

# Welcome to *HSCI 4681: Medical Nutrition Therapy 1!*

Instructor: Neal Malik ("Dr. Neal"), DrPH, MPH, RDN, CHES, ACSM-EP

## Welcome!

Welcome to your HSCI 4681 Medical Nutrition Therapy 1 course! This purpose of this class is to help you reach your goal to becoming an RDN or NDTR. I welcome you to contact me outside of office hours. If you ever find yourself confused, lost, or need extra help, you're probably not alone! Please talk to me. We can find a time and a means that works for both of us.

## Course Overview

When I'm asked about what I should be eating, how should I respond? What should I base this on? What if someone has a health condition? Does that change my recommendations? This class will explore these concepts. I will provide you with an...

Introduction to the skills and knowledge necessary for nutrition and dietary interventions in disease states using the principles of medical nutrition therapy and the Nutrition Care Process. Includes the pathophysiology of disease processes, nutrition assessment, diagnosis, intervention, monitoring, and evaluation to recover from disease conditions and/or to improve the quality of life. Introduction to coding and billing of nutrition and dietetics services to obtain reimbursement for services provided. Introduction to the Academy of Nutrition and Dietetics' Evidence Analysis Library. Formerly HSCI 443; students may not receive credit for both courses. Semester Corequisite: HSCI 4681L. Semester Prerequisite: HSCI 3602, 3607, 3607L, HSCI 4661. Quarter Prerequisite: HSCI 441, HSCI 365, and HSCI 384. (3 units)

## Learning Objectives

### Relevant Professional Standards

### **Academy of Nutrition and Dietetics (AND) Knowledge and Competencies met by this course:**

KRDN 1.3 Apply critical thinking skills

KRDN 2.5 Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.

KRDN 4.3: Describe the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained.

*... "syllabi are alive, symbolic, and vocal. A syllabus really can talk, and it's saying a lot more than we think." – Monica D'Antonio*



## Course & Contact Information:

**Instructor:** Neal Malik ("Dr. Neal"), DrPH, MPH, RDN, CHES, ACSM-EP

**Office Hours:** Via Zoom Tuesdays 4 - 5:15 pm; Thursdays 7:30 - 10:15 am & 4 - 5:15 pm (other times via appointment)

**Email:** [neal.malik@csusb.edu](mailto:neal.malik@csusb.edu)

**Semester/Year:** Fall 2020

**Location:** ONLINE

**Days & Times:** Please check BlackBoard for course information.

## Student and Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Utilize the Reimbursement Tool developed by the Academy's NDEP Council.
2. Employ critical thinking skills and knowledge of the MNT process to complete various case studies.
3. Effectively collaborate with a healthcare team to complete a case study.

## Course Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Apply the ADIM and SOAP processes to hypothetical patients.
2. Understand the use of nutrition-specific billing codes.
3. Define common medical terms used in dietetics.
4. Perform enteral and total parenteral calculations.

## The following table provides the types of Learning Assessments used to meet the Learning Outcomes from above:

You will have lots of opportunities to demonstrate what you are learning and receive feedback in this course. I have designed the course to provide you with a number of ways to demonstrate your learning. I will provide you with clear instructions for each assignment. But again, if you need extra help, don't hesitate to ask.

Course Requirements	Points* (*points may change – check Bb for updates)
Case Studies 1 – 10 (10 x 20 pts ea)	200
Medical Terminology Quizzes 1-11 (10 pts ea)	110
Quizzes on Lecture Material 1-7 (25 pts ea)	175
Course Surveys: 1 Tough Moment + 1 New Lesson Learned About Yourself (7 x 10 pts ea)	70
Midterm x2 (50 pts ea)	100
Final Exam (150 pts ea)	150
<b>TOTAL</b>	<b>805</b>

## Course Evaluation Plan

Final Grades are based on the following percentages:

A	93-100%
A-	90-92.9%
B+	87-89.9%
B	84-86.9%
B-	80-83.9%
C+	77-79.9%
C	74-76.9%
C-	70-73.9%
D+	67-69.9%
D	64-66.9%
D-	60-63.9%
F	Below 59.9%

# Building a Case for Personal Integrity

Integrity Requirements for the Professor	Integrity Requirements for the Student
I make the class and each session a worthwhile experience for you.	You treat me and your fellow classmates seriously and with respect (see Netiquette Guidelines in this syllabus as well).
I plan each session so that it is worth your time and effort.	Be engaged! Ask if you don't understand.
I take you seriously and treat you with respect.	Ensure that the work you submit to me represents your best effort.
I am available during office hours or at arranged times to support you.	The work you submit represents your own ideas and are not borrowed/copied from someone else or recycled from another course.
I carefully consider your responses to assignments, etc. before assigning each a grade.	Give full and proper credit to your sources.
I carefully weigh all of your grades during the course before submitting final course grades.	If you feel I made a grading mistake, please let me know as soon as possible. Just be prepared to show me where the mistake was made and/or explain why you believe I made a mistake.

I will do my best to live up to my responsibilities. At the same time, I expect you will do the same. If I get the sense that you're not doing so, I will call you on it. This is not to embarrass you, but rather help you realize your full potential. In certain circumstances, such as cheating or plagiarism, I may be required to report a violation of the University's Plagiarism and Cheating Policy (included in this syllabus).

Integrity, as with so much in life, involves a system of interconnected rights and responsibilities that reflect our mutual dependence on one another. The success of our efforts in this course, as in life, depends on all of us living up to our responsibilities. The failure of any of us, or even just one of us, to do what is required will diminish the opportunity for the rest to achieve *their* goals. That is why it is essential for all of us in this class to practice academic integrity.

*"If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea."—Antoine de Saint-Exupery*





## The Power of Reflection

*“Tell me and I will forget, show me and I may remember; involve me and I will understand.” – Confucius*

In order to support student learning, I incorporate well-researched approaches into my classroom. Using Bloom’s Taxonomy as the foundation (see Fig. 1), I design lectures, assignments, quizzes, and exams so that they incorporate various levels of complexity to help students remember what they’re being taught and how it relates to their futures (Adams, 2015).

Adams, N. E. (2015). Bloom’s taxonomy of cognitive learning objectives. *Journal of the Medical Library Association: JMLA*, 103(3), 152–153. doi: 10.3163/1536-5050.103.3.010; Sites at Penn State. 2020. *Types of Online Assessments*. [online] Available at: <<https://sites.psu.edu/onlineassessment/gather-evidence/>> [Accessed 15 July 2020].

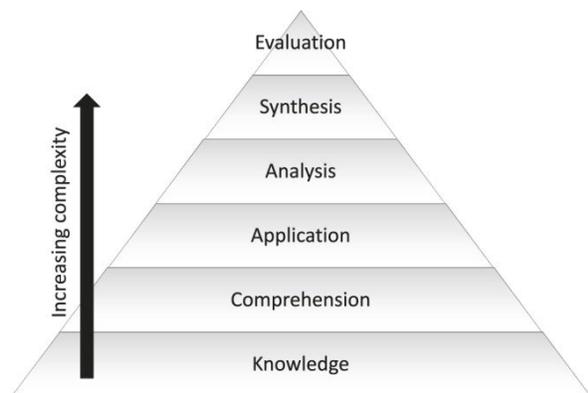


Fig. 1. Graphical representation of Bloom’s Taxonomy.

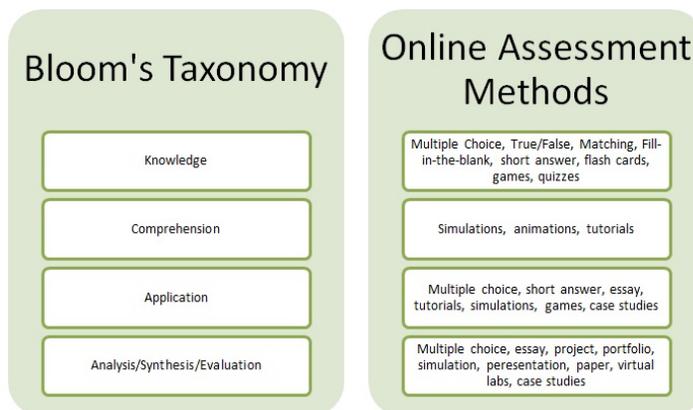


Fig. 2. Applying Bloom’s Taxonomy to Online Courses.

## Technology Requirements

You need access to a computer and the internet in order to be successful in this class. If you have technical difficulties, please try to troubleshoot the problem on your own first. If you are still having trouble, contact the IT Help Desk. Please do not email me saying, “My computer wouldn’t play the movie” or “My computer won’t allow....”. This is because I often won’t be able to help you. However, you can contact CSUSB’s Information Technology Services Department at 909-537-7677 or [support@csusb.edu](mailto:support@csusb.edu)

The table on the next page outlines the recommended minimum hardware and software specifications needed to be successful in this course. Note: the university will not provide technical support for non-university supported course resources and the university does not endorse any products which may be advertised through those resources. (CSU San Bernardino Distributed Learning Policy, FSD 01-0.1RD)



Hardware Requirements for both PC and Mac	
<b>Processor:</b>	2GHz Core 2 Duo Processor or Equivalent
<b>Memory:</b>	2GB RAM
<b>Monitor:</b>	17" monitor (32-bit color) set to 1024 X 768 resolution (recommended)
<b>Hard Drive:</b>	250 GB
<b>Network:</b>	Ethernet 10/100
<b>Sound:</b>	Speakers or Headsets with microphone

Software Requirements	
<b>Operating System:</b>	(PC) Windows 10 Service Pack 1 32-bit  (Mac) Mac OSX 10.13.6
<b>MS Office:</b>	(PC) Microsoft Office 2010 software package  (Mac) Microsoft Office 2010  Or compatible software program
<b>Anti-Virus:</b>	Current Anti-Virus software updated monthly (preferred Microsoft Security Essentials).
<b>Free Software Availability</b>	Some OS/software titles are available to current students for free from the campus or on the web. You can contact the CSUSB Help Desk 24/7 for any BlackBoard questions.
<b>Web Browser:</b>	(PC) Microsoft Internet Explorer 9 or higher, Mozilla Firefox 24 or higher, and Google Chrome. (Mac) Mozilla Firefox 5 or higher, Safari and Google Chrome.  <b>The use of any other browser might create problems when you participate in online class activities. Do not use the AOL Web browser or any other type of proprietary Web browser, as they typically time you out when completing assignments.</b>
<b>Plug-ins:</b>	Adobe Acrobat Reader, Adobe Flash Player, Java, Apple Quick Time
<b>Internet Service Provider:</b>	Reliable Internet availability from home via an Internet Service Provider (ISP) is required. Internet access at work may not allow enough time to complete assignments. "Firewalls" may impede access to online courses from work and also from home.
<b>Email:</b>	CSUSB student email account must be activated.
<b>Skills:</b>	You should be proficient in using the World Wide Web and e-mail. You are required to have an e-mail address; your CSUSB e-mail account is sufficient. You should be proficient in Word Processing: attachments, spell check, copy and paste, etc.

*"I am not a teacher, but an awakener."—Robert Frost*



## Building Our Classroom Community

Although this course takes place online, community building is an important component for meeting our course outcomes. To ensure a productive and collegial learning experience for all course-takers, we need everyone to do their best to practice each of the following:

- **Netiquette:** Personal integrity, especially with regards to personal communication is essential to your success as a student and as a future professional. Netiquette refers to a set of behaviors that are appropriate for online activity, especially with email and discussions. In an online classroom, our primary means of communication is written. The written language has many advantages: more opportunity for reasoned thought, more ability to go in-depth, and more time to think through an issue before posting a comment. However, written communication also has certain disadvantages, such a lack of the face-to-face signaling that occurs through body language, intonation, pausing, facial expressions, and gestures. As a result, please be aware of the possibility of miscommunication and compose your comments in a positive, supportive, and constructive manner. Please review the core rules of netiquette, which are found at <http://www.albion.com/netiquette/corerules.html>
- **Commitment to Diversity:** In our commitment to the furthering of knowledge and fulfilling our educational mission, California State University, San Bernardino seeks a campus climate that welcomes, celebrates, and promotes respect for the entire variety of human experience. In our commitment to diversity, we welcome those from all backgrounds and we seek to include knowledge and values from many cultures in the curricula and extra-curricular life of the campus community. Dimensions of diversity shall include but are not limited to, the following: race, ethnicity, religious belief, sexual orientation, sex/gender, disability, socioeconomic status, cultural orientation, national origin, and age. (From the CSU San Bernardino University Diversity Committee Statement of Commitment to Diversity, 1995)
- **Students with Disabilities:** In keeping with the university's Commitment to Diversity, the faculty of the College of Natural Sciences fully support the Americans with Disabilities Act (ADA). Faculty will provide reasonable accommodations to any student with a registered disability through the Office of Services to Students with Disabilities (SSD). If you are in need of an accommodation for a disability in order to participate in this class, contact Services to Students with Disabilities at UH-183 or (909) 537-5238 and they will inform the instructor of the accommodations you might need. It is the student's responsibility to contact the instructor well in advance for academic accommodations for a verified disability.
- **Actively participate.** The course experience is more enriching when it includes a greater number of diverse voices and perspectives.
- **Demonstrate respect for differences.** We all come to the table with different experiences and viewpoints. In order to get the most out of this learning opportunity, show respect for differences by seeking to understand, asking questions, clarifying understanding, and/or respectfully explaining your own perspective.
- **Be timely.** We ask that you do your best to stay on the same schedule as your cohort to maximize learning for all course-takers.



• **Be specific.** We encourage you to offer specific evidence from the videos or your own classroom experiences when posting to the discussion forums.

• **Use an appropriate tone and language.** In online environments without verbal or physical cues, humor and sarcasm can be mistaken as cold or insulting. Please pay special attention to your tone and language use before submitting discussion posts.

## Academic Honesty

**Academic Honesty:** As mentioned above, personal integrity is essential to your success as a student and as a future professional. This goes just beyond personal communication. It also involves Academic Honesty. The Policy and Procedures concerning Academic Dishonesty states:

**Plagiarism and Cheating:** Plagiarism and cheating are violations of the Student Discipline Code (see Appendix of the CSUSB Catalogue of Programs) and may be dealt with by both the instructor and the Judicial Affairs Officer of the Student Conduct Office. Plagiarism is the act of presenting the ideas and writings of another as one's own. Cheating is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive or fraudulent means. Plagiarism is academically dishonest and makes the offending student liable to penalties up to and including expulsion. Students must make appropriate acknowledgments of the original source where material written or compiled by another is used. Questions about academic dishonesty and the policy should be addressed to the Vice President of Student Affairs.

**Course-Specific Guidelines on Academic Dishonesty:** Engaging in an act of plagiarism is a violation of academic integrity and will not be tolerated on this campus and will result in an automatic "F" for the assignment.

Cheating is not tolerated. Cheating would include forms of plagiarism as outlined above and any of the following during a quiz/exam: looking at another student's quiz/exam, talking, using notes, surfing the web to look for answers, etc. Cheating will result in an automatic score of 0 points for that assignment or quiz/exam as well as a required visit with the Student Affairs Office.

Any idea, concept, etc. that is not yours needs to be properly cited and referenced. For written assignments, credit will not be given for the following:

1. Use of another person's work or ideas that are not properly cited and/or referenced.
2. Copying or borrowing large sections of text (e.g., sentences) from another source without using quotations, even if a reference is cited. This includes the cutting and pasting of information. You need to read the material and put it in your own words.
3. Overuse of quotations (significant points will be deducted for multiple quotations)
4. Re-wording of another's sentences (e.g., changing a few words or reversing the sentence structure)
5. Use of Wikipedia or other non-academic sources that are continually updated/changed without adequate peer-review
6. Use of ".org" websites as major sources, unless pre-approved by the instructor
7. Serious, intentional plagiarism or cheating, which will likely result in a grade of "F" for the course. Submitting work completed in another class or from another student is considered cheating and subject to a failing grade in the course.



## How to Succeed in this Course

### Sample Weekly Schedule

Day	Tasks
Monday-Tuesday	Log on to BlackBoard and begin reviewing the week's materials, assignments, etc. Check your campus email.
Tuesday-Thursday	Complete Medical Terminology Quiz. If you need help, consider attending my office hours. Check your campus email.
Wednesday-Friday	Complete Case Study. Double-check your work by rereading assignments, etc. to be sure it reflects your best effort. Check your campus email.
Friday-Sunday	Submit assignments, quizzes, etc. by the due date and time. Check your campus email.

## Course Resources

Resource	Description
Textbook (required)	Nelms, M., Sucher, KP. 2020. <i>Nutrition Therapy and Pathophysiology</i> . 4th ed. Boston, MA: Cengage. ISBN-13: 978-0357041710
BlackBoard	Other required readings and course materials will be available on BlackBoard.
CSUSB IT Department (available 24/7)	<a href="mailto:support@csusb.edu">support@csusb.edu</a> or 909-537-7677
Your Instructor	<a href="mailto:Neal.Malik@csusb.edu">Neal.Malik@csusb.edu</a>

*“What we learn with pleasure we never forget.” – Alfred Mercier*



# Tentative Course Schedule

Week	Dates	Topics	Readings/Assignments
1	8/25	Why is the class structured like this? What's going to be my role? Ch. 1 The Nutrition Care Process	Ch. 1/Case Study Ch. 1
	8/27	Why do I have to learn all of this? I just want to help people eat better! Ch. 2 Overview: The Nutrition Care Process  Lab: Case studies Ch. 1-2	Ch. 2/Case Study Ch. 2/"1 Tough Moment & 1 Learning Moment" Survey
2	9/1	Before giving nutrition advice, what should I do first? Ch. 3 Pt. 1 (Nutrition Assessment)	Ch. 3/Complete Medical Terminology Quiz 1
	9/3	Before giving nutrition advice, what should I do first? Ch. 3 Pt. 2 (Nutrition Assessment)  Lab: Case study Ch. 3	Ch. 3/Case Study Ch. 3/Quiz: Chapters 1&2
3	9/8	Helping patients feel their best through a Nutrition Intervention. Ch. 4 (Nutrition Intervention, Monitoring, & Evaluation)	Ch. 4/Complete Medical Terminology Quiz 2
	9/10	How do I complete a medical chart? Ch. 6 (Documentation of the Nutrition Care Process)  Lab: Case study Ch. 4	Ch. 6/Case Study Ch.4/"1 Tough Moment & 1 Learning Moment" Survey
4	9/15	What are some common medications I need to be aware of? Ch.11 Pt. 1 (Pharmacology)	Ch.11/Complete Medical Terminology Quiz 3
	9/17	How do I get paid? (Reimbursement)  Lab: Case study Ch. 11	Ch. 11/Case Study Ch. 11/Quiz: Chapters 4&6
5	9/22	Exam 1	Exam Feedback – "Exam Wrapper"
	9/24	What's the endocrine system and what does that have to do with diabetes? Ch. 17 Pt. 1 (Diseases of the Endocrine System)  Lab: Case Study Ch. 17 v.1	Ch. 17/Case Study 1 Ch. 17/"1 Tough Moment & 1 Learning Moment" Survey
6	9/29	What's the endocrine system and what does that have to do with diabetes? Ch. 17 Pt. 2 (Diseases of the Endocrine System)	Ch. 17/Complete Medical Terminology Quiz 4
	10/1	What's the endocrine system and what does that have to do with diabetes? Ch. 17 Pt. 3 (Diseases of the Endocrine System)  Lab: Case Study Ch. 17 v.2	Ch. 17/Case Study 2 Ch. 17/Quiz: Chapter 17
7	10/6	What if a patient is unable to eat? Ch. 5 Pt. 1 (Enteral & Parental Nutrition Support)	Ch. 5/Complete Medical Terminology Quiz 5



	10/8	What if a patient is unable to eat? Ch. 5 Pt. 2 (Enteral & Parental Nutrition Support)  Lab: Case Study Ch. 5	Ch. 5/Case Study Ch. 5/"1 Tough Moment & 1 Learning Moment" Survey
8	10/13	What are electrolytes? Ch.7 Pt. 1 (Fluid & Electrolyte Balance)	Ch. 7/Complete Medical Terminology Quiz 6
	10/15	What are electrolytes? Ch. 7 Pt. 2 (Fluid & Electrolyte Balance)  Lab: Case Study Ch. 7	Ch. 7/Case Study Ch. 7/Quiz: Chapters 5&7
9	10/20	How do the kidneys work? Ch. 8 (Acid-Base Balance)	Ch. 8/Complete Medical Terminology Quiz 7
	10/22	Acidic or alkaline? Which is better? Ch. 8 Pt. 1 (Acid-Base Balance)  Lab: Case Study Ch. 8 v.1	Ch. 8/Case Study 1 Ch. 8/"1 Tough Moment & 1 Learning Moment" Survey
10	10/27	Acidic or alkaline? Which is better? Ch. 8 Pt. 2 (Acid-Base Balance)	Ch. 8/Complete Medical Terminology Quiz 8
	10/29	Could nutrition help with injury recovery? Ch.9 Pt. 1 (Cellular & Phys Response to Injury)  Lab: Case Study 2 Ch. 8 v.2	Ch. 9/Case Study 2 Ch. 8/Quiz: Chapter 8
11	11/3	Could nutrition help with injury recovery? Ch. 9 Pt. 2 (Cellular & Phys Response to Injury)	Ch. 9/Complete Medical Terminology Quiz 9
	11/5	Could nutrition help with injury recovery? Ch.9 Pt. 3 (Cellular & Phys Response to Injury)  Lab: Case Study Ch. 9	Ch. 9/Case Study Ch. 9/"1 Tough Moment & 1 Learning Moment" Survey
12	11/10	Exam 2	Exam Feedback – "Exam Wrapper"
	11/12	What're the differences between a heart attack, stroke, and peripheral artery diseases? Ch. 13 Pt. 1 (Diseases of the CV System)	Ch. 13/Quiz: Chapter 9
13	11/17	What're the differences between a heart attack, stroke, and peripheral artery diseases? Ch. 13 Pt. 2 (Diseases of the CV System)	Ch. 13/Complete Medical Terminology Quiz 10
	11/19	What're the differences between a heart attack, stroke, and peripheral artery diseases? Ch. 13 Pt. 3 (Diseases of the CV System)  Lab: Case Study Ch. 13	Ch. 13/Case Study Ch. 13/"1 Tough Moment & 1 Learning Moment" Survey
14	11/24	Final Exam Prep 1	
	11/26	Enjoy your Thanksgiving weekend!!	



15	12/1	Final Exam Prep 2	Complete Medical Terminology Quiz 11
	12/3	Final Exam Prep 3	Quiz: Chapter 13
16	12/8	<b>FINAL EXAM</b>	

The Department of Health Science and Human Ecology at CSUSB, along with other college departments across the nation and world, stands in solidarity with our Black students, faculty, staff, and members of the Black community, against all forms of racism, social, and environmental injustices. Racism is an urgent Public Health issue and it is our responsibility as instructors, researchers, health professionals, and community advocates to fight against the blatant racism that impacts, not only our family and loved ones, but also our students, colleagues, and communities.

Our department's values of equity, diversity, and advocacy serve as a guide, as we: 1) challenge our diverse student body to explore and critique the intersection of diversity, equity, and inclusion in the classroom, research activities, community work, and other high impact practices; 2) prepare highly competent graduates to work with community organizations in helping to improve the health of underserved populations; and 3) commit to explore and address racism, social, and environmental injustices through our teaching, research, and service.

The College of Natural Sciences will enhance the quality of life and health of the communities it serves by promoting educational, social, economic, scientific, and cultural advancement through:

- Establishing centers of academic leadership in the fields of biology, chemistry, computer science, geology, health science, kinesiology, mathematics, nursing, and physics;
- Meeting the emerging and identified needs of the community;
- Developing new academic programs to meet future challenges;
- Linking research and teaching that will benefit K-12, undergraduate and graduate education;
- Applying interdisciplinary approaches for the solution of problems;
- Preparing students for advanced studies;
- Fostering camaraderie and providing a safe environment for faculty, staff, students, and administration;
- Enabling students and faculty to achieve their full potential in their quest for learning and teaching; and,
- Cultivating the appreciation of the relevance of the sciences in everyday life through outreach and public education.

The mission of the department is to prepare highly competent professionals who are well prepared in the disciplines of public health including environmental health science, health care management and administration, nutrition and food sciences, and public health education, and to maintain the department as a public health leader within the University's service area. Graduates will exhibit broad health science knowledge, applied technical and human skills, clear personal and social values, civic commitment to the community, and a desire for lifelong learning and achievement. To this end, we are committed to achieving excellence in undergraduate and graduate education by being at the forefront of scientific advancement and professional practice in the areas of research, teaching, and service consistent with the philosophy and goals of the California State University System, the San Bernardino campus, and the College of Natural Sciences.

