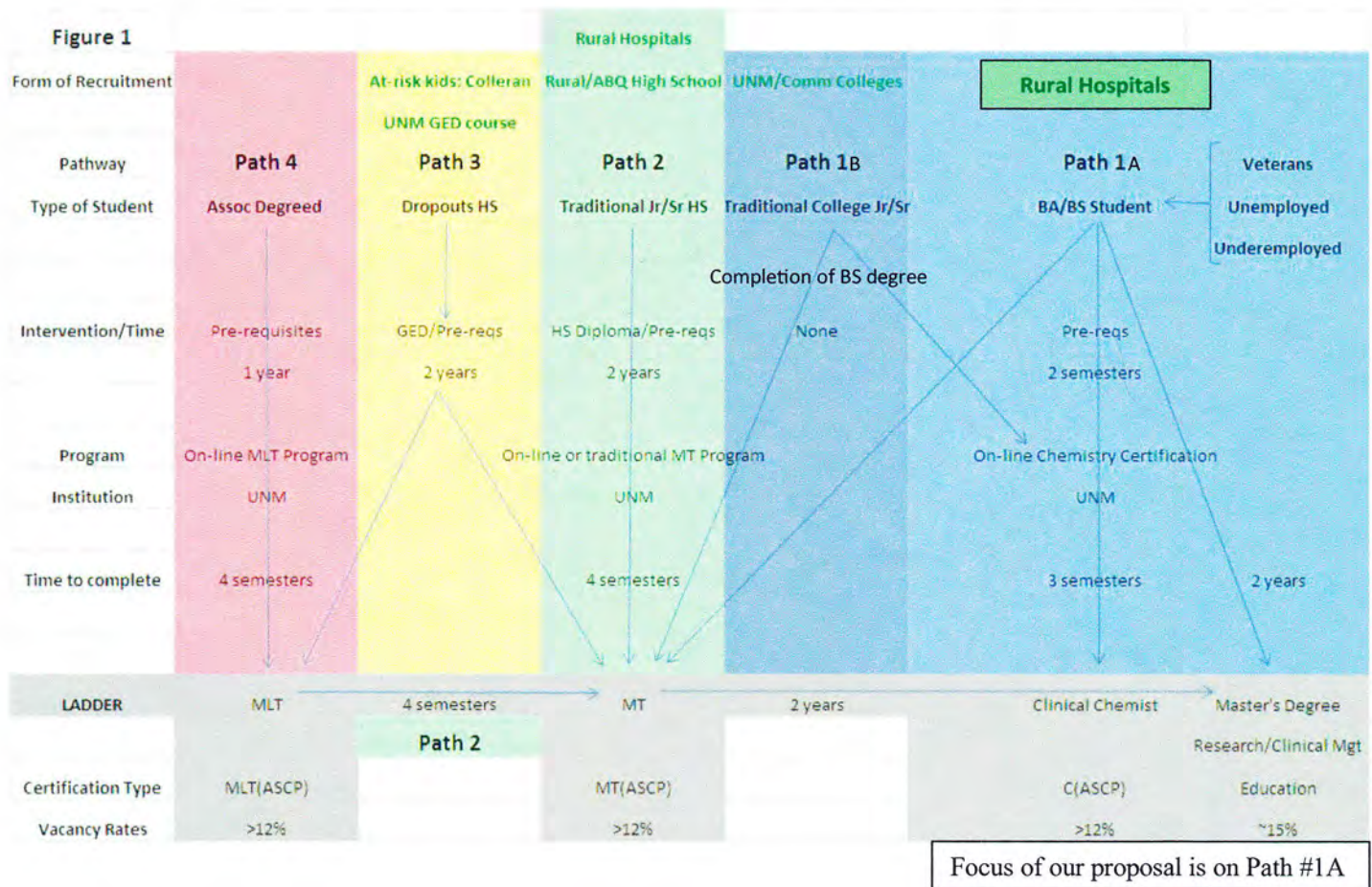
Mailed

Dear Curriculum Committee Members,

The goal of the establishment of innovative and cost effective training programs for Clinical Laboratory Personnel begins with this certificate program in Clinical Chemistry.

Amid a critical shortage of Medical Laboratory Scientists in our state, as well as the nation in general (1, 2), we intend to train at least forty individuals/year once the program is established. We are targeting people who are unemployed or underemployed for careers to work in the exciting and rapidly expanding field of laboratory science, a field of expertise that has well-documented growth, opportunity and job stability. Our proposal is unique in that it utilizes a combination of on-line and on-site training programs designed to target the rural underserved areas in New Mexico and throughout the United States. On-line training programs are advantageous in a state such as ours because the people we intend to educate will have the advantage of remaining in the rural site without having to relocate to Albuquerque leaving family commitments. Furthermore, the proposed program will provide incentives to train 'homegrown' workers who will remain in underserved rural areas to staff hospitals and clinics where there is a shortage of critical personnel.

Because of the numerous contacts our established MLS program has made over the years with rural and urban hospitals in New Mexico, public and private training programs, State Government and within our own School of Medicine, we will be able to reach out to the unemployed in urban and rural areas, and stratify them into entry pathways (see Figure 1) according to their prior education and experience.



Need for this Training Program

Need 1: To address critical vacancy rates and projected retirement vacancies in the clinical laboratory sciences field.

We have done a survey of the major employers in the Albuquerque and surrounding major rural hospitals in New Mexico including Rio Rancho and Santa Fe (Date: September 10, 2009 response rate: 100% and 50%, urban and rural respectively. The results show a current urban vacancy rate of 8% with a projected rate in the next year of 14%; and 8.6% with a projected rate of 18% in the next 3 years in the rural areas due to age of workforce and expected retirements.

Need 2: To supply convenient on-line instruction for the rural areas of New Mexico and the US to replace closing of many traditional programs

Our program has been involved in supplying trainees to the rural health sites for the past 5 years with a program called the Rural Health Initiative Program. From a survey done less than a month ago, the rural sites expressed that their most significant need is for certified personnel who will not only train in the rural sites but will remain in these areas after training is finished. The best option seen by the rural managers is to provide on-line training to current employees and residents in the area. In addition, traditional educational programs have decreased from a high in 1975 of 770 to a low in 2007 of 222 traditional programs (2).

Need 3: To control the cost of traditional on-campus training in the area of clinical laboratory sciences by supplying low-cost on-line programs to rural areas in New Mexico.

We believe that once the remaining on-line courses have been developed, the students will be able to take the courses without relocation to Albuquerque; whether they are in the state or in the nation. Currently we have agreements with 3 sites (Taos, Crownpoint and Hobbs) to establish scholarships for rural candidates to attend these on-line certification courses and have them train in these hospitals at no cost. Once the program is successfully built with the help of this infusion of capital, we intend to explore the possibility of increasing these agreements throughout the state to make the program sustainable.

Methods

Our proposal aims to utilize **four** different paths (See **Figure 1**) by which an entrant will ultimately gain eligibility to become registered as certified clinical laboratorians. The assets that the UNM Medical Laboratory Science Program brings to the table include:

1. All training will be provided by the University of New Mexico's Medical Laboratory Sciences program that has been accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) for more than thirty-five years.
2. Currently we already have in place pre-existing agreements with cooperating rural hospitals including: Taos, Santa Fe, Hobbs, Gallup, Silver City and Roswell, New Mexico, as well as an Indian Health Service facilities in Fort Defiance Arizona who can provide on-site training at no additional cost.
3. Several web-based courses we have developed within the framework of Vista Blackboard® are already available on-line for rural outreach and Distance Education programs within our University.

Description of Path I: Clinical Chemistry Certificate:

Path I: will consist of those individuals who already have a Bachelor of Arts, or a Bachelor of Sciences degree from an accredited institution. These students will be recruited from many sources including but not limited to: Workforce Connections in Albuquerque and rural sites; job fairs; local and national advertising and Armed Forces veterans. It will culminate in the awarding of a Clinical Chemistry certificate. Our aim is to recruit twenty individuals per year for stratification onto this track.

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Corrections made per
Forms B.

SWB

Path IA Clinical Chemistry Certificate Complete Curriculum:

Semester I (Summer Semester):

Classes already offered from our program on-line:

- MEDL 234: Clinical Immunology (3)
- MEDL 315L: Clinical Serology (2)
- MEDL 350L: Clinical Urinalysis/Body Fluids (2)

New Course to be added by approval of this certificate:

MEDL 463: ~~Laboratory Mathematics~~ (2)

Laboratory Operations & Laboratory Mathematics

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MEDL 462: ~~Specimen Collection and Handling~~ (2)

MEDL 461: ~~Phlebotomy Practicum~~ (2)

Specimen Processing and Collection Practicum

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MEDL 464: ~~Management Practicum~~ (2)

Management Project Practicum

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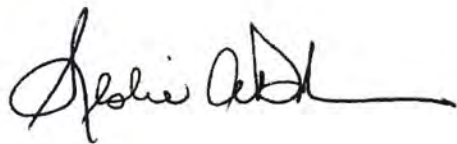
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Lee Danielson, PhD
Director of the MLS Program
Department of Pathology
University of New Mexico

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Director, MLS Program 2-5509
(Title, position, telephone number)LDanielson@salud.unm.edu
(Email address)Assigned by
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Degree BS
Type☐ Undergraduate
degree only☐☐☐

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Certificate

☒☐☐☐

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Date 10/20/2011

College Curriculum Committee

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CIRT (if necessary)

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Date 2/8/12

FS Curriculum Committee

Date 3-5-12

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Date

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Entered (Mainframe)

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For Scheduling Office ONLY:

Mailed

Exact Requirements:

Certification in Clinical Chemistry from our professional certification agency: American Society of Clinical Pathologists (ASCP) requires the following in order for the student to attempt the Certification Exam:

1. Student must have a baccalaureate degree from a nationally accredited institution
OR
2. Student must have earned a baccalaureate from another institution with successful completion of 30 semester credit hours or biology and chemistry to include at least 16 semester credit hours in chemistry

Our program will accept a UNM degree (Track 1) or a degree from another institution that includes the pre-requisites described in Track 2

Reasons for request:

A number of reasons have instigated this new program.

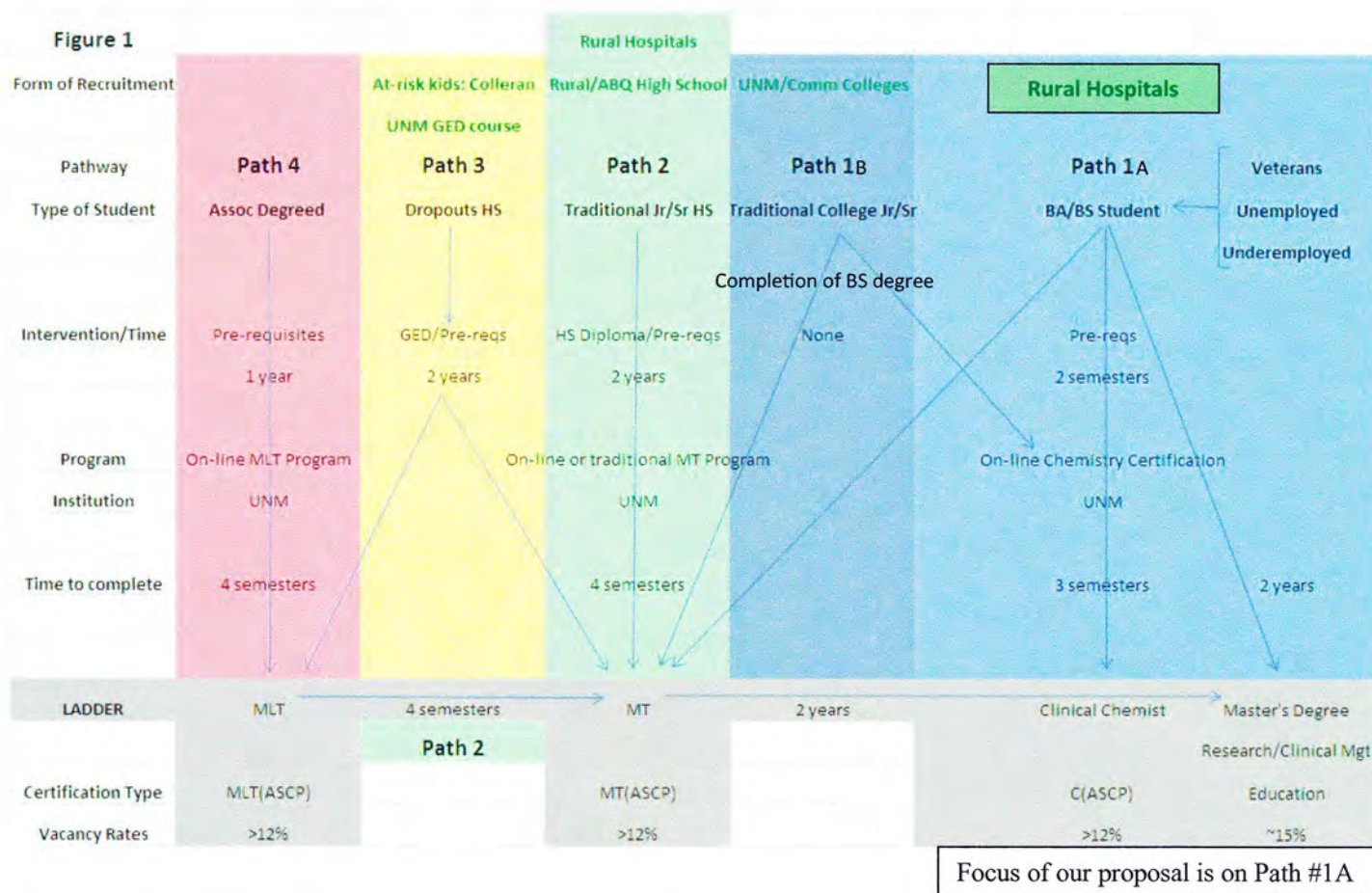
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4. Offering this program can help the current certified personnel by providing continuing education credits (CE) which will ensure the maintenance of their certification (12 hours of CE/year is required to maintain certification)
5. Outreach to the rural areas will promote effective cooperation with in-town laboratories to help rural sites successfully pass the mandatory 2-year laboratory inspection required by all accredited clinical laboratories (CAP, JACHO and other mandatory inspection agencies)
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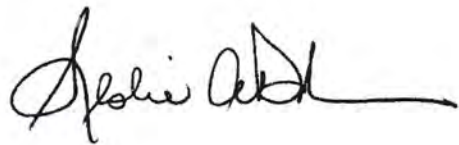
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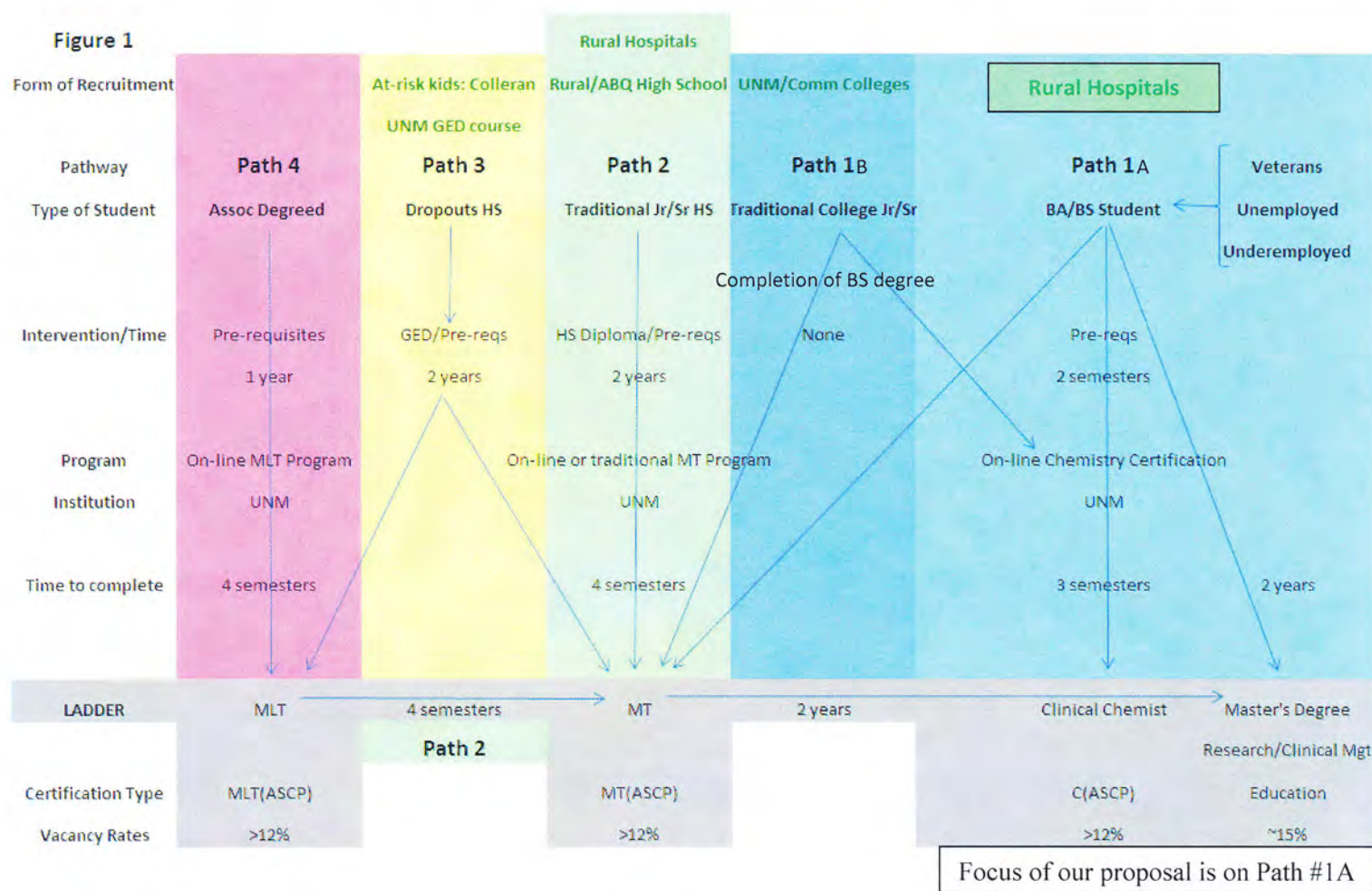
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Path IA Clinical Chemistry Certificate Complete Curriculum:

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- MEDL 234: Clinical Immunology (3)
- MEDL 315L: Clinical Serology (2)
- MEDL 350L: Clinical Urinalysis/Body Fluids (2)

New Course to be added by approval of this certificate:

MEDL 463: Laboratory Mathematics (2)

Semester II (Fall Semester):

Classes already offered from our program on-line:

- MEDL 310: Introduction to Clinical Chemistry (3)
- MEDL 311L: Introduction to Clinical Chemistry Laboratory (2)
- MEDL 410L: Advanced Clinical Chemistry Lecture/Lab (3)
- MEDL 355: Urinalysis Practicum (1)

New Courses to be added by approval of certificate:

MEDL 462: Specimen Collection and Handling (2)

MEDL 461: Phlebotomy Practicum (2)

Semester III (Spring Semester):

Classes already offered from our program on-line:

- MEDL 351: Basic Clinical Chemistry Practicum (4)
- MEDL 451: Advanced Clinical Chemistry Practicum (1)

New Courses to be added by approval of certificate:

MEDL 461: Clinical Correlations Studies (2)

MEDL 464: Management Practicum (2)

New budgetary/faculty requirements: Because this program is designed to be totally on-line and the specific clinical training is done at the rural facility, no new funds or faculty are required for this certificate. With our current program, we already have the faculty members teaching here at the University for the courses listed above. The requested new courses will be supervised by rural site preceptors. These rural sites have signed contracts with our program for the supervision of our students that are renewed and reviewed every year. This is utilization of our resources and faculty to the greatest degree.

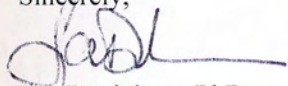
Opportunities for Employment:

Graduates of this program would be employable by all clinical laboratories in New Mexico and in the nation. Opportunities for those with a certificate at the associate degree, bachelor degree or master's degree in clinical laboratory science are expected to be more in demand than PhD trained scientists. They will fill positions as science or engineering technicians as well as health technologists and technicians. Additionally, they may become high school, university science or health care educators. We would expect that at least 50% of our graduates will stay in the state of New Mexico because of the presence of two important reference laboratories: SED Lovelace and TriCore Reference Laboratories. The graduates will represent established New Mexican urban and rural families and contribute an important service in this state as well as the nation.

References:

1. Lab Medicine Volume 40 Issue 4 March 2011: ASCP Wage and Vacancy Survey p 133
2. Critical Values Volume 1 Issue 4 October 2010: Shortage pp 8-10
3. Personal Communication with Tom Williams, PhD Department of Pathology Chair and Art Kaufmann, MD February/August 2010

Sincerely,

A handwritten signature in dark ink, appearing to read 'Lee Danielson', with a long horizontal flourish extending to the right.

Lee Danielson, PhD
Director of the MLS Program
Department of Pathology
University of New Mexico

FORM C - DEGREE/PROGRAM CHANGE

CIP CODE

Date: 10/10/2011

Leslie A. Danielson
(Name of individual initiating curricular change form)

Assigned by
Associate Provost
for Academic Affairs

Director, MLS Program 2-5509
(Title, position, telephone number)

LDanielson@salud.unm.edu
(Email address)

UNIT PREPARES IN QUADRUPPLICATE

- Routing (All four copies)
1. College Curriculum Committee
 2. College or School Faculty (if necessary)
 3. College or School Dean/Dean of Instruction
 4. Office of the Registrar—Catalog
 5. Director of relevant Library
 6. CIRT (if necessary)
 7. FS Graduate Committee (graduate courses)
 8. FS Undergraduate Committee (undergraduate courses)
 9. FS Curriculum Committee
 10. Assoc. Provost for Academic Affairs
 11. Faculty Senate

MLS Program

(Department/Division/Program/Branch)

Mark appropriate Program:

Undergraduate Degree Program ☒Graduate Degree Program ☐

(For existing degree only)

* Plan for curricular process to take at least 12 months.

This form is for _____ Certificate in Clinical Chemistry
Name of New or Existing ProgramThis program is or would be located in current undergraduate/graduate catalog
on page(s) _____

Mark appropriate category:

NEW

REVISION OF

DELETION

NAME CHANGE

Degree BS
Type☐ Undergraduate
degree onlyMajor ☐Minor ☐Concentration ☐Certificate ☒Emphasis ☐Department ☐*See New Units policy Guidelines book
available from the Provost's Office.

NA

Give exact title and requirements as they should appear in the catalog. See current catalog for format within the respective college (attach additional sheets if necessary). Identify in bracket form what is being changed.

*Please See Attached

Reason(s) for Request (attach additional sheets if necessary). *Please see attached

Attach statements to address Budgetary and Faculty Load Implications and Long-range planning.

Does this change affect in a significant way, any other departmental programs/branch campuses? Yes _____ No X

If yes, have you resolved these issues with department/branch involved? _____ (attach statement)

Effective Date of Proposed Change: _____ Fall _____, 2012
Semester Year

Required Signatures:

Department Chairperson Theresa PachecoDate 10/20/2011College Curriculum Committee Greg TurnerDate 10/22/11

College or School Faculty (if necessary) _____

Date _____

College or School Dean/Dean of Instruction Greg TurnerDate 10/22/11Office of the Registrar—Catalog Elizabeth A. BarreraDate 12/05/11Director of relevant Library 12-13Date 10/22/11

CIRT (if necessary) _____

Date _____

FS Graduate Committee (graduate courses) _____

Date _____

FS Undergraduate Committee (undergraduate courses) _____

Date _____

FS Curriculum Committee Theresa PachecoDate 3/5/12Assoc. Provost for Academic Affairs Greg TurnerDate 3/8/12

Faculty Senate _____

Date _____

Board of Regents _____

Date _____

Received _____

Entered (Mainframe) _____

For Scheduling Office ONLY:
Entered (Catalog) _____

Mailed _____

Exact Requirements:

Certification in Clinical Chemistry from our professional certification agency: American Society of Clinical Pathologists (ASCP) requires the following in order for the student to attempt the Certification Exam:

1. Student must have a baccalaureate degree from a nationally accredited institution
OR
2. Student must have earned a baccalaureate from another institution with successful completion of 30 semester credit hours or biology and chemistry to include at least 16 semester credit hours in chemistry

Our program will accept a UNM degree (Track 1) or a degree from another institution that includes the pre-requisites described in Track 2

Reasons for request:

A number of reasons have instigated this new program.

1. There is a documented shortage of certified medical laboratory scientists. This shortage can lead to the closure of rural hospitals due to lack of qualified personnel
2. New Mexican rural hospitals have requested this program because they find it hard to attract competent and certified personnel to work in their clinical labs
3. This program is on-line in order to train working personnel in the current clinical labs. This helps non-certified people by providing a ladder for promotion and assessment of competency
4. Offering this program can help the current certified personnel by providing continuing education credits (CE) which will ensure the maintenance of their certification (12 hours of CE/year is required to maintain certification)
5. Outreach to the rural areas will promote effective cooperation with in-town laboratories to help rural sites successfully pass the mandatory 2-year laboratory inspection required by all accredited clinical laboratories (CAP, JACHO and other mandatory inspection agencies)
6. Expansion of training for laboratory personnel that will not involve increased budgetary and space requirements for the University of New Mexico School of Medicine

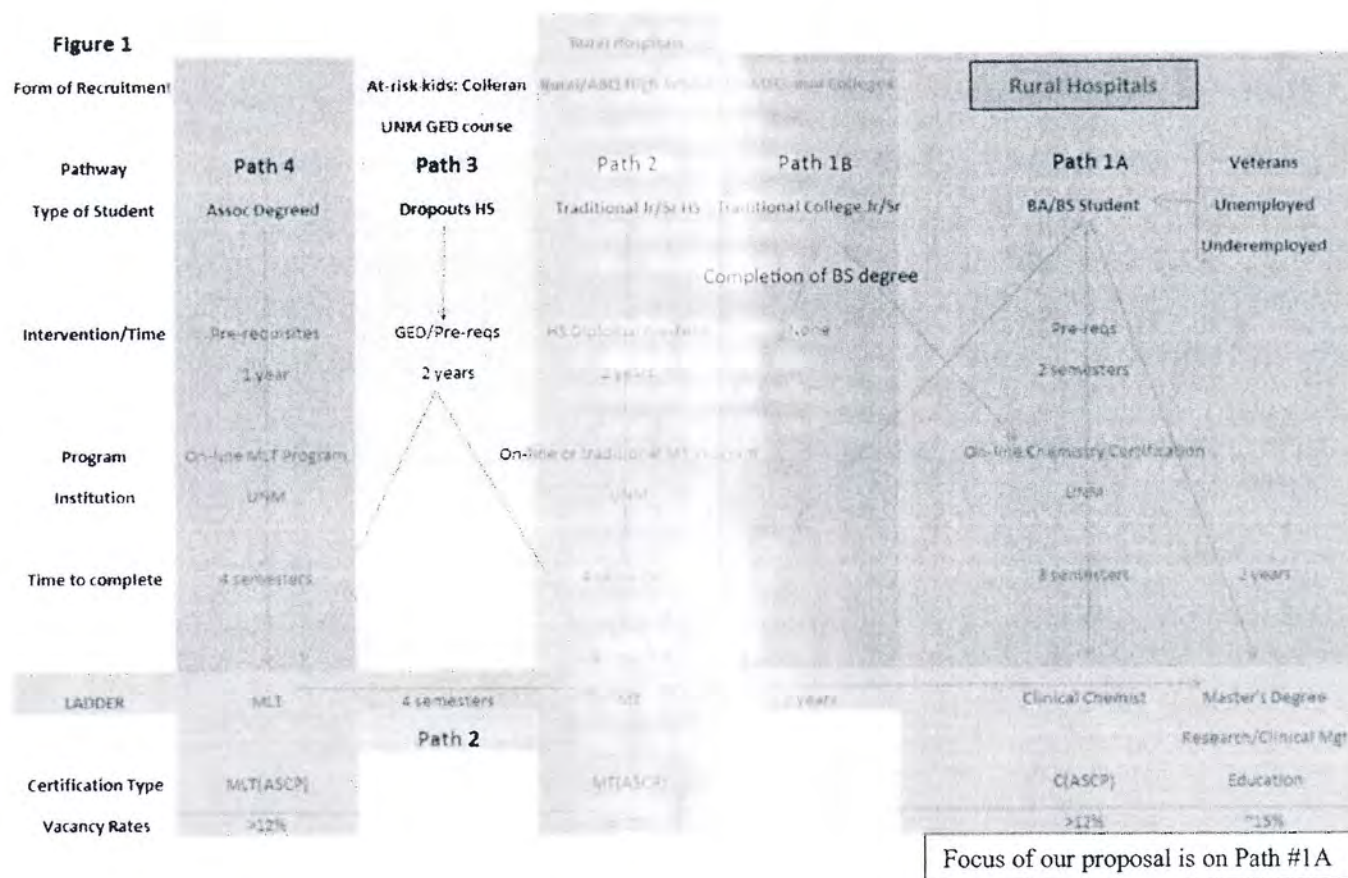
Dear Curriculum Committee Members,

The goal of the establishment of innovative and cost effective training programs for Clinical Laboratory Personnel begins with this certificate program in Clinical Chemistry.

Amid a critical shortage of Medical Laboratory Scientists in our state, as well as the nation in general (1, 2), we intend to train at least forty individuals/year once the program is established. We are targeting people who are unemployed or underemployed for careers to work in the exciting and rapidly expanding field of laboratory science, a field of expertise that has well-documented growth, opportunity and job stability. Our proposal is unique in that it utilizes a combination of on-line and on-site training programs designed to target the rural underserved areas in New Mexico and throughout the United States. On-line training programs are advantageous in a state such as ours because the people we intend to educate will have the advantage of remaining in the rural site without having to relocate to Albuquerque leaving family commitments. Furthermore, the proposed program will provide incentives to train 'homegrown' workers who will remain in underserved rural areas to staff hospitals and clinics where there is a shortage of critical personnel.

Because of the numerous contacts our established MLS program has made over the years with rural and urban hospitals in New Mexico, public and private training programs, State Government and within our own School of Medicine, we will be able to reach out to the unemployed in urban and rural areas, and stratify them into entry pathways (see Figure 1) according to their prior education and experience.

Figure 1



Need for this Training Program

Need 1: To address critical vacancy rates and projected retirement vacancies in the clinical laboratory sciences field.

We have done a survey of the major employers in the Albuquerque and surrounding major rural hospitals in New Mexico including Rio Rancho and Santa Fe (Date: September 10, 2009 response rate: 100% and 50%, urban and rural respectively). The results show a current urban vacancy rate of 8% with a projected rate in the next year of 14%; and 8.6% with a projected rate of 18% in the next 3 years in the rural areas due to age of workforce and expected retirements.

Need 2: To supply convenient on-line instruction for the rural areas of New Mexico and the US to replace closing of many traditional programs

Our program has been involved in supplying trainees to the rural health sites for the past 5 years with a program called the Rural Health Initiative Program. From a survey done less than a month ago, the rural sites expressed that their most significant need is for certified personnel who will not only train in the rural sites but will remain in these areas after training is finished. The best option seen by the rural managers is to provide on-line training to current employees and residents in the area. In addition, traditional educational programs have decreased from a high in 1975 of 770 to a low in 2007 of 222 traditional programs (2).

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Corrections made per
Forms B.

5/2/13

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New Course to be added by approval of this certificate:

- MEDL 463: ~~Laboratory Mathematics~~ (2) *Laboratory Operations* *Laboratory Mathematics*

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- MEDL 461: ~~Phlebotomy Practicum~~ (2) *Rotation*

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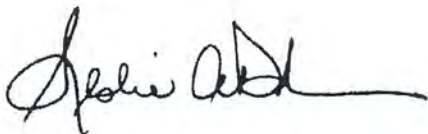
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Department of Pathology
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