

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

**ACADEMIC SENATE**

**ACADEMIC PROGRAMS COMMITTEE**

**REPORT TO**

**THE ACADEMIC SENATE**

**AP-047-156**

**MAJOR IN NUTRITION FOR SEMESTERS**

**Academic Programs Committee**

**Date: 08/22/2016**

**Executive Committee  
Received and Forwarded**

**Date: 08/24/2016**

**Academic Senate**

**Date: 08/31/2016**

**First Reading**

**09/28/2016**

**Second Reading**

BACKGROUND: The Department of Human Nutrition and Food Science has put forward a referral for a Major in Nutrition for semesters. This is a revised program.

RESOURCES CONSULTED:

Deans  
Associate Deans  
Department Chairs  
All Faculty

DISCUSSION:

Before reaching the Academic Programs Committee, this program was reviewed by the College Curriculum Committee in the College of Agriculture as well as the Dean of Agriculture and the Office of Academic Programs. All concerns raised at those levels were addressed. The Academic Programs Committee then conducted campus-wide consultation, as well as its own review of the program. No concerns were raised.

RECOMMENDATION:

The Academic Programs Committee recommends approval of the semester program: Major in Nutrition.

| <b>Nutrition, B.S.</b>  |   |
|---|---|
| <b>Status</b>   | active  |
| <b>Hierarchy Entities</b>                                     | Human Nutrition and Food Science  |
| <b>Approval Process Name</b>                                  | I. Program - Q2S Existing Program/Option/Minor  |
| <b>Current Step</b>   | Office of Academic Programs   |
| <b>Originator</b>   | Bonny Burns-Whitmore  |
| <b>Created</b>  | 12/04/2015 01:47PM  |
| <b>Launched</b>   | 12/04/2015 02:09PM  |
| <b>Form</b>   |   |
| <b>General Catalog Information</b>                            |   |
| Department  | Human Nutrition and Food Science  |
| Conversion Category:  | Revised   |
| Proposal Type:  | Program   |
| Describe or list changes                                      | The program was revised by setting up both options in a "pre-major" arrangement in order to limit the number of students applying to the Dietetic option. Presently, all CSUs that offer the major or option in Dietetics are impacted. Our program could not be impacted, so we needed to determine how to limit enrollment without impact. Therefore, we identified several classes as "gate keeper" classes that require a grade of B- or higher in order to continue in the Dietetic's option. Due to the limitations of the number of units allowed for the major (120 max), many of the classes we used to offer were downsized and combined between several different classes and new information added. Every class offered was revised by the addition of materials not previously contained, or by combining required knowledge requirements into classes that did not previously have requirements for the Didactic Programs in Dietetics (DPD) classes. The classes for the Dietetics Option contains the DPD classes (an accredited program-by ACEND) are required to match up with the current knowledge and skill requirements in order to continue compliance with the ACEND requirements. Additionally, the Nutrition Science option did not have a mission, program objectives, assessment, and those were also developed. This new Nutrition BS program was modeled after several CSU semester programs-CSUN and CSULB.  |
| Semester Program Name (e.g. Biology, B.S., Art History, B.A.) | Nutrition, B.S.   |
| Program Description   | <p>NUTR Major-Dietetics Option Semester Conversion</p> <p>Dietetics Mission: To prepare students to meet the Didactic requirements as defined by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) in order to be successful nutrition professionals that work in diverse communities and workplaces.</p> <p>Dietetics Goals</p> <p>The program prepares students for entry-level nutrition careers as a Dietetic Technician, Registered, (BS-DTR) or Nutrition Dietetic Technician, Registered, BS-NDTR (under Plan III), Registered Dietitian (RD) and/or admittance to nutrition related postgraduate programs.</p> <p>The program will prepare students to meet the Didactic components defined by ACEND.</p> <p>The program will produce graduates with a knowledge and skill base to be successful nutrition and health professionals.</p> <p>Nutrition Major-Nutrition Science Mission: To provide a high quality education that educates and prepares our diverse students so that they can promote healthy nutrition and food practices that enhance human and animal health through teaching, research, classes and opportunities that support the Human Nutrition and Food Science, College of Agriculture and Cal Poly Pomona missions.</p> <p>Goals:</p> <p>Goal 1: Prepare competent graduates capable of successful entry into graduate programs (Pre-professional and Animal Nutrition)</p> <p>Goal 2: Prepare graduates for entry into food and nutrition-related careers</p> <p>Goal 3: Recruit, retain and graduate a diverse population of undergraduate nutrition science students with the social and cultural understanding required to help promote healthy nutrition and food practices.</p> <p>Objectives:</p> <p>In order to secure and maintain accreditation for the Didactic Programs in Dietetics program, these Nutrition Science option Student Learning Objectives will not include the food service and medically-related competencies (Foodservice/Medical Nutrition Therapy) than the requirements for Accreditation Council for Education in Nutrition and Dietetics (ACEND) requirements.</p> |
| Curriculum Sheet  | See attached  |
| Roadmap   | See attached  |

### Program Proposal for Re-Vision Programs-version revised 050416

BS in Nutrition, with Options in Dietetics and Nutrition Science

## Nutrition Major Curriculum Sheet-Dietetics Options

### SEMESTER CONVERSION

|                               |            |
|-------------------------------|------------|
| Required Major Core           | 77         |
| Required Option Core          | 28         |
| Double-counted                | (33)       |
| <u>GE</u>                     | <u>48</u>  |
| <b>TOTAL UNITS FOR DEGREE</b> | <b>120</b> |

|            | <b>Required Major Core</b>                       | <b>SEM</b> |
|------------|--|------------|
| AG 1010    | Agriculture and Modern World (D2)(MC)            | 3          |
|            | Ethical Issues in Food, Agriculture, and Apparel |            |
| AG 4010    | Industries (D4) (MC)                             | 3          |
| BIO 1150   | Basic Biology (B2) (MC)                          | 3          |
| BIO 1150L  | Basic Biology Lab (B3) (MC)                      | 1          |
| BIO 2060   | Basic Microbiology(MC)                           | 3          |
| BIO 2060L  | Basic Microbiology Lab(MC)                       | 1          |
| BIO 2350   | Human Physiology(MC)                             | 3          |
| BIO 2350L  | Human Physiology Lab(MC)                         | 1          |
| BIO 3000   | Genetics and Human Issues (B5) (MC)              | 3          |
| CHM 1210   | General Chemistry (B1) (MC)                      | 3          |
| CHM 1210L  | General Chemistry Lab (MC)                       | 1          |
| CHM 1220   | General Chemistry (MC)                           | 3          |
| CHM 1220L  | General Chemistry Lab(MC)                        | 1          |
| CHM 2010   | Elements of Organic Chemistry(MC)                | 3          |
| CHM 3210   | Elements of Biochemistry(MC)                     | 3          |
| COM 2204   | Advocacy and Argument (A1)(MC)                   | 3          |
| ENG 1103   | Freshman English 1 (A2) (MC)                     | 3          |
| ENG 2105   | Written Reasoning (A3) (MC)                      | 3          |
| FST 3210   | Experimental Food Science(MC)                    | 2          |
| FST 3210L  | Experimental Food Science Lab(MC)                | 1          |
| FST 3250   | Food Safety and Current Issues(MC)               | 3          |
| NUTR 1000  | Introduction to the Professions(MC)              | 1          |
| NUTR 1210  | Introduction to Foods(MC)                        | 2          |
| NUTR 1210L | Introduction to Foods Lab(MC)                    | 1          |
| NUTR 2280  | Food and Culture (D3) (MC)                       | 3          |
| NUTR 2350  | Nutrition(MC)                                    | 3          |
| NUTR 2350L | Nutrition Lab(MC)                                | 1          |
| NUTR 3130  | Introduction to Nutrition Research(MC)           | 3          |
| NUTR 3350  | Nutrition of the Life Cycle(MC)                  | 3          |

|                              |   |            |
|------------------------------|---|------------|
| NUTR 3450                    | Nutrition Education and Counseling(MC)          | 3          |
| NUTR 3450A                   | Nutrition Education and Counseling Activity(MC) | 1          |
| PSY 2201                     | Introduction to Psychology (E)(MC)              | 3          |
| <u>STA 1200</u>              | <u>Statistics with Apps (B4)(MC)</u>            | <u>3</u>   |
|                              | <b>Required Option Core</b>                     | <b>SEM</b> |
| ABM 2240                     | Accounting for Agribusiness (OC)                | 3          |
| NUTR 3280L                   | Food and Culture Lab(OC)                        | 1          |
| NUTR 3670                    | Institutional Food Service I(OC)                | 2          |
| NUTR 3670L                   | Institutional Food Service Lab(OC)              | 1          |
| NUTR 3680                    | Institutional Food Service II(OC)               | 2          |
| NUTR 3680L                   | Institutional Food Service II Lab(OC)           | 1          |
| NUTR 4260                    | Food Service Administration(OC)                 | 2          |
| NUTR 3930                    | Advanced Nutrient Metabolism 1(OC)              | 3          |
| NUTR 3940                    | Advanced Nutrient Metabolism 2(OC)              | 3          |
| NUTR 4430                    | Medical Nutrition Therapy 1(OC)                 | 3          |
| NUTR 4430A                   | Medical Nutrition Therapy 1 Activity(OC)        | 1          |
| NUTR 4440                    | Medical Nutrition Therapy 2(OC)                 | 3          |
| NUTR 4460                    | Community Nutrition(OC)                         | 2          |
| NUTR 4460A or<br>NUTR 4460AS | Community Nutrition Activity(OC)                | 1          |

Option Core= OC

Major Core=MC

GEs are named according to A, B, C, D, E designations

**Nutrition Major- Nutrition Science Option Curriculum Sheet-11/01/15-rev 11/13/15-rev 05/04/16**

**SEMESTER CONVERSION**

|            |   |            |
|------------|---|------------|
|            | Required Major Core                           | 74         |
|            | Required Option Core                          | 10         |
|            | Double-counted                                | (33)       |
|            | GE  | 48         |
|            | <u>Emphasis Electives</u>                     | <u>21</u>  |
|            | <b>TOTAL DEGREE</b>                           | <b>120</b> |
|            | <b>Required Major Core</b>                    | <b>SEM</b> |
| AG 1010    | Agriculture and Modern World (D2)(MC)         | 3          |
| AG 4010    | Ethical Issues (D4)(MC)                       | 3          |
| BIO 1150   | Basic Biology (B2) or BIO 1210(MC)            | 3          |
| BIO 1150L  | Basic Biology Lab (B3) or BIO 1210L(MC)       | 1          |
| BIO 2350   | Human Physiology(MC)                          | 3          |
| BIO 2350L  | Human Physiology Lab(MC)                      | 1          |
| BIO 2060   | Basic Microbiology(MC)                        | 3          |
| BIO 2060L  | Basic Microbiology Lab(MC)                    | 1          |
| BIO 3000   | Genetics (B5) (MC)                            | 3          |
| CHM 1210   | General Chemistry (B1) (MC)                   | 3          |
| CHM 1210L  | General Chemistry Lab (B3) (MC)               | 1          |
| CHM 1220   | General Chemistry (MC)                        | 3          |
| CHM 1220L  | General Chemistry Lab(MC)                     | 1          |
| CHM 2010   | Elements of Organic Chemistry or CHM 3170(MC) | 3          |
| COM 2204   | Advocacy and Argument (A1) (MC)               | 3          |
| ENG 1103   | Freshman English 1 (A2) (MC)                  | 3          |
| ENG 2105   | Written Reasoning (A3) (MC)                   | 3          |
| FST 3210   | Experimental Food Science(MC)                 | 2          |
| FST 3210L  | Experimental Food Science Lab(MC)             | 1          |
| FST 3250   | Food Safety and Current Issues(MC)            | 3          |
| NUTR 1000  | Intro to Professions(MC)                      | 1          |
| NUTR 1210  | Intro to Foods(MC)                            | 2          |
| NUTR 1210L | Intro to Foods Lab(MC)                        | 1          |
| NUTR 2280  | Food and Culture (D3) (MC)                    | 3          |
| NUTR 2350  | Nutrition(MC)                                 | 3          |
| NUTR 2350L | Nutrition Lab(MC)                             | 1          |
| NUTR 3130  | Intro to Research(MC)                         | 3          |
| NUTR 3350  | Nutrition of the Life Cycle(MC)               | 3          |
| NUTR 3450  | Nutrition Education and Counseling(MC)        | 3          |
| NUTR 3450A | Nutrition Education and Counseling Act(MC)    | 1          |
| PSY 2201   | Introduction to Psychology (E) (MC)           | 3          |

|                             |                                    |   |
|-----------------------------|------------------------------------|---|
| STA 1200                    | Statistics with Apps (B4) (MC)     | 3 |
| <b>Required Option Core</b> |                                    |   |
| MAT 1060                    | Trigonometry(OC)                   | 3 |
| MAT 1200                    | Calculus for the Life Sciences(OC) | 3 |
| PHY 1210                    | College Physics(OC)                | 3 |
| PHY 1210L                   | College Physics Lab(OC)            | 1 |

**\*Emphasis Electives**

**Students should select one of the three emphases:  
Requires 21 units from selected emphasis**

**\*Pre-Professional**

|            |   |     |
|------------|---|-----|
| BIO 3020   | Biology of Cancer   | 3   |
| BIO 3030   | Genetics  | 3   |
| BIO 3100   | Cell, Molecular & Developmental Biology                     | 3   |
| BIO 4210   | Advanced Genetics BIO 421                                   | 3   |
| BIO 4240   | Neuroscience BIO 424  | 3   |
| BIO 4280/L | Cellular Physiology BIO 4280/4280L                          | 3/1 |
| CHM 2210/L | Quantitative Analysis                                       | 3/1 |
| CHM 3150/L | Organic Chemistry   | 3/1 |
| CHM 3160/L | Organic Chemistry   | 3/1 |
| CHM 3210/L | Elements of Biochemistry                                    | 3/1 |
| CHM 3270/L | or Biochemistry/Laboratory                                  | 3/1 |
| CHM 3280/L | Biochemistry and Lab  | 3/1 |
| CHM 3310/L | Clinical Chemistry  | 3/1 |
| CHM 3420/L | Spectroscopic Methods                                       | 3/1 |
| CHM 3430/L | or Separation Methods                                       | 3/1 |
| CHM 4500   | Bio-analytical Chemistry                                    | 3   |
| CHM 4530   | Recombinant DNA Biochemistry                                | 3   |
| KIN 3030/L | Exercise Science  | 3/1 |
| KIN 4550   | Sports Medicine   | 3   |
| NUTR 3930  | Advanced Nutrient Metabolism I (3)                          | 3   |
| NUTR 3940  | Advanced Nutrient Metabolism II (3)                         | 3   |
| NUTR 4370  | Nutritional Genomics (requires NUTR 3930 & 3940)            | 3   |
| NUTR 4380  | Evaluation of Complementary Medicine (req NUTR 3930 & 3940) | 3   |
| NUTR 4450  | Agriculture, Nutrition and International Development        | 3   |
| PHY 1220/L | College Physics   | 3/1 |

**\*Nutrition and Health**

|          |                      |   |
|----------|----------------------|---|
| AVS 2110 | Drugs and Society    | 3 |
| BIO 3020 | Biology of Cancer    | 3 |
| BIO 3090 | Biology of the Brain | 3 |



|   |  |                 |
|---|--|-----------------|
| BIO 3110  | Sexually Transmitted Diseases: Current Issues                          | 3               |
| BIO 3280  | The Biology of Human Aging   | 3               |
| COM 3270  | Intercultural Communication  | 3               |
| FST 4240  | Food Systems in Developing Nations I                                   | 3               |
| FST 4250  | Food Systems in Developing Nations II                                  | 3               |
| HRT 2550  | Healthy American Cuisine   | 3               |
| KIN 3010  | Foundations of Exercise Science  | 3               |
| KIN 3030/3030L                                      | Physiology of Exercise   | 3/1             |
| KIN 3650  | Science of Physical Aging  | 3               |
| KIN 3700  | Stress Management for Healthy Living                                   | 3               |
| KIN 3800  | Consumer Health  | 3               |
| KIN 4030/4030L                                      | Physiology of Exercise   | 3/1             |
| KIN 4080  | Drug Education   | 3               |
| KIN 4550  | Sports Medicine  | 3               |
| KIN 4650  | Exercise Metabolism and Weight Control                                 | 3               |
| NUTR 2030   | Health, Nutrition & the Integrated Being (3) if GE-cannot be used here | 3               |
| NUTR 4410/4420                                      | Internship in Foods and Nutrition (1-3)                                | 1-3             |
| NUTR/IA 4450  | Agriculture, Nutrition and International Health                        | 3               |
| PSY 3250  | Multicultural Psychology   | 3               |
| PSY 3260  | Health Psychology  | 3               |
| <b>*Animal Nutrition</b>                            |  |                 |
| <b>Required classes</b>                             |  |                 |
| AVS 1010  | Fundamentals of Animal Nutrition (3)                                   | 3               |
| AVS 2010  | Animal Diseases (3)  | 3               |
| AVS 4730  | Clinical Nutrition (3)   | 3               |
| AVS 3500  | Anatomy and Physiology of Domestic Animals                             | 3               |
|   |  | <b>Total 12</b> |
| <b>Require minimum 8 units from these electives</b> |  |                 |
| CHM 3150/L  | Organic Chemistry L (3/1)  | 3/1             |
| CHM 3160/L  | Organic Chemistry (3/1)  | 3/1             |
| CHM 3210  | Elements of Biochemistry (3)   | 3               |
| CHM 3270/L  | or Biochemistry/Laboratory (3/1)                                       | 3/1             |
| CHM 3280/L  | Biochemistry (3/1)   | 3/1             |
| NUTR 3930   | Advanced Nutrient Metabolism I (3)                                     | 3               |
| NUTR 3940   | Advanced Nutrient Metabolism II (3)                                    | 3               |
| NUTR 4370   | Nutritional Genomics (requires NUTR 3930&40)                           | 3               |
| NUTR 4380   | Evaluation of Complementary Medicine (req NUTR 3930&40)                | 3               |

Option Core = OC

Major Core = MC  
GEs are named according to A, B, C, D, E designations  
Emphasis Elective areas = \*

Nutrition Major: Dietetics Option

Curriculum Years: 2018-2020

*Your department has developed this road plan, taking into account prerequisites and schedule restrictions. You should pay attention to these concerns when deviating from this plan, however there are many variations that still lead to graduation in four years. Please see the NUTR courses offered each quarter in Blackboard. Sometimes it is necessary to offer a class on a different quarter.*

| Year 1              | Fall               | Units                | Spring                 | Units     | Comment<br>Supplement Semester to take<br>GE/Support/ courses<br>*GE and support core |
|---------------------|--------------------|----------------------|------------------------|-----------|---|
|                     | ENG 1103 (A2) *    | 3                    | CHM 1220/L             | 3/1       |   |
| NUTR 2350/L         | 3/1                | ENG 2105* (A3)       | 3                      |           |   |
| NUTR 1000           | 1                  | NUTR 3130            | 3                      |           |   |
| CHM 1210/L*(B1, B2) | 3/1                | COM 2240* (A1)       | 3                      |           |   |
| STAT 1200*(B4)      | 3                  | BIO 1150/L* (B2, B3) | 3/1                    |           |   |
|                     |                    |                      |                        |           |   |
|                     |                    |                      |                        |           |   |
|                     | <b>Total Units</b> | <b>15</b>            | <b>Total Units</b>     | <b>17</b> |   |
|                     |                    |                      | Total Units for Year 1 | <b>32</b> |   |

  

| Year 2     | Fall               | Units         | Spring                 | Units     | Comment<br>Supplement Semester to take<br>GE/Support/ courses<br>*GE and support core |
|------------|--------------------|---------------|------------------------|-----------|---|
|            | BIO 2350/L         | 3/1           | NUTR 3350              | 3         |   |
| CHM 2010   | 3                  | AG 1010* (D2) | 3                      |           |   |
| BIO 2060/L | 3/1                | GE D (1)      | 3                      |           |   |
| BIO 3000*  | 3                  | GE C (1)      | 3                      |           |   |
|            |                    | CHM 3210      | 3                      |           |   |
|            |                    |               |                        |           |   |
|            |                    |               |                        |           |   |
|            | <b>Total Units</b> | <b>14</b>     | <b>Total Units</b>     | <b>15</b> |   |
|            |                    |               | Total Units for Year 2 | <b>29</b> |   |

|               |   |              |                                   |              |  |
|---------------|---|--------------|-----------------------------------|--------------|--|
| <b>Year 3</b> | <b>Fall</b>                                   | <b>Units</b> | <b>Spring</b>                     | <b>Units</b> | <b>Supplement Semester to take<br/>GE/Support/ courses<br/>* GE and support core</b> |
|               | NUTR 1210/L                                   | 2/1          | NUTR 3680/L                       | 2/1          |  |
|               | NUTR 3670/L                                   | 2/1          | NUTR 3940                         | 3            |  |
|               | NUTR 2280 (D3) or<br>ANT 102 (D3)             | 3            | FST 3250                          | 3            |  |
|               | NUTR 3930                                     | 3            | NUTR 3450/A                       | 3/1          |  |
|               | PSY 2201* (E)                                 | 3            | NUTR 3280L                        | 1            |  |
|               |   |              |                                   |              |  |
|               | <b>Total Units</b>                            | <b>15</b>    | <b>Total Units</b>                | <b>14</b>    |  |
|               |   |              | Total Units for Year 3            | 29           |  |
| <b>Year 4</b> | <b>Fall</b>                                   | <b>Units</b> | <b>Spring</b>                     | <b>Units</b> | <b>Supplement Semester to take<br/>GE/Support/ courses<br/>* GE and support core</b> |
|               | NUTR 4430/A                                   | 3/1          | NUTR 4460/A                       | 2/1          |  |
|               | FST 3210/L                                    | 2/1          | NUTR 4440                         | 3            |  |
|               | ABM 2240                                      | 3            | AG 401*(D4)                       | 3            |  |
|               | NUTR 4260                                     | 2            | GE C (3)                          | 3            |  |
|               | GE C (2)                                      | 3            | CE C (4)                          | 3            |  |
|               | <i>File an application for<br/>graduation</i> |              |                                   |              |  |
|               | <b>Total Units</b>                            | <b>15</b>    | <b>Total Units</b>                | <b>15</b>    |  |
|               |   |              | <b>Total Units for the year 4</b> | <b>30</b>    |  |

**Nutrition Major: Nutrition Science Option**

**Curriculum Years: 2018-2020**

*Your department has developed this road plan, taking into account prerequisites and schedule restrictions. You should pay attention to these concerns when deviating from this plan, however there are many variations that still lead to graduation in four years. Please see the NUTR courses offered each quarter in Blackboard. Sometimes it is necessary to offer a class on a different quarter.*

|               |                         |                        |                      |              |   |
|---------------|-------------------------|------------------------|----------------------|--------------|---|
| <b>Year 1</b> | <b>Fall</b>             | <b>Units</b>           | <b>Spring</b>        | <b>Units</b> | <b>Supplement Semester to take<br/>GE/Support/ courses<br/>GE and support core, as well as elective<br/>units to meet requirement of 20 units</b> |
|               | ENG 1103 (A2) *         | 3                      | CHM 1220/L           | 3/1          |   |
|               | NUTR 2350/L             | 3/1                    | ENG 2105* (A3)       | 3            |   |
|               | NUTR 1000               | 1                      | NUTR 3130            | 3            |   |
|               | CHM 1210/1210L*(B1, B2) | 3/1                    | BIO 1150/L* (B2, B3) | 3/1          |   |
|               | STAT 1200*(B4)          | 3                      |                      |              |   |
|               | <b>Total Units</b>      | <b>15</b>              | <b>Total Units</b>   | <b>14</b>    |   |
|               |                         | Total Units for Year 1 | <b>29</b>            |              |   |
| <b>Year 2</b> | <b>Fall</b>             | <b>Units</b>           | <b>Spring</b>        | <b>Units</b> | <b>Supplement Semester to take<br/>GE/Support/ courses<br/>GE and support core, as well as elective<br/>units to meet requirement of 20 units</b> |
|               | BIO 2350/L              | 3/1                    | CHM 2010             | 3            |   |
|               | CHM 1230/L              | 3/1                    | BIO 2060/L           | 3/1          |   |
|               | GE D (1)                | 3                      | AG 1010* (D2)        | 3            |   |
|               | BIO 3000*               | 3                      | PSY 2201* (E)        | 3            |   |
|               | NUTR 1210/L             | 2/1                    | Emphasis electives   | 2            |   |
|               |                         |                        |                      |              |   |
|               | <b>Total Units</b>      | <b>17</b>              | <b>Total Units</b>   | <b>15</b>    |   |
|               |                         | Total Units for Year 2 | <b>32</b>            |              |   |

|                    |   |                                   |                    |              |  |
|--------------------|---|-----------------------------------|--------------------|--------------|--|
| <b>Year 3</b>      | <b>Fall</b>                                   | <b>Units</b>                      | <b>Spring</b>      | <b>Units</b> | <b>Supplement Semester to take<br/>GE/Support/ courses<br/>GE and support core<br/>As well as elective units to meet<br/>requirement of 20 units</b> |
|                    | NUTR 3350                                     | 3                                 | MAT 1200           | 3            |  |
|                    | MAT 1060                                      | 3                                 | FST 3250           | 3            |  |
|                    | NUTR 2280 (D3)                                | 3                                 | Emphasis electives | 3            |  |
|                    | NUTR 3450/L                                   | 2/1                               | FST 3210/L         | 2/1          |  |
|                    | GE C (1)                                      | 3                                 | Emphasis electives | 3            |  |
|                    |   |                                   |                    |              |  |
|                    | <b>Total Units</b>                            | <b>15</b>                         | <b>Total Units</b> | <b>15</b>    |  |
|                    |   | <b>Total Units for Year 3</b>     | <b>30</b>          |              |  |
| <b>Year 4</b>      | <b>Fall</b>                                   | <b>Units</b>                      | <b>Spring</b>      | <b>Units</b> | <b>Supplement Semester to take<br/>GE/Support/ courses<br/>GE and support core<br/>As well as elective units to meet<br/>requirement of 20 units</b> |
|                    | Emphasis electives                            | 3                                 | Emphasis electives | 3            |  |
|                    | COM 2240* (A1)                                | 3                                 | Emphasis electives | 3            |  |
|                    | Emphasis electives                            | 3                                 | AG 4010 (D4)*      | 3            |  |
|                    | PHY 1210/L                                    | 3/1                               | NUTR 3280L         | 1            |  |
|                    | GE C (2)                                      | 3                                 | GE C (3)           | 3            |  |
|                    |   |                                   |                    |              |  |
|                    |   |                                   |                    |              |  |
|                    | <i>File an application<br/>for graduation</i> |                                   |                    |              |  |
| <b>Total Units</b> | <b>16</b>                                     | <b>Total Units</b>                | <b>13</b>          |              |  |
|                    |   | <b>Total Units for the year 4</b> | <b>32</b>          |              |  |

**NUTR Major Semester Courses- 2018-2019**

| <b>Subject and Catalog No.</b> | <b>Course Name</b>  | <b>Schedule</b> |
|--------------------------------|---|-----------------|
| NUTR 1000                      | Introduction to the Nutrition Professions (1)                         | FS              |
| NUTR 1210/1210L                | Introduction to Foods (2/1)   | FS              |
| NUTR 2030                      | Health, Nutrition and the Integrated Being (3)                        | FSU             |
| NUTR 2050 (new)                | Personal and Consumer Nutrition                                       | FS              |
| NUTR 2280                      | Food and Culture (3)  | FSU             |
| NUTR 2350                      | Nutrition (3)   | FSU             |
| NUTR 2350L                     | Nutrition Lab (1)   | FSU             |
| NUTR 3050                      | Nutrition, Science and Health (3)                                     | FSU             |
| NUTR 3130                      | Introduction of Nutrition Research Methods (3)                        | FS              |
| NUTR 3280L                     | Culture and Meal Patterns Lab (1)                                     | FS              |
| NUTR 3280A*                    | Culture and Meal Patterns in Hispanics Activity(1)                    | F               |
| NUTR 3350                      | Nutrition of the Life Cycle (3)                                       | FSU             |
| NUTR 3350A*                    | Nutrition of the Life Cycle Spanish Activity (1)                      | F               |
| NUTR 3450/3450A                | Nutrition Education and Counseling (2/1)                              | F               |
| NUTR 3450AS*                   | Nutrition Education Activity Service-Learning (1)                     | S               |
| NUTR 3670/3670L                | Institutional Food Service I (2/1)                                    | F               |
| NUTR 3680/3680L                | Institutional Food Service II (2/1)                                   | S               |
| NUTR 3930                      | Advanced Nutrient Metabolism I (3)                                    | FS              |
| NUTR 3940                      | Advanced Nutrient Metabolism II (3)                                   | S               |
| NUTR 4260                      | Foodservice Administration (2)  | F               |
| NUTR 4310                      | Dietetic Internship Exploration (1)                                   | F               |
| NUTR 4370                      | Nutritional Genomics (3)  | N               |
| NUTR 4380                      | Evaluation of Complementary Medicine (3)                              | N               |
| NUTR 4430/A e1                 | Medical Nutrition Therapy I (3/1)                                     | F               |
| NUTR 4440A*                    | Medical Nutrition Therapy II for the Hispanic Population Activity (1) | S               |
| NUTR 4440 e1                   | Medical Nutrition Therapy II (3)                                      | S               |
| NUTR 4460S/4460AS              | Community Nutrition (2/1)   | FS              |
| NUTR 4410/4420                 | Internship in Foods and Nutrition (1-3)                               | N               |
| NUTR 4450                      | Agriculture, Nutrition and International Health (3)                   | N               |

**NUTR Major Semester Courses- 2019-2020**

| <b>Subject and Catalog No.</b> | <b>Course Name</b>  | <b>Schedule</b> |
|--------------------------------|---|-----------------|
| NUTR 1000                      | Introduction to the Nutrition Professions (1)                         | FS              |
| NUTR 1210/1210L                | Introduction to Foods (2/1)   | FS              |
| NUTR 2030                      | Health, Nutrition and the Integrated Being (3)                        | FSU             |
| NUTR 2050 (new)                | Personal and Consumer Nutrition                                       | FS              |
| NUTR 2280                      | Food and Culture (3)  | FSU             |
| NUTR 2350                      | Nutrition (3)   | FSU             |
| NUTR 2350L                     | Nutrition Lab (1)   | FSU             |
| NUTR 3050                      | Nutrition, Science and Health (3)                                     | FSU             |
| NUTR 3130                      | Introduction of Nutrition Research Methods (3)                        | FS              |
| NUTR 3280L                     | Culture and Meal Patterns Lab (1)                                     | FS              |
| NUTR 3280A*                    | Culture and Meal Patterns in Hispanics Activity(1)                    | F               |
| NUTR 3350                      | Nutrition of the Life Cycle (3)                                       | FSU             |
| NUTR 3350A*                    | Nutrition of the Life Cycle Spanish Activity (1)                      | F               |
| NUTR 3450/3450A                | Nutrition Education and Counseling (2/1)                              | F               |
| NUTR 3450AS*                   | Nutrition Education Activity Service-Learning (1)                     | S               |
| NUTR 3670/3670L                | Institutional Food Service I (2/1)                                    | F               |
| NUTR 3680/3680L                | Institutional Food Service II (2/1)                                   | S               |
| NUTR 3930                      | Advanced Nutrient Metabolism I (3)                                    | FS              |
| NUTR 3940                      | Advanced Nutrient Metabolism II (3)                                   | FS              |
| NUTR 4260                      | Foodservice Administration (2)  | F               |
| NUTR 4310                      | Dietetic Internship Exploration (1)                                   | F               |
| NUTR 4370                      | Nutritional Genomics (3)  | N               |
| NUTR 4380                      | Evaluation of Complementary Medicine (3)                              | N               |
| NUTR 4430/A e1                 | Medical Nutrition Therapy I (3/1)                                     | F               |
| NUTR 4440A*                    | Medical Nutrition Therapy II for the Hispanic Population Activity (1) | S               |
| NUTR 4440 e1                   | Medical Nutrition Therapy II (3)                                      | S               |
| NUTR 4460S/4460AS              | Community Nutrition (2/1)   | FS              |
| NUTR 4410/4420                 | Internship in Foods and Nutrition (1-3)                               | N               |
| NUTR 4450                      | Agriculture, Nutrition and International Health (3)                   | N               |



## NUTR Major-Dietetics Option Semester Conversion

### Dietetics Mission

To prepare students to meet the Didactic requirements as defined by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) in order to be successful nutrition professionals that work in diverse communities and workplaces.

### Dietetics Goals

1. The program prepares students for entry-level nutrition careers as a Dietetic Technician, Registered, (BS-DTR) or Nutrition Dietetic Technician, Registered, BS-NDTR (under Plan III), Registered Dietitian (RD) and/or admittance to nutrition related postgraduate programs.
2. The program will prepare students to meet the Didactic components defined by ACEND.
3. The program will produce graduates with a knowledge and skill base to be successful nutrition and health professionals.

### Goal Outcome Measures (version 2013)

In order to secure and maintain accreditation, these must be in alignment with ACEND requirements. The requirements are called KR—they are the Program Student Learning Objectives (PSLOs)

#### **1. Scientific and Evidence Base of Practice: integration of scientific information and research into practice**

##### KRD 1.1

The curriculum must reflect the scientific basis of the dietetics profession and must include research methodology, interpretation of the literature and integration of research principles into evidence based practice.

1.1 Students demonstrate how to locate, interpret, evaluate and use professional literature.

1.2 Students use current information technologies to determine evidence practices, research methodologies and evidence-based practice information.

#### **2. Professional Practice Expectations: beliefs, values, attitudes and behaviors for the professional dietitian level of practice.**

##### KRD 2.1

The curriculum must include opportunities to develop a variety of communication skills sufficient for entry into pre-professional practice. (Tip: Students must be able to demonstrate effective and professional oral and written communication and documentation.)

2.1 Students demonstrate effective professional oral and written communication.

#### KRD 2.2

The curriculum must provide principles and techniques of effective counseling methods. (Tip: Students must be able to demonstrate counseling techniques to facilitate behavior change.)

2.2 Students are able to demonstrate assertiveness, advocacy and negotiation skills.

2.3 Students are able to demonstrate counseling techniques.

#### KRD 2.3

The curriculum must include opportunities to understand governance of dietetics practice, such as the Scope of Dietetics Practice and the Code of Ethics for the Profession of Dietetics, and interdisciplinary relationships in various practice settings. (The student must understand governance of dietetics practice, such as the Scope of Dietetics Practice and the Code of Ethics for the Profession of Dietetics, and interdisciplinary relationships in various practice settings.)

2.4 Students are able to locate, understand and apply established guidelines.

2.5 Students are able to identify and describe the roles of others.

### **3. Clinical and Customer Services: development and delivery of information, products and services to individuals, groups and populations**

#### KRD 3.1

The curriculum must reflect the principles of Medical Nutrition Therapy and the practice of the nutrition care process, including principles and methods of assessment, diagnosis, identification and implementation of interventions and strategies for monitoring and evaluation. (Tip: Students must be able to use the nutrition care process to make decisions, to identify nutrition-related problems and determine and evaluate nutrition interventions.)

3.1 Students use the nutrition care process to make decisions.

#### KRD 3.2

The curriculum must include the role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. (Tip: Students must be able to develop interventions to affect change and enhance wellness in diverse individuals and groups.)

3.2 Students apply knowledge of the role of environment, food and lifestyle choices.

#### KRD 3.3

The curriculum must include education and behavior change theories and techniques. (Tip: Students must be able to develop an educational session or program/educational strategy for a target population.)

3.3 Students develop an educational session or program/educational strategy for target populations.

#### **4. Practice Management and Use of Resources: strategic application of principles of management and systems in the provision of services to individuals and organizations**

##### **KRD 4.1**

The curriculum must include management and business theories and principles required to deliver programs and services.

4.1 Students apply management and business theories and principles.

4.2 Students determine costs of services or operations.

##### **KRD 4.2**

The curriculum must include content related to quality management of food and nutrition services.

4.3 Students apply the principles of human resource management to different situations.

4.4 Students apply safety principles.

4.5 Students develop outcome measures, use informatics principles and technology to collect and analyze data.

##### **KRD 4.3**

The curriculum must include the fundamentals of public policy, including the legislative and regulatory basis of dietetics practice. (Tip: Students must be able to explain the impact of a public policy position on dietetics practice.)

4.6 Students explain the impact of a public policy on dietetics practice.

##### **KRD 4.4**

The curriculum must include content related to health care systems. (Tip: Students must be able to explain the impact of health care policy and different health care delivery systems on food and nutrition services.)

4.7 Students explain the impact of health care policy, administration, different health care delivery systems and current reimbursement policies.

##### **KRD 4.5**

The curriculum must include content related to coding and billing of dietetics/nutrition services to obtain reimbursement for services from public or private insurers.

4.7 Students explain the impact of health care policy, administration, different health care delivery systems and current reimbursement policies.

## **5. Support Knowledge: knowledge underlying the requirements specified above.**

### **KRD 5.1**

The food and food systems foundation of the dietetics profession must be evident in the curriculum. Course content must include the principles of food science and food systems, techniques of food preparation and application to the development, modification and evaluation of recipes, menus and food products acceptable to diverse groups.

5.1 Students are able to identify the types of foodservice operations in existence.

5.2 Students are able to identify the interrelated parts that make up a foodservice system.

5.3 Students will understand the techniques of food preparation and application to the development, modification and evaluation of recipes and menus.

5.4 Students will demonstrate knowledge of techniques of food preparation and application to the development, modification and evaluation of recipes and menus.

5.5 Students will demonstrate knowledge of standards of purchasing of food.

### **KRD 5.2**

The physical and biological science foundation of the dietetics profession must be evident in the curriculum. Course content must include organic chemistry, biochemistry, physiology, genetics, microbiology, pharmacology, statistics, nutrient metabolism and nutrition across the lifespan.

6.1 Describe the mechanism of action of essential nutrients in health promotion and disease prevention.

6.2 Describe the mechanism of action of bioactive non-nutrients in health promotion and disease prevention.

6.3 Determine nutrient needs across the lifespan.

6.4 Integrate knowledge of the use of nutrients at the molecular, cellular and organ level.

6.5 Integrate genetic, physiologic and biochemical mechanisms by which food and nutrients promote optimal health.

6.6 Understand and demonstrate the scientific method and the application of research methodologies.

6.7 Interpret basic statistics used in nutrition and medical research.

### **KRD 5.3**

The behavioral and social science foundation of the dietetics profession must be evident in the curriculum. Course content must include concepts of human behavior and diversity, such as psychology, sociology or anthropology

We have incorporated courses such as: NUTR 228, Food and Culture or ANT 1020, Introduction to Cultural Anthropology, NUTR 3280L, Cultural Food, PSY 2010, Psychology into our curriculum. Course catalog requirement fulfill the above requirements for the GE classes, but are not tracked. NUTR classes will be tracked and utilize the above requirements as it relates to the subject, which includes behavior, culture and diversity. (See NUTR 2280 for SLOs 3.2, 6.1, 6.2 and NUTR 3280L for SLOs 3.2, 5.3, 5.4)

## **Nutrition Major-Nutrition Science 10/09/15**

**Mission:** To provide a high quality education that educates and prepares our diverse students so that they can promote healthy nutrition and food practices that enhance human and animal health through teaching, research, classes and opportunities that support the Human Nutrition and Food Science, College of Agriculture and Cal Poly Pomona missions.

### **Program Goals:**

Goal 1: Prepare competent graduates capable of successful entry into graduate programs (Pre-professional and Animal Nutrition)

Goal 2: Prepare graduates for entry into food and nutrition-related careers

Goal 3: Recruit, retain and graduate a diverse population of undergraduate nutrition science students with the social and cultural understanding required to help promote healthy nutrition and food practices.

### **Program Objectives:**

In order to secure and maintain accreditation for the Didactic Programs in Dietetics program, these Nutrition Science option Student Learning Objectives will not include the food service and medically-related competencies (Foodservice/Medical Nutrition Therapy) than the requirements for Accreditation Council for Education in Nutrition and Dietetics (ACEND) requirements.

### **Section 1: Scientific and Evidence Base of Practice: integration of scientific information and research into practice**

- 1.1 Students demonstrate how to locate, interpret, evaluate and use professional literature.
- 1.2 Students use current information technologies.

### **Section 2: Professional Practice Expectations: beliefs, values, attitudes and behaviors for the nutrition professional**

- 2.1 Students demonstrate effective professional oral and written communication.
- 2.2 Students are able to demonstrate assertiveness, advocacy and negotiation skills.
- 2.3 Students are able to demonstrate counseling techniques.
- 2.4 Students are able to locate, understand and apply established guidelines.
- 2.5 Students are able to identify and describe the roles of others.

### **Section 3: The physical and biological science foundation of the nutrition profession must be evident in the curriculum.**

- 6.1 Describe the mechanism of action of essential nutrients in health promotion and disease prevention.
- 6.2 Describe the mechanism of action of bioactive non-nutrients in health promotion and disease prevention.
- 6.3 Determine nutrient needs across the lifespan.
- 6.4 Integrate knowledge of the use of nutrients at the molecular, cellular and organ level.
- 6.5 Integrate genetic, physiologic and biochemical mechanisms by which food and nutrients promote optimal health.
- 6.6 Understand and demonstrate the scientific method and the application of research methodologies.
- 6.7 Interpret basic statistics used in nutrition and medical research.

**Dietetics Option: Section1: Scientific and Evidence Base of Practice: integration of scientific information and research into practice**

|  |   |
|--|---|
| <p><b>Program goals</b></p>  | <p>PSLO # 1.1<br/>The curriculum must reflect the scientific basis of the dietetics profession and must include research methodology, interpretation of the literature and integration of research principles into evidence based practice.</p> |
| <p>1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs.</p>                                   |   |
| <p>2. The program will prepare students who meet the Didactic component defined by Accreditation Council for Education in Nutrition and Dietetics (ACEND) requirements</p> | <p style="text-align: center;"><b>X</b></p>   |
| <p>3. The program will produce graduates with the knowledge and skill base to be successful professionals in the food and nutrition.</p>                                   | <p style="text-align: center;"><b>X</b></p>   |

Dietetics Option Section 2: **Professional Practice Expectations: beliefs, values, attitudes and behaviors for the professional dietitian level of practice**

| <b>Program Goals</b>   | PSLO # 2.1<br>Students must be able to demonstrate effective and professional oral and written communication and documentation | PSLO # 2.2<br>Students must be able to demonstrate counseling techniques to facilitate behavior change. | PSLO # 2.3<br>The student must understand governance of dietetics practice, such as the Scope of Dietetics Practice and the Code of Ethics for the Profession of Dietetics, and interdisciplinary relationships in various practice settings. |
|--|--|---|---|
| 1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs | <b>X</b>   | <b>X</b>  | <b>X</b>  |
| 2. The program will prepare students who meet the Didactic component defined by ACEND.   | <b>X</b>   | <b>X</b>  | <b>X</b>  |
| 3. The program will produce graduates with the knowledge and skill base to be successful professionals in food and nutrition.    | <b>X</b>   | <b>X</b>  | <b>X</b>  |

**Dietetics Option Section 3: Clinical and Customer Services: development and delivery of information, products and services to individuals, groups and populations**

| <b>Program Goals</b>   | PSLO # 3.1<br>Students must be able to use the nutrition care process to make decisions, to identify nutrition-related problems and determine and evaluate nutrition interventions. | PSLO #3.2<br>Students apply knowledge of the role of environment, food and lifestyle choices. The curriculum must include the role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. | PSLO # 3.3<br>Students develop an educational session or program or educational strategy for target populations. The curriculum must include education and behavior change theories and techniques. |
|--|---|--|---|
| 1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs | <b>X</b>  | <b>X</b>   | <b>X</b>  |
| 2. The program will prepare students who meet the Didactic component defined by ACEND.   | <b>X</b>  | <b>X</b>   | <b>X</b>  |
| 3. The program will produce graduates with the knowledge and skill base to be successful professionals in food and nutrition.    | <b>X</b>  | <b>X</b>   | <b>X</b>  |



Dietetics Option Section 4: **Practice Management and Use of Resources: strategic application of principles of management and systems in the provision of services to individuals and organizations**

| <p><b>Program Goals</b></p>  | <p>PSLO #4.1<br/>The curriculum must include management and business theories and principles required to deliver programs and services.</p> | <p>PSLO #4.2<br/>The curriculum must include content related to quality management of food and nutrition services.</p> | <p>PSLO #4.3<br/>Students must be able to explain the impact of a public policy position on dietetics practice. The curriculum must include the fundamentals of public policy, including the legislative and regulatory basis of dietetics practice.</p> |
|--|---|--|--|
| <p>1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs.</p> | <p><b>X</b></p>   | <p><b>X</b></p>  | <p><b>X</b></p>  |
| <p>2. The program will prepare students who meet the Didactic component defined by ACEND</p>   | <p><b>X</b></p>   | <p><b>X</b></p>  | <p><b>X</b></p>  |
| <p>3. The program will produce graduates with the knowledge and skill base to be successful professionals in food and nutrition.</p>     | <p><b>X</b></p>   | <p><b>X</b></p>  | <p><b>X</b></p>  |

**Dietetics Option Section 4: Practice Management and Use of Resources: strategic application of principles of management and systems in the provision of services to individuals and organizations**

| <b>Program Goals</b>  | PSLO #4.4<br>Students must be able to explain the impact of health care policy and different health care delivery systems on food and nutrition services | PSLO #4.5<br>The curriculum must include content related to coding and billing of dietetics/nutrition services to obtain reimbursement for services from public or private insurers. |
|---|--|--|
| 1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs. | <b>X</b>   | <b>X</b>   |
| 2. The program will prepare students who meet the Didactic component defined by ACEND   | <b>X</b>   | <b>X</b>   |
| 3. The program will produce graduates with the knowledge and skills base to be successful professionals in food and nutrition.    | <b>X</b>   | <b>X</b>   |

Dietetics Option Section 5: **Support Knowledge: (KRD 5.1) The food and food systems foundation of the dietetics profession must be evident in the curriculum and the physical and biological science foundation of the dietetics profession must be evident in the curriculum (KRD 5.2)**

| <p><b>Program Goals</b></p>  | <p>PSLO # 5.1<br/>The food and food systems foundation of the dietetics profession must be evident in the curriculum. Course content must include the principles of food science and food systems, techniques of food preparation and application to the development, modification and evaluation of recipes, menus and food products acceptable to diverse groups.</p> | <p>PSLO 5.2<br/>The physical and biological science foundation of the dietetics profession must be evident in the curriculum. Course content must include organic chemistry, biochemistry, physiology, genetics, microbiology, pharmacology, statistics, nutrient metabolism and nutrition across the lifespan.</p> | <p>PSLO 5.3<br/>The behavioral and social science foundation of the dietetics profession must be evident in the curriculum. Course content must include concepts of human behavior and diversity, such as psychology, sociology or anthropology</p> |
|--|---|---|---|
| <p>1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs.</p> | <p style="text-align: center;"><b>X</b></p>   | <p style="text-align: center;"><b>X</b></p>   | <p style="text-align: center;"><b>X</b></p>   |
| <p>2. The program will prepare students who meet the Didactic component defined by ACEND</p>   | <p style="text-align: center;"><b>X</b></p>   | <p style="text-align: center;"><b>X</b></p>   | <p style="text-align: center;"><b>X</b></p>   |
| <p>3. The program will produce graduates with the knowledge and skills base to be successful professionals in food and nutrition.</p>    | <p style="text-align: center;"><b>X</b></p>   | <p style="text-align: center;"><b>X</b></p>   | <p style="text-align: center;"><b>X</b></p>   |

Dietetics Option Section 5: **Support Knowledge: (KRD 5.1) The food and food systems foundation of the dietetics profession must be evident in the curriculum and the physical and biological science foundation of the dietetics profession must be evident in the curriculum (KRD 5.2)**

| <p><b>Program Goals</b></p>  | <p>PSLO # 5.4<br/>Students will demonstrate knowledge of techniques of food preparation and application to the development, modification and evaluation of recipes and menus.</p> | <p>PSLO 5.5<br/>Students will demonstrate knowledge of standards of purchasing of food.</p> |
|--|---|---|
| <p>1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs.</p> | <p><b>X</b></p>   | <p><b>X</b></p>   |
| <p>2. The program will prepare students who meet the Didactic component defined by ACEND</p>   | <p><b>X</b></p>   | <p><b>X</b></p>   |
| <p>3. The program will produce graduates with the knowledge and skills base to be successful professionals in food and nutrition.</p>    | <p><b>X</b></p>   | <p><b>X</b></p>   |

**Dietetics Option Section 6: Support Knowledge: The physical and biological science foundation of the dietetics profession must be evident in the curriculum (KRD 5.2)**

| <p><b>Program Goals</b></p>  | <p>PSLO # 6.1 Describe the mechanism of action of essential nutrients in health promotion and disease prevention.</p> | <p>PSLO 6.2 Describe the mechanism of action of bioactive non-nutrients in health promotion and disease prevention.</p> | <p>PSLO 6.3 Determine nutrient needs across the lifespan.</p> |
|--|---|---|---|
| <p>1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs.</p> | <p><b>X</b></p>   | <p><b>X</b></p>   | <p><b>X</b></p>   |
| <p>2. The program will prepare students who meet the Didactic component defined by ACEND</p>   | <p><b>X</b></p>   | <p><b>X</b></p>   | <p><b>X</b></p>   |
| <p>3. The program will produce graduates with the knowledge and skills base to be successful professionals in food and nutrition.</p>    | <p><b>X</b></p>   | <p><b>X</b></p>   | <p><b>X</b></p>   |

**Dietetics Option Section 6: Support Knowledge: The physical and biological science foundation of the dietetics profession must be evident in the curriculum (KRD 5.2)**

| Program Goals   | PSLO # 6.4 Integrate knowledge of the use of nutrients at the molecular, cellular and organ level. | PSLO 6.5 Integrate genetic, physiologic and biochemical mechanisms by which food and nutrients promote optimal health. | PSLO 6.6 Understand and demonstrate the scientific method and the application of research methodologies. | PSLO 6.7 Interpret basic statistics used in nutrition and medical research. |
|---|--|--|--|---|
| 1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate programs. | <b>X</b>   | <b>X</b>   | <b>X</b>   | <b>X</b>  |
| 2. The program will prepare students who meet the Didactic component  | <b>X</b>   | <b>X</b>   | <b>X</b>   | <b>X</b>  |
| 3. The program will produce graduates with the knowledge and skills base to be successful professionals in food and nutrition.    | <b>X</b>   | <b>X</b>   | <b>X</b>   | <b>X</b>  |

Nutrition Science Option: Section 1: **Scientific and Evidence Base of Practice: integration of scientific information and research into practice**

| Program goals  | SLO # 1.1 Students demonstrate how to locate, interpret, evaluate and use professional literature. | SLO # 1.2 Students use current information technologies. |
|--|--|--|
| 1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate training programs.   | <b>X</b>   | <b>X</b>   |
| 2. Prepare graduates for entry into food and nutrition-related careers   | <b>X</b>   | <b>X</b>   |
| 3. Recruit, retain and graduate a diverse population of undergraduate nutrition science students with the social and cultural understanding required to help promote healthy nutrition and food practices. | <b>X</b>   | <b>X</b>   |

Nutrition Science Option: **Section 2: Professional Practice Expectations: beliefs, values, attitudes and behaviors for the nutrition professional**

| Program Goals   | SLO # 2.1 Students demonstrate effective professional oral and written communication. | SLO # 2.2 Students are able to demonstrate assertiveness, advocacy and negotiation skills. | SLO # 2.3 Students are able to demonstrate counseling techniques. | SLO # 2.4 Students are able to locate, understand and apply established nutrition guidelines. | SLO # 2.5 Students are able to identify and describe the roles of nutrition and medical professionals. |
|---|---|--|---|---|--|
| 1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate training programs.  | <b>X</b>  | <b>X</b>   | <b>X</b>  | <b>X</b>  | <b>X</b>   |
| 2. Prepare graduates for entry into food and nutrition-related careers  | <b>X</b>  | <b>X</b>   | <b>X</b>  | <b>X</b>  | <b>X</b>   |
| 3. Recruit, retain and graduate a diverse group of undergraduate nutrition science students with social and cultural understanding required to help promote healthy nutrition and food practices. | <b>X</b>  | <b>X</b>   | <b>X</b>  | <b>X</b>  | <b>X</b>   |



Nutrition Science Option: Section 3. **The physical and biological science foundation of the dietetics profession must be evident in the curriculum. Course content must include organic chemistry, biochemistry, physiology, genetics, microbiology, statistics, nutrient metabolism, and nutrition across the lifespan.**

|  | SLO # 6.1   | SLO # 6.2  | SLO # 6.3                                     | SLO # 6.4  | SLO # 6.5   | SLO # 6.6   | SLO # 6.7  |
|--|---|--|---|--|---|---|--|
| Program Goals  | Describe the mechanism of action of essential nutrients in health promotion and disease prevention. | Describe the mechanism of action of bioactive non- nutrients in health promotion and disease prevention. | Determine nutrient needs across the lifespan. | Integrate knowledge of the use of nutrients at the molecular, cellular and organ level | Integrate genetic, physiological and biochemical mechanisms by which food and nutrients promote optimal health. | Understand and demonstrate the scientific method and the application of research methodologies. | Interpret basic statistics used in nutrition and medical research. |
| 1. The program prepares graduates for entry-level nutrition careers and/or admittance to nutrition related postgraduate training programs.                                     | X   | X  | X   | X  | X   | X   | X  |
| 2. Prepare graduates for entry into food and nutrition-related careers   | X   | X  | X   | X  | X   | X   | X  |
| 3. Recruit, retain and graduate, diverse pop. of under-grad Nutr Sci students with social & cultural under-standing req. to help promote healthy nutrition and food practices. | X   | X  | X   | X  | X   | X   | X  |

## NUTRITION MAJOR-SEMESTER

| <b>Assessment Tool For ACEND</b> |   |  |   |
|----------------------------------|---|--|---|
| <b>NUTR Course</b>               | <b>SLO, Link to class and Quality Indicators</b>  | <b>Assessment method</b>   | <b>Instructor Responsible/ Assessment Results</b> |
| NUTR 1000                        | #1.2: Students are able to use current information technologies to locate and apply evidence based guidelines and protocols. <b>(I)</b> 100% of the students will upload a professional portfolio to Blackboard (BB) with 80% accuracy  | Submission of portfolio to Blackboard (BB)   |   |
|                                  | # 2.1: Students demonstrate effective professional oral and written communication. <b>(I)</b> Students will participate in in-class oral presentation and submit 1-professional portfolio at the end of the academic quarter  | Roster of attendance for oral presentation<br>100% of students will submit a professional portfolio at the end of the quarter<br>Portfolio will be graded on a rubric totaling 75 points |   |
|                                  | #2.5: Students are able to identify and describe the roles of others. <b>(I)</b> Students will be able to identify and describe the roles of others by writing 7 summaries/reflective statements about guest speakers from nutrition and food science fields  | 100% of students will turn in their professional portfolio with summaries of course guest speakers.<br>Portfolio will be graded on a rubric totaling 75 points                           |   |
| NUTR 1210/L                      | # 4.4: Students apply safety principles. <b>(I)</b> . Students will utilize food safety principles such as hand washing and proper cleaning techniques with 90% accuracy  | Rubric for hand washing and cleaning for both instructor and peer evaluation   |   |
|                                  | #5.3: Students will demonstrate knowledge of techniques of food preparation and application to the development, modification and evaluation <b>(I)</b> Students will prepare recipes using basic techniques, and learn the structure and function of key foods that comprise the recipe with 70% accuracy. Students will also perform experiments such as substituting different types of fat and flours in pastries, breads, and quick breads with 90% accuracy. Students will evaluate all finished products using basic sensory methods. | Instructor observation<br><br>Sensory evaluation of application<br><br>Rubric for recipe evaluation  |   |
| NUTR 2280                        | # 2.1: Students demonstrate effective professional oral and written communication. <b>(P)</b> Students will research a diverse population and present an in-class oral presentation two written reports on a cultural and diet of the researched population   | Oral presentations will be measured on a rubric scale of 1-10 by the instructor and by the class<br><br>Written reports will be graded using a rubric template provided to               |   |

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|           |  | students at the beginning of the academic quarter  |  |
|           | <b># 3.2:</b> Students apply knowledge of the role of environment, food and lifestyle choices. <b>(I, P)</b> Through course lectures, text, articles and assigned readings students will gain and in-depth understanding of the role of environment, food and lifestyle of diverse populations as demonstrated through 15-weekly class assignments                                 | Students will complete 15 bi-weekly assignments analyzing the role of environment, food and lifestyles of assigned diverse populations with 70% accuracy or higher |  |
| NUTR 2350 | <b>#1.1:</b> Students demonstrate how to locate, interpret, evaluate and use professional literature. <b>(I).</b> Students will go to the MyPlate.gov website, input their 5 day (or 3 day) diet and exercise record, interpret the MyPlate comparisons correctly make recommendations for excessive and insufficient nutrient intakes in an assignment with 70% or more accuracy. | Submission of assignment to instructor   |  |
|           | <b>#1.2</b> Students use current information technologies <b>(P).</b> Students will go to the MyPlate.gov website, input their 5 day (or 3 day) diet and exercise record, interpret the MyPlate comparisons correctly make recommendations for excessive and insufficient nutrient intakes in an assignment with 70% or more accuracy.   | Submission of assignment to instructor   |  |
|           | <b>#2.4:</b> Students are able to locate, understand and apply established guidelines <b>(I, P)</b> All students will be able to locate and understand the established guidelines for the Code of Ethics in Dietetics ( <a href="http://www.eatright.org">www.eatright.org</a> ) and Position Papers with 80% accuracy   | Embedded exam question   |  |
|           | <b>#3.1:</b> Students use the nutrition care process to make decisions <b>(I).</b> Students will describe the nutrition care process with 70% accuracy on their mid-term exam, and 80% accuracy on their final exam  | Embedded exam questions  |  |
|           | <b># 3.2:</b> Students apply knowledge of the role of environment, food and lifestyle choices. <b>(I).</b> Students will be able to discuss the role of environment, food and lifestyle choices on the following chronic diseases: Cardiovascular disease and type 2 Diabetes with 70% accuracy  | Embedded exam questions  |  |

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|          | <b># 4.5:</b> Students develop outcome measures, use informatics principles and technology to collect and analyze data <b>(I)</b> . Dietetic students will be able to use informatics principles to analyze data relating to individuals and organizations with 70% accuracy   | Embedded exam questions  |  |
|          | <b># 4.6:</b> Students explain the impact of a public policy on dietetics practice. <b>(I)</b> . Students are able to explain an impact of public policies (i.e. Healthy People, DRIs, and AND Position Papers) on dietetics practice with 70% accuracy  | Embedded exam question   |  |
|          | <b># 6.1:</b> Describe the mechanism of action of essential nutrients in health promotion and disease prevention <b>(I, P)</b> . Students will be able to, with 70% accuracy describe the role of essential nutrients in health promotion<br>(ii) students will be able to, with 70% accuracy, describe the role of essential nutrients in disease and deficiency prevention                           | Essay exam on midterm regarding essential nutrients and health promotion. Filling in chart on final exam for vitamins and minerals-function in the body, name of deficiency and deficiency symptoms. |  |
|          | <b># 6.2:</b> Describe the mechanism of action of bioactive non-nutrients in health promotion and disease prevention <b>(I)</b> . (i) Students will be able to, with 70% accuracy describe the role of bio-active non-nutrients (phytochemicals) in health promotion<br>(ii) Students will be able to, with 70% accuracy, describe the role of bio-active non-nutrients in disease prevention          | Embedded essay exam questions  |  |
|          | <b># 6.3:</b> Determine nutrient needs across the lifespan. <b>(I)</b> . Students will be able to, with 70% accuracy describe the key nutrient(s) needs in infants, during lactation, adult, and older adults  | Embedded exam questions  |  |
|          | <b># 6.4:</b> Integrate knowledge of the use of nutrients at the molecular, cellular and organ level <b>(I, P)</b> . Students will be able to, with 70% accuracy describe the process of digestion, absorption and basic transport of foods/nutrients in the human   | Quizzes and embedded exam questions  |  |
| FN 2350L | <b>#1.1</b> Students demonstrate how to locate, interpret, evaluate and use professional literature. <b>I)</b> . Students will go to the ESHA Food Processor software, input their 3 day (or 5 day) diet and exercise record, interpret the actual and DRI comparisons correctly, and make recommendations for excessive and insufficient nutrient intakes in an assignment with 70% or more accuracy. | Completion, submission, and grading of assignment  |  |

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|           | <b>KRD 2.1</b> Students demonstrate effective professional oral and written communication. <b>D</b> . 70% of the students will score $\geq 80\%$ on the nutritional analyses assignments.  | Grade on assignment   |  |
|           | <b>KRD 3.1</b> Students use the nutrition care process to make decisions. <b>D</b> . 70% of the students will score $\geq 80\%$ on diet assessments (case studies) of a person with Heart Disease and Diabetes, as well as proposed recommendations to modify diet and lifestyle.  | Grade on assignment   |  |
|           | <b>KRD 3.2</b> Students apply knowledge of the role of environment, food and lifestyle choices. (I,P). 70% of the students will score $\geq 80\%$ on diet assessments (case studies) of a person with Heart Disease and Diabetes, as well as proposed recommendations for diet and lifestyle modifications. 70% of the students will score $\geq 80\%$ on their respective Food Record Analysis and make appropriate suggestions for diet and lifestyle modifications  | Rubric-graded case studies  |  |
|           | <b>KRD 4.5</b> Students develop outcome measures, use informatics principles and technology to collect and analyze data. <b>I</b> .100% of the students will use computer technology and the ESHA program (latest version) to analyze diets and suggest diet and lifestyle modifications.  | Completion, submission, and grading of assignment   |  |
|           | <b>KRD 5.3</b> Students will demonstrate knowledge of techniques of food preparation and application to the development, modification and evaluation of recipes and menus. <b>D</b> . 100% of the students will analyze recipes and menus and suggest modifications to meet nutrient requirements.   | Completion, submission, and grading of assignment   |  |
| NUTR 3130 | <b>#1.1</b> Students demonstrate how to locate, interpret, evaluate and use professional literature. <b>(I,P)</b> . (i) Students will choose a peer-reviewed article from PubMed, AJCN, or J of Nutr in a topic of their interest (locate). (ii) Students use this article to diagram the study design, determine study justification, list outcome measurements, describe 2 study results, study limitations and the objectives/aims of the study with 70% accuracy (interpret and evaluate). (iii) Students will be able | Submission of article to instructor<br><br>Submission of assignment to instructor<br><br>Embedded exam essay question |  |

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|  | to describe how to locate peer-reviewed literature with 80% accuracy. (iv) All students then present a poster presentation on the article to the class (use professional literature)   | Presentation of poster/peer evaluation and instructor feedback   |  |
|  | <b>#1.2</b> Students are able to use current information technologies to locate and apply evidence based guidelines and protocols. <b>(I, P)</b> . (i) Students use computers to access the Academy of Nutrition and Dietetics Evidenced Based Library website as a source for determining the strength of the evidence for certain practices with 70% accuracy. (ii) Students visit the clinicaltrials.gov website to determine the clinical trial phase of certain treatments with 70% accuracy                  | Rubric for assignments   |  |
|  | <b># 2.1:</b> Students demonstrate effective professional oral and written communication <b>(I)</b> . (i) Students critically evaluate a research study with 70% accuracy (written).(ii) All students present a poster present-ation on the article to the class (oral)  | Rubric for critical evaluation of a research study<br><br>Design and presentation of a poster                            |  |
|  | <b># 2.4:</b> Students are able to locate, understand and apply established guidelines. <b>(I,P)</b> . (i) All students access the American Dietetic Association Code of Ethics and Position Statements website as a source for determining the strength of the evidence or position stances for certain practices with 70% accuracy.(ii) All students take the Collaborative Institutional Training Initiative (CITI) workshop and test regarding Human subject research ethics (Research 101) with >80% accuracy | Rubric for the assignment<br><br>Certification statement from CITI that student has passed with an overall score of >80% |  |
|  | <b># 4.5:</b> Students develop outcome measures, use informatics principles and technology to collect and analyze data. <b>(I)</b> . Students will use computer technology to access PubMed and the American Dietetic Association Code of Ethics and Position Statements website as a source for determining the strength of the evidence or position stances for certain practices with 70% accuracy.   | Rubric for assignment  |  |
|  | <b>#6.6:</b> Understand and demonstrate the scientific method and the application of research methodologies. <b>(I, P)</b> . Students will be able to, with 70% accuracy describe the scientific method and design a research study, given a problem statement   | In-class group assignment; embedded exam questions   |  |

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|            | <p><b># 6.7:</b> Interpret basic statistics used in nutrition and medical research using statistically analyzed results. <b>(P,M)</b>. Using a scientific article, students will, with 70% accuracy, be able to interpret basic statistics used in nutrition and medical research</p>  | <p>Assignment of research article; Embedded exam question, Rubric for data analysis interpretation in assignment</p>  |  |
| NUTR 3280L | <p><b>#4.4:</b> Students apply safety principles <b>(P)</b> Students will complete the department food and lab safety lab video and complete the College of Agriculture Safety Procedure on-line exam with 80% accuracy prior to participating in lab activities</p>   | <p>100% of students will complete the safety video and College of Agriculture Safety with 80% or higher accuracy</p>  |  |
|            | <p><b>#4.5:</b> Students develop outcome measures, use informatics principles and technology to collect and analyze data <b>(P)</b> Students will utilize nutrient analyzes software to assess and develop therapeutically modified diets for clinically compromised patients.</p>   | <p>Students will submit a detail evaluation of case study and therapeutic diet meal plan with an accuracy of 70% or greater</p>   |  |
|            | <p><b>#5.3:</b> Students will demonstrate knowledge of techniques of food preparation and application to the development, modification and evaluation of recipes and menus. <b>(P)</b> Students will create two 7-day culturally appropriate menus which they will modify to meet both the Therapeutic Lifestyle Change Diet (TLC) and the DASH Diet Guidelines</p>  | <p>Students will receive a grade for the created menus with a 70% accuracy or higher</p>  |  |
|            | <p><b>#5.4:</b> Students will demonstrate knowledge of techniques of food preparation and application to the development, modification and evaluation of recipes and menus. <b>(P)</b> Students will prepare two 7-day culturally appropriate menus which they will modify to meet both the Therapeutic Lifestyle Change Diet (TLC) and the DASH Diet Guidelines</p> | <p>Students will research, design and prepare traditional and therapeutically modified meals of diverse cultures; students will prepare a group power-point presentation describing the meal, culture, and preparation techniques with a 70% accuracy or higher</p> |  |
| NUTR 3350  | <p><b>#2.4:</b> Students are able to locate, understand and apply established guidelines. <b>(P)</b>. 80% of Students will correctly recite and apply (70% accuracy) ADA, AAP, NIH and NCEP and other evidence based guidelines for pregnancy weight gain, infant feeding, prevention of childhood overweight, and prevention of cardiovascular disease</p>          | <p>Embedded exam questions and cases</p>  |  |
|            | <p><b>#3.1:</b> Students use the nutrition care process to make decisions <b>(P)</b>. 80% of students will accurately (70%) use the</p>  | <p>Embedded exam questions</p>  |  |

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|  | nutrition care process to recommend pregnancy weight gain, infant-feeding decisions, treat childhood overweight, meet elderly nutrition needs.  |                                       |  |
|  | <b>#3.2:</b> Students apply knowledge of the role of environment, food and lifestyle choices ( <b>P</b> ). 80% of students will accurately (70%) identify and modulate the key risk factors for infertility, premature birth, low and very low birth weight, failure to thrive, childhood overweight, type 2 diabetes, obesity and cardiovascular disease.  | Embedded exam question; case studies  |  |
|  | <b>#4.6:</b> Students explain the impact of a public policy on dietetics practice. ( <b>P</b> ). All students will accurately describe the impact of the WIC and School lunch programs and Meals on wheels and other congregate meal programs on health status of target groups.  | Assignment or Embedded essay question |  |
|  | <b>#6.1:</b> Describe the mechanism of action of essential nutrients in health promotion and disease prevention ( <b>P, M</b> ). 80% of students will accurately (70%) describe how the DRIs meet pregnancy, lactation, infant growth, adolescence and elderly needs and prevent deficiencies.  | Embedded exam question                |  |
|  | <b>#6.3:</b> Determine nutrient needs across the lifespan. ( <b>P,M</b> ). 80% of students will accurately (70%): 1) recommend key DRIs for pre-pregnancy, pregnancy, lactation; 2) describe the factors that affect the DRI adjustments across the lifespan; 3) describe the physiological changes in aging that alter the DRIs  | Embedded exam question                |  |
|  | <b>#6.4:</b> Integrate knowledge of the use of nutrients at the molecular, cellular and organ level ( <b>P, M</b> ). 80% of students will accurately describe the process of placental nutrient transport, nutrient utilization by the fetus, mammary tissue.   | Embedded exam questions               |  |
|  | <b># 6.5:</b> Integrate genetic, physiologic and biochemical mechanisms by which food and nutrients promote optimal health. ( <b>P,M</b> ). 80% of students will accurately (70%): 1) identify the beneficial nutrients in human milk for infant health; 2) describe the mechanisms of action of each nutrient on infant metabolism and growth and prevent of disease; 3) describe the hypothalamus pituitary gonadal axis in providing nutrition support for embryos; 4) describe the regulation of lactation; 4) describe the | Embedded exam questions               |  |



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|             | effect of sex hormones on adolescent male and female growth and sexual maturation.  |  |  |
| NUTR 3450/A | <b># 1.1</b> Students demonstrate how to locate, interpret, evaluate and use professional literature <b>(I,P)</b> . i. Students will describe with 70% accuracy 4 behavior change models/theories and relate at least one of the 4 to the practice of nutrition education with 70% accuracy. <b>(P)</b> . ii. Students can present a nutrition lesson in class using at least one concept from a behavior change model correctly and identify which concept they used. <b>(P)</b> . iii. Students will identify three concepts within the ADA Code of Ethics as relate to the RD with 70% accuracy <b>(P)</b> . vi. Students will identify 80% of errors of Conduct that violate ADA Code of Ethics in a Case study with 70% accuracy | Embedded exam questions<br><br>In-class presentations, students write up a report on the presentation. |  |
|             | <b>#2.1:</b> Students demonstrate effective professional oral and written communication. <b>(P)</b> . All students will develop a nutrition education lesson plan and conduct a lesson in front of the class with a 70% passing rate. <b>(M)</b> . Each student will conduct a counseling session with a mock patient achieving at least a 70% grade <b>(M)</b> . All students will write a report on the counseling session with 70% accuracy  | Rubric for lesson plan and presentation  |  |
|             | <b># 2.2:</b> Students are able to demonstrate assertiveness, advocacy and negotiation skills. <b>(M)</b> . All students will conduct a counseling session with a mock patient achieving at least a 70% grade   | Rubric for counseling session  |  |
|             | <b># 2.3:</b> Students are able to demonstrate counseling techniques. <b>(I, P)</b> . Student will demonstrate ability to conduct nutrition assessment during a mock counseling session achieving at least a 70% grade. <b>(M)</b> . ii. Each student will conduct a counseling session with a mock patient achieving at least a 70% grade  | Rubric: Counseling session rubric<br><br>Counseling written report rubric                              |  |
|             | <b># 2.4:</b> Students are able to locate, understand and apply established guidelines <b>(P)</b> . Each student will conduct a counseling session with a mock patient achieving at least a 70% grade   | Rubric for counseling session  |  |
|             | <b># 3.1:</b> Students use the nutrition care process to make decisions. <b>(P)</b> Each student will conduct a counseling session with a mock patient achieving at least a 70% grade. <b>(P)</b> . Each student will describe the nutrition care process with 70% accuracy on their mid-term exam  | Rubric for counseling session<br><br>Embedded exam questions   |  |

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|             | <p><b># 3.2:</b> Students apply knowledge of the role of environment, food and lifestyle choices. <b>(P)</b>. i. Students will understand the role of environment, food and life style on eating habits and delivery of nutrition education as demonstrated by knowledge of the theories of behavior change application to nutrition education questions on an exam with 70% accuracy. <b>(P)</b>. ii. Each student will conduct a counseling session with a mock patient achieving at least a 70% grade</p> | Embedded exam questions, Rubric for counseling session |  |
|             | <p><b># 3.3:</b> Students develop an educational session or program/educational strategy for target populations. <b>(P)</b>. All students will develop a plan and conduct a lesson in front of the class with a 70% passing rate</p>   | Rubric for lesson plan and presentation                |  |
|             | <p><b># 4.7:</b> Students explain the impact of health care policy, administration, different health care delivery systems and current reimbursement policies.. <b>(P)</b>. Students will identify and describe the effects of health care delivery systems and reimbursement policy on dietetics counseling with 70% accuracy</p>   | Embedded exam question                                 |  |
| NUTR 4460/A | <p><b>#1.2</b> Students are able to use current information technologies to locate and apply evidence based guidelines and protocols. <b>(M)</b> Students will identify and describe the services of four federal nutrition programs with 70% accuracy.</p>  | Embedded exam question                                 |  |
|             | <p><b># 2.1:</b> Students demonstrate effective professional oral and written communication <b>(P, M)</b>. Each team consisting of 2-8 students will participate in a panel discussion about their service learning experience and site and receive a grade of 70% or higher</p>   | Rubric for panel discussion                            |  |
|             | <p><b>#2.2:</b> Students are able to demonstrate assertiveness, advocacy and negotiation skills. <b>(P,M)</b>. All students will explain at least 3 advocacy strategies the RD can utilize to affect policy with 70% accuracy</p>  | Embedded exam question                                 |  |
|             | <p><b>#2.3:</b> Students are able to demonstrate counseling techniques. <b>(I, P)</b>. Given a mock counseling session, 70% of the students will be able to counsel effectively (grade of 80% or higher) for each: diabetes, heart disease, and anemia</p>   | Rubric scored counseling sessions                      |  |
|             | <p><b>#2.5:</b> Students are able to identify and describe the role of others <b>(M)</b>. 80% of</p>   | Embedded exam question                                 |  |

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|             | students will define and describe with 70% accuracy the role of other health care providers in the community  |  |  |
|             | <b>#3.2:</b> Students apply knowledge of the role of environment, food and lifestyle choices. <b>(P)</b> . Each student will write and submit a program plan for their learning site with a 70% pass rate or above  | Rubric for program plan                        |  |
|             | <b># 3.3:</b> Students develop an educational session or program/educational strategy for target populations <b>(M)</b> . Each student will outline and evaluate their educational lessons performed at their service learning site following the journal rubric guidelines with a 70% passing rate | Rubric for journaling on site experience       |  |
|             | <b>#4.1:</b> Students apply management and business theories and principles. <b>(P)</b> . Students will demonstrate knowledge of social marketing and evaluation tools with 70% accuracy on the final exam.   | Embedded exam questions                        |  |
|             | <b>#4.6:</b> Students explain the impact of a public policy on dietetics practice. <b>(M)</b> . Students will identify and describe the effects of public policy on community dietetics with 70% accuracy   | Embedded exam question                         |  |
|             | <b>#4.7:</b> Students explain the impact of health care policy, administration, different health care delivery systems and current reimbursement policies. <b>(P, M)</b> Students will identify roles of federal health care systems with 70% accuracy  | Embedded exam question                         |  |
| NUTR 3670/L | <b>#2.1:</b> Students demonstrate effective professional oral and written communication. <b>(P)</b> . Students will participate in a team-building workshop. <b>(P)</b> . Students will present case studies using PowerPoint   | Review of attendance roster                    |  |
|             | <b># 2.2:</b> Students are able to demonstrate assertiveness, advocacy and negotiation skills. <b>(P)</b> . <b>100%</b> Students will participate in a team-building workshop, with 70% participation   | Participation will be noted.                   |  |
|             | <b>#2.5:</b> Students are able to identify and describe the roles of others. <b>(P)</b> . 80% of students will define with 70% accuracy the role of foodservice workers in healthcare, school foodservice or community settings   | Rubric for written report comparing facilities |  |
|             | <b>#4.1</b> Students apply management and business theories and principles <b>(I,P)</b> . Students will demonstrate with 70%  | Embedded exam questions                        |  |

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|             | accuracy principles of business and management related to food service   |  |  |
|             | <b>#4.3</b> Students apply the principles of human resource management to different situations. <b>(I,P)</b> . Students will demonstrate with 70% accuracy aspects of human resources as they relate to foodservice workers in healthcare, school, foodservice or community settings   | Embedded exam questions  |  |
|             | <b>#4.4:</b> Students apply safety principles. <b>(P, M)</b> . Students will complete the Serve-Safe class and 80% will pass the national certification exam   | Serve-Safe exam administered by NRA                            |  |
|             | <b># 5.1</b> Students are able to identify the types of foodservice operations in existence. <b>(I)</b> . Students will describe with 70% accuracy types of foodservice operations. <b>(I)</b> Students will describe with 70% accuracy the process in planning and preparing of food in an institutional setting <b>(I)</b> Students will describe receiving and storage standards with 70% accuracy <b>(P)</b> Students will research and select a foodservice operation for development and prepare a three to four page proposal and Rubric to score proposal receive a score of 70% or higher | Embedded exam questions<br><br>Rubric to score proposal        |  |
|             | <b># 5.2:</b> Students are able to identify the interrelated parts that make up a foodservice system. <b>(I,P)</b> . Students will describe systems approach with 70% accuracy.  | Embedded exam questions  |  |
| NUTR 3680/L | <b>#2.1:</b> Students demonstrate effective professional oral and written communication <b>(P)</b> . 100% Students will present case studies using PowerPoint with 90% compliance.   | Review of attendance roster<br><br>Review of attendance roster |  |
|             | <b># 2.2:</b> Students are able to demonstrate assertiveness, advocacy and negotiation skills. <b>(P)</b> 80% of students will earn at least a 70% on their oral case presentation   | Score on exam  |  |
|             | <b>#4.1</b> Students apply management and business theories and principles. <b>(P)</b> . Students will demonstrate with 70% accuracy of purchasing principles related to food service  | Embedded exam questions  |  |
|             | <b>#4.3:</b> Students apply the principles of human resource management to different situations <b>(I, P)</b> . Students will be able to define with 70% accuracy the role of the dietitian in food purchasing and production  | Embedded exam questions  |  |
|             | <b>#5.3</b> Students will understand the techniques of food preparation and  | Embedded exam questions  |  |

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|           | <p>application to the development, modification and evaluation of recipes and menus. <b>(P)</b>. Students will describe with 70% accuracy methods for recipe modification and bulk production in a food service setting. <b>(M)</b>. Students will develop a menu for an institutional facility that meets nutritional, physiological, psychological needs of the consumer with 70% accuracy. <b>(M)</b>. Students will quantify four recipes for the facility they have proposed with 70% accuracy <b>(M)</b>. Students will develop HACCP plans for two of the recipes with 70% accuracy <b>(M)</b>. Students (with their group of six) will standardize and prepare a recipe for 50 portions, and evaluate for cost and nutritional content. This is also a Graduate Exit Exam question</p> | <p>Rubric for menus project scores</p> <p>Rubric for project</p> <p>Rubric for recipes</p> <p>Review of attendance roster</p> |  |
|           | <p><b># 5.4:</b> Students will demonstrate knowledge of standards of purchasing of food. <b>(I, P)</b> Students will describe with 70% accuracy standards for purchasing of food for foodservice operations. <b>(I, P)</b> Students will write specifications with 70% accuracy for perishable and non-perishable food to be used in a foodservice operation of their choice.</p>  | <p>Embedded exam questions</p>  |  |
| NUTR 4260 | <p><b># 2.1:</b> Students demonstrate effective professional oral and written communication. <b>(M)</b>. All students will pass (70%) present final project PowerPoint and written proposal describing a large scale food service facility.</p>  | <p>Presentation, rubric for presentation and report</p>   |  |
|           | <p><b># 2.5:</b> Students are able to identify and describe the roles of others <b>(P)</b>. 80% students will define with 70% accuracy the role of administrative staff in healthcare, school foodservice or community settings</p>  | <p>Embedded exam question</p>   |  |
|           | <p><b>#4.1:</b> Students apply management and business theories and principles. <b>(M)</b>. Students will develop a minimum (70%) business plan, to include marketing, menus, recipes, specifications, policies, procedures, schedule and budget for a foodservice facility. <b>(M, P)</b>. Students will develop a minimum (70%) layout utilizing equipment appropriate to a facility of their choice.</p>  | <p>Rubric for business plan</p> <p>Rubric for layout plan</p>   |  |
|           | <p><b># 4.2:</b> Students determine cost of services or operations <b>(M)</b>. Students will demonstrate knowledge of financial</p>  | <p>Rubric for budget workbook</p>   |  |

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|                       | management by completing a budget workbook with a score of 50 out of 60 possible points. <b>(M)</b> . Students will demonstrate knowledge of financial management of a facility by preparing a budget with 70% accuracy, appropriate to the facility of their choice.  | Rubric for budget                                       |  |
|                       | <b># 4.3:</b> Students apply the principles of human resource management to different situations <b>(M)</b> . Students will understand the role of management as demonstrated by knowledge of the theories of management and will answer questions on an exam with 70% accuracy.<br><b>(M)</b> . Students will identify the functions of management and will answer questions on an exam with 70% accuracy <b>(M)</b> . Students will identify tools utilized by management and will answer questions on an exam with 70% accuracy. <b>(M)</b> . Students will utilize management tools during the development of their business plan, to include but not limited to Gantt | Embedded exam questions<br><br>Rubric for Business plan |  |
| NUTR 3930 & NUTR 3940 | <b>#6.1:</b> Describe the mechanism of action of essential nutrients in health promotion and disease prevention. <b>(M)</b> . 80% of students will accurately (70%) describe (1) how DRIs are established; 2) mechanism of action of the DRIS at preventing deficiency symptoms; 3) mechanism of action for five dietary components of the NCEP ATP-III plan and TLC, DASH to prevent coronary artery disease; 4) describe the mechanism by which fiber, glycemic load and index manage blood glucose levels.  | Embedded exam questions                                 |  |
|                       | <b>#6.2:</b> Describe the mechanism of action of bioactive non-nutrients in health promotion and disease prevention <b>(P,M)</b> . 80% of students will accurately (70%) describe the effects of bio-active non-nutrients on enzymes, transport, metabolic pathways that enhance general health.   | Embedded exam question                                  |  |
|                       | <b>#6.3:</b> Determine nutrient needs across the lifespan. <b>(M)</b> . 80% of students will describe accurately (70%) how stage of development changes the metabolic requirement for nutrients.   | Embedded exam question                                  |  |
|                       | <b># 6.4:</b> Integrate knowledge of the use of nutrients at the molecular, cellular and organ level <b>(M)</b> . 80% of students will accurately (70%): 1) identify regulatory  | Embedded exam question                                  |  |

## NUTRITION MAJOR-SEMESTER

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|  | enzymes that utilize nutrients in metabolic pathways; 2) describe the differences in organ utilization of nutrients; 3) identify the hormones and genes activated and inhibited by dietary treatment and nutrients; 4) describe the metabolic flow of nutrients among organs during absorptive, post-prandial, post-absorptive, fasting and starvation states; 5) describe the complex nature of carbohydrate, protein and fat metabolism in energy balance. |   |  |
|  | <b># 6.5:</b> Integrate genetic, physiologic and biochemical mechanisms by which food and nutrients promote optimal health. <b>(M)</b> . 80% of students will accurately (70%) describe intermediary metabolism regarding diabetes, ketosis, protein energy metabolism, blood pressure regulation, dehydration   | Embedded exam question  |  |
|  | <b># 6.7:</b> Interpret basic statistics used in nutrition and medical research using statistically analyzed results <b>(P,M)</b> . 80% of students will correctly (70%) interpret tables and figures containing data representing nutrient utilization, physiologic function, and biochemical function.   | Embedded exam question  |  |
| <b>NUTR 4430/A<br/>NUTR 4440<br/><br/>(Dietetics only)</b> | <b># 1.1</b> Students demonstrate how to locate, interpret, evaluate and use professional literature. <b>(P,M)</b><br>80% of students will be able to write a case study earning at least a 70% grade. Case studies are based on relevant literature in which students identify lab values, medical history, pathophysiological and anthropometric data  | Grades on Case Studies  |  |
|  | <b># 1.2</b> Students are able to use current information technologies to locate and apply evidence based guidelines and protocols. <b>(P,M)</b><br>In the Dietary Analysis section of case studies, 80% of students will earn at least a 70% on the dietary analysis using nutrition analysis software  | Grades on Dietary analysis section of case studies  |  |
|  | <b># 2.1:</b> Students demonstrate effective professional oral and written communication skills. <b>(P,M)</b> 80% of students will earn at least a 70% on their oral case presentation   | Oral case presentation grade  |  |
|  | <b># 2.2:</b> Students are able to demonstrate assertiveness, advocacy and negotiation skills. <b>(P,M)</b> All students will participate in role playing of patient and RD communication in class   | 100% of students participate in classroom activity of role playing patient and RD communication |  |

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|            | <b># 2.4:</b> Students are able to locate, understand and apply established guidelines. <b>(P,M)</b> At least 80% of students earn a grade of 70% on case studies documenting and utilizing appropriate evidence based guidelines  | Case study grades                                   |  |
|            | <b># 2.5:</b> Students are able to identify and describe the roles of others. <b>(P,M)</b> Case studies grades (80% of students earning a 70%) Case studies include appropriate referrals to other health care providers.  | Case study grades                                   |  |
|            | <b># 3.1:</b> Students use the nutrition care process to make decisions. <b>(P,M)</b> Use of correct PES on case studies (grades 80% at are above 70% grade)   | Case study grades                                   |  |
|            | <b># 3.2:</b> Students apply knowledge of the role of environment, food and lifestyle choices. <b>(P,M)</b> Case studies include life style component. Grades of 80% at over above 70%   | Case study grades                                   |  |
|            | <b># 6.1:</b> Describe the mechanism of action of essential nutrients in health promotion and disease prevention. <b>(P,M)</b> Students will explain the mechanism of action for plant sterols and omega three fatty acids with 80% of students achieving a 70% correct score on these exam questions  | Selected questions on mid-term exam                 |  |
|            | <b># 6.2:</b> Describe the mechanism of action of bioactive non-nutrients in health promotion and disease prevention. <b>(P,M)</b> Students will draw the mechanism of action for anti-oxidants and cancer and heart disease with 80% of students achieving a 70% correct score on these exam questions  | Selected questions on mid-term exam                 |  |
|            | <b># 6.4:</b> Integrate knowledge of the use of nutrients at the molecular, cellular and organ level <b>(P,M)</b> Students will explain the mechanism of pathophysiology and heart disease with 80% of students achieving a 70% correct score on these exam questions  | Selected questions on mid-term exam                 |  |
| FST 3210/L | <b># 1.1</b> Students demonstrate how to locate, interpret, evaluate and use professional literature <b>(P)</b> . Student groups will design a research project of their choice, locate scientific literature pertaining to their research from peer-reviewed sources, write up a research proposal containing a study justification based on their review of the scientific literature with 80% accuracy. | Research proposal project; Rubric for justification |  |



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|  | <p><b># 1.2</b> Students are able to use current information technologies to locate and apply evidence based guidelines and protocols. (P). (i) Student groups use computers to access PubMed and Journal of Food Science for their proposal literature reviews and methodologies. (ii) Student groups use computers to access the FDA website for information regarding serving sizes and Federal labeling requirements for their experiments</p>                             | <p>Rubric for research proposal project</p> <p>Submitted assignment</p>   |  |
|  | <p><b># 2.1:</b> Students demonstrate effective professional oral and written communication. (P). (i) Student groups write up a group-designed research proposal with 80% accuracy. (ii) Students in the group present a group slideshow and a poster presentation that includes an abstract, introduction, methodology, experimental results, discussion and conclusions to the class</p>   | <p>Rubric for assignment</p> <p>Poster Presentation/Assignment</p>  |  |
|  | <p><b># 4.2:</b> Students determine cost of services or operations (I,P). Students will prepare a budget for the Grant Proposal Project with 80% accuracy.</p>   | <p>Rubric for Grant Proposal Project Budget</p>   |  |
|  | <p><b>4.4:</b> Students apply safety principles (P) Students will utilize food safety principles such as hand washing and proper cleaning techniques with 90% accuracy</p>   | <p>Instructor observation and peer evaluation</p>   |  |
|  | <p><b># 4.5:</b> Students develop outcome measures, use informatics principles and technology to collect and analyze data (P). Student teams will design an experimental study, substitute one major recipe ingredient with 3 separate variables, test their products using sensory and objective measures, organize the data into Excel spreadsheets, utilize SPSS 17.0 to statically evaluate their data, and present the results to the class with 85% overall accuracy</p> | <p>Slideshow presentation of results, instructor and student self and peer-review evaluations of presentation</p> |  |
|  | <p><b>#5.3:</b> Students will demonstrate knowledge of techniques of food preparation and application to the development, modification and (P) Completion of assignment and PowerPoint presentation' rubric for experiment and simple statistics evaluation of recipes and menus</p>   | <p>Completion of assignment and PowerPoint presentation' rubric for experiment and simple statistics</p>          |  |

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|          | <p><b>#6.6:</b> Understand and demonstrate the scientific method and the application of research method (P). Students will write a grant proposal, design an experiment, collect data, run some simple statistics, and interpret data and present research results with 70% accuracy.</p> | <p>Proposal assignment and PowerPoint presentation' rubric for experiment and simple statistics</p> |  |
| FST 3250 | <p><b>#1.1</b> Students demonstrate how to locate, interpret, evaluate and use professional literature (P). Report of recent advances in an area of food safety. 100% of students will complete with at least six peer-reviewed and four trade journal articles.</p>                      | <p>Rubric for report</p>  |  |
|          | <p><b>#4.4:</b> Students apply safety principles. (P) Students will identify how their own home cooking preparation meets HACCP standards with 90% of students earning a grade of 70% or higher</p>   | <p>Homework grade</p>   |  |

CAL POLY POMONA COMPLIANCE MAP TO ACEND REQUIREMENTS (DIETETICS)-  
DEPARTMENT OFFERING-SLOs

| Course number | 1.1.1 | 1.1.2 | 2.2.1 | 2.2.2 | 2.2.3 | 2.2.4 | 2.2.5 | 3.3.1 | 3.3.2 | 3.3.3 | 4.4.1 | 4.4.2 | 4.4.3 | 4.4.4 | 4.4.5 | 4.4.6 | 4.4.7 | 5.5.1 | 5.5.2 | 5.5.3 | 5.5.4 | 5.5.5 |   |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| NUTR 1000     |       | X     |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| NUTR 1210/L   |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       | X     |       |   |
| NUTR 2280     |       |       | X     |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| NUTR 2350     | X     | X     |       |       |       | X     |       |       | X     | X     |       |       |       |       | X     | X     |       |       |       |       |       |       |   |
| NUTR 2350L    | X     |       | X     |       |       |       |       | X     | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| NUTR 3130     | X     | X     | X     |       |       | X     |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |   |
| NUTR 3280L    |       |       |       |       |       |       |       |       | X     |       |       |       |       | X     | X     |       |       |       |       |       | X     |       |   |
| NUTR 3350     |       |       |       |       |       | X     |       | X     | X     |       |       |       |       |       |       | X     |       |       |       |       |       |       |   |
| NUTR 3450/A   | X     |       | X     | X     | X     | X     |       | X     | X     | X     |       |       |       |       |       |       | X     |       |       |       |       |       |   |
| NUTR 3670/L   |       |       | X     | X     |       |       | X     |       |       |       | X     |       | X     | X     |       |       |       | X     | X     | X     | X     |       |   |
| NUTR 3680/L   |       |       | X     | X     |       |       |       |       | X     |       | X     |       |       |       |       |       |       |       |       | X     | X     |       |   |
| NUTR 4260     |       |       | X     |       |       |       | X     |       |       |       |       | X     | X     | X     |       |       |       | X     | X     | X     | X     |       |   |
| NUTR 3930     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| NUTR 3940     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| NUTR 4430/A   | X     | X     | X     | X     |       | X     | X     | X     | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| NUTR 4440     | X     | X     | X     | X     |       | X     | X     | X     | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| NUTR 4460/A   | X     | X     | X     | X     |       | X     |       | X     | X     | X     | X     |       |       |       |       | X     | X     |       |       |       |       |       |   |
| FST 3250      | X     |       |       |       |       |       |       |       |       |       | X     |       |       | X     |       |       |       |       |       |       |       |       |   |
| FST 3210/L    | X     | X     | X     |       |       |       |       |       |       |       |       | X     |       | X     | X     |       |       |       |       |       | X     |       | X |

Example: 1. 1.1 = Section 1: Scientific and Evidence Base of Practice: integration of scientific information and research into practice: 1.1 Students demonstrate how to locate, interpret, evaluate and use professional literature.

CAL POLY POMONA COMPLIANCE MAP TO ACEND REQUIREMENTS-DEPARTMENT OFFERINGS

SLOs

| Course number | 6.6.1 | 6.6.2 | 6.6.3 | 6.6.4 | 6.6.5 | 6.6.6 | 6.6.7 |
|---------------|-------|-------|-------|-------|-------|-------|-------|
| NUTR 1000     |       |       |       |       |       |       |       |
| NUTR 1210/L   |       |       |       |       |       |       |       |
| NUTR 2280     |       |       |       |       |       |       |       |
| NUTR 2350     | X     | X     | X     | X     |       |       |       |
| NUTR 2350L    |       |       |       |       |       |       |       |
| NUTR 3130     |       |       |       |       |       | X     | X     |
| NUTR 3280L    |       |       |       |       |       |       |       |
| NUTR 3350     | X     | X     | X     | X     | X     |       |       |
| NUTR 3450/A   |       |       |       |       |       |       |       |
| NUTR 3670/L   |       |       |       |       |       |       |       |
| NUTR 3680/L   |       |       |       |       |       |       |       |
| NUTR 4260     |       |       |       |       |       |       |       |
| NUTR 3930     | X     | X     | X     | X     | X     | X     | X     |
| NUTR 3940     | X     | X     | X     | X     | X     | X     | X     |
| NUTR 4430/A   | X     | X     | X     | X     |       |       |       |
| NUTR 4440     | X     | X     | X     | X     |       |       |       |
| NUTR 4460/A   |       |       |       |       |       |       |       |
| FST 3250      |       |       |       |       |       |       |       |
| FST 3210/L    |       |       |       |       |       | X     |       |

Example: 1. 1.1 = Section 1: Scientific and Evidence Base of Practice: integration of scientific information and research into practice: 1.1

**COURSE MAPPING NUTRITION MAJOR**

| Course number | 1.1.1 | 1.1.2 | 2.2.1 | 2.2.2 | 2.2.3 | 2.2.4 | 2.2.5 | 3.3.1 | 3.3.2 | 3.3.3 | 4.4.1 | 4.4.2 | 4.4.3 | 4.4.4 | 4.4.5 | 4.4.6 | 4.4.7 | 5.5.1 | 5.5.2 |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| NUTR 1000     |       | I     |       |       |       |       | I     |       |       |       |       |       |       |       |       |       |       |       |       |
| NUTR 1210/L   |       |       |       |       |       |       |       |       |       |       |       |       |       | I     |       |       |       |       |       |
| NUTR 2280     |       |       | I     |       |       |       |       |       | I,P   |       |       |       |       |       |       |       |       |       |       |
| NUTR 2350     | I     | P     |       |       |       | I,P   |       | I     | I     |       |       |       |       | I     | I     |       |       |       |       |
| NUTR 2350L    | I     |       | P     |       |       |       |       | I     | P     |       |       |       |       |       |       |       |       |       |       |
| NUTR 3130     | I     | I,P   | I     |       |       | I,P   |       |       |       |       |       |       |       | I     |       |       |       |       |       |
| NUTR 3280L    |       |       |       |       |       |       |       | P     |       |       |       |       | P     | P     |       |       |       |       |       |
| NUTR 3350     |       |       |       |       |       | P     |       | P     | P     |       |       |       |       |       |       | I     |       |       |       |
| NUTR 3450/A   | I,P   |       | P,M   | M     | I,P,M | P     |       | P     | P     | P     |       |       |       |       |       |       | I     |       |       |
| NUTR 3670/L   |       |       | I     | P     |       |       | P     |       |       |       | I,P   |       | I,P   | P,M   |       |       |       | I,P   | I,P   |
| NUTR 3680/L   |       |       | P     | P     |       |       |       |       | P     |       | P     |       |       |       |       |       |       |       |       |
| NUTR 4260     |       |       | M     |       |       |       | P     |       |       |       |       | M     | P,M   | M     |       |       |       | M     | M     |
| NUTR 3930     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| NUTR 3940     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| NUTR 4430/A   | P,M   | P,M   | P,M   | P,M   |       | P,M   | P,M   | P,M   | P,M   |       |       |       |       |       |       |       |       |       |       |
| NUTR 4440     | P     | M     | P,M   | P,M   |       | P,M   | P,M   | P,M   | P,M   |       |       |       |       |       |       |       |       |       |       |
| NUTR 4460/A   | M     | M     | P,M   | P     |       | M     |       | P     | P     | M     | P     |       |       |       |       | M     | P,M   |       |       |
| FST 3250      | I     |       |       |       |       |       |       |       |       |       | I     |       |       | I     |       |       |       |       |       |
| FST 3210/L    | P     | P     | P     |       |       |       |       |       |       |       |       | I,P   |       | P     | P     |       |       |       |       |

**COURSE MAPPING NUTRITION MAJOR**

| Course number | 5.5.3 | 5.5.4 | 5.5.5 | 6.6.1 | 6.6.2 | 6.6.3 | 6.6.4 | 6.6.5 | 6.6.6 | 6.6.7 |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| NUTR 1000     |       |       |       |       |       |       |       |       |       |       |
| NUTR 1210/L   | I     |       |       |       |       |       |       |       |       |       |
| NUTR 2280     |       |       |       |       |       |       |       |       |       |       |
| NUTR 2350     |       |       |       | I     | I     | I     | I     |       |       |       |
| NUTR 2350L    |       |       |       |       |       |       |       |       |       |       |
| NUTR 3130     |       |       |       |       |       |       |       |       | P     | P,M   |
| NUTR 3280L    | P     |       |       |       |       |       |       |       |       |       |
| NUTR 3350     |       |       |       | P,M   | P,M   | P,M   | P,M   | P,M   |       |       |
| NUTR 3450/A   |       |       |       |       |       |       |       |       |       |       |
| NUTR 3670/L   | I,P   | I,P   |       |       |       |       |       |       |       |       |
| NUTR 3680/L   | I,P,M | I,P,M |       |       |       |       |       |       |       |       |
| NUTR 4260     | M     | M     |       |       |       |       |       |       |       |       |
| NUTR 3930     |       |       |       | M     | M     | M     | M     | M     | M     | P     |
| NUTR 3940     |       |       |       | M     | M     | M     | M     | M     | M     | P     |
| NUTR 4430/A   |       |       |       | M     | M     | M     | M     |       |       |       |
| NUTR 4440     |       |       |       | M     | M     | M     | M     |       |       |       |
| NUTR 4460/A   |       |       |       |       |       |       |       |       |       |       |
| FST 3250      |       |       |       |       |       |       |       |       |       |       |
| FST 3210/L    | P     |       | I,P   |       |       |       |       |       | P,M   |       |