# University of Puerto Rico Río Piedras Campus College of Natural Sciences Nutrition and Dietetics Program Bachelor of Science in Nutrition and Dietetics

- A. Course Title: Integrative Nutrition III: Nutrition Care for Individuals and Groups
- B. Course Codification: NUTR 4503
- C. Number of Credits: 1 hour per week / 1 credit
- D. **Course and Other Pre-requisites**: NUTR 4042, Human Nutrition II; NUTR 4165, Clinical Dietetics, NUTR 4169 Applied Clinical Dietetics; NUTR 4501, Integrative Nutrition I: Principles of Foods, Nutrition and Education; Basic to intermediate skills in computer use
- E. **Course Description**: Discussion of contemporary issues in foods, nutrition and dietetics according to current trends and health priorities. The course covers professional core knowledge, skills and competencies in nutrition screening and assessment of population and community needs; diagnosis, planning, intervention, monitoring and evaluation for nutrition care of individuals and groups to prepare students for local and national professional examinations, which is one of the requirements to practice the Nutrition and Dietetics profession.

**Descripción del curso**: Discusión de temas contemporáneos en alimentos, nutrición y dietética según las tendencias actuales y prioridades de salud. El curso cubre los conocimientos, destrezas y competencias profesionales medulares en cernimiento y evaluación nutricional de poblaciones y de las necesidades de la comunidad; diagnóstico, planificación, intervención, monitoreo y evaluación del cuidado nutricional de individuos y grupos, y prepara los estudiantes para el examen de reválida profesional local y nacional, el cual es uno de los requisitos para ejercer a la profesión de Nutrición y Dietética.

- F. **Course Objectives**: Upon completion of the course NUTR 4503, each student should have acquired the knowledge and skills to:
  - 1. Integrate biochemical pathways and physiological processes to the nutrition care process in health and disease states.
  - 2. Translate biochemical and physiological science to nutrition interventions for individuals and communities.
  - 3. Analyze principles of medical therapy and the nutrition care process for effective intervention in health and disease.
  - 4. Apply local and national professional codes of ethics to the nutrition care process of individuals and communities.
  - 5. Interpret, evaluate and use professional literature to make evidence-based practice decisions on the nutritional care of individuals and groups.
  - 6. Apply evidence-based guidelines and protocols using current information technology to manage nutrition care in diseased states.

## **Course Objectives (continued)**

- 7. Use the nutrition care process to identify nutrition–related problems, determine and evaluate nutrition interventions.
- 8. Demonstrate counseling and educational methods to facilitate behavioral change and enhance wellness for diverse individual and groups.
- 9. Apply coding and billing of nutritional dietetics care to obtain reimbursement for services from public or private payers, fee for services and value-based payment system.

## G. Outline of Course Content and Time Distribution:

This course may be offered in either of the following two modalities: 1) traditional classroom (75% or more of the instructional hours require the physical presence of the students and professor in the classroom), 2) hybrid (25 - 75% of the total instructional hours will occur through a virtual platform).

UNITS	DOMAIN, TOPICS, AND OUTLINE	TIME (HRS)	
DOMAI	DOMAIN – NUTRITION CARE FOR INDIVIDUALS AND GROUPS		HYBRID
		CLASS	
	PRE-TEST	1	1 in class
1	Screening and Assessment		
	1. Nutrition screening	2.5	2.5
	2. Nutrition assessment of individuals		(0.5 in
	3. Nutrition Assessment of populations and of community needs		class)
2	Diagnosis		
	1. Relationship between nutrition diagnoses and medical diagnoses		
	2. Data sources and tools for nutrition diagnosis	3.5	3.5
	3. Diagnosing nutrition problems for individuals and groups		(0.5 in
	4. Etiologies (Cause/contributing risk factors)		class)
	5. Signs and symptoms (Defining characteristics)		
	6. Documentation		
3	Planning and Intervention		
	1. Nutrition care for health promotion and disease prevention		
	2. Medical Nutrition Therapy	3.5	3.5
	3. Implementation and Promotion of National Dietary Guidance		(0.5 in
	4. Development of programs and services		class)
4	Monitoring and Evaluation		
	1. Monitoring progress and updating previous care	3.5	3.5
	2. Measuring outcome indicators using evidence-based guides for		(0.5 in
	practice		class)
	3. Evaluating outcomes		
	4. Relationship with outcomes measurement systems and quality		
	improvement		
	5. Determining continuation of care		
	6. Documentation		
	POST-TEST	1	1 in class
	Total	15	15
			(4 in class*

\* Minimum number of hours in class

#### Instructional Techniques:

<u>On campus</u>: May include conferences, discussions, workshops, group projects, cooperative learning, field work, assignments

**<u>Hybrid</u>**: May include conferences, videos, discussions, virtual forums, in-classroom or virtual workshops, group projects, cooperative learning, field work, online educational modules, virtual assignments, chats

#### I. Minimal Resources Required:

Resource (I = provided by the Institution, S = acquired		Hybrid
by the Student)		
Access to a computer or mobile device	S	S
Activated institutional e-mail (upr.edu) account	Ι	1
Microsoft Office or compatible equivalent software	S	S
(Word, Excel, Powerpoint in particular)		
Access to the distance education platform	Ι	1
Speakers, microphone for computer or mobile device	N/A	S
Web-cam	N/A	S
Skype or equivalent audio-video communication	N/A	Ι
software		
Access to broad-band (high velocity) Internet	N/A	S

#### **Evaluation Techniques (In-class or hybrid):**

At the beginning and at the end of the course, students are required to take a comprehensive exam. The pre- test will serve as a diagnostic indicator of student dominion of the knowledge, skills and competencies, and the final test should demonstrate improved student dominion. Test questions will aim to simulate national and local exam style questions and may be generated from the *Study Guide for the Registration Examination for Dietitians,* in addition to a variety of other professional sources. The post-test will comprise 100% of the course evaluation.

### **Grading Scheme:**

P (Pass / Approved) or NP (No Pass / Not Approved)

≥ 75% = Pass / Approved

< 75% = No Pass / Not Approved

### **Reasonable Accommodation:**

The University of Puerto Rico complies with all state and federal laws and regulations related to discrimination, including "The American Disabilities Act" (ADA law) and Law #51 from the Puerto Rico Commonwealth (*Estado Libre Asociado de Puerto Rico*). Every student has the right to request and receive reasonable accommodation and Vocational Rehabilitation Services (VRS). Those students with special needs that require some type of particular assistance or accommodation shall explicitly communicate it directly to the professor. Students who are receiving VRS services shall communicate it to the professor at the beginning of the semester so

that appropriate planning and the necessary equipment may be requested according to the Disabilities Persons Affairs Office (*Oficina de Asuntos para las Personas con Impedimentos* (OAPI)) from the Students' Deanship office. Any other student requiring assistance or special accommodation shall also communicate directly with the professor. Reasonable accommodations requests or services DO NOT exempt the student from complying and fulfilling academic and course related requirements and responsibilities.

## Academic Integrity:

The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Article 6.2 of the UPR Students General Bylaws (Board of Trustees Certification 13, 2009-2010) states that academic dishonesty includes, but is not limited to: fraudulent actions; obtaining grades or academic degrees by false or fraudulent simulations; copying the whole or part of the academic work of another person; plagiarizing totally or partially the work of another person; copying all or part of another person answers to the questions of an oral or written exam by taking or getting someone else to take the exam on his/her behalf; as well as enabling and facilitating another person to perform the aforementioned behavior. Any of these behaviors will be subject to disciplinary action in accordance with the disciplinary procedure laid down in the UPR Students General Bylaws.

### **Bibliography:**

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Academy of Nutrition and Dietetics. (2015). eNCPT Student Companion Guide. Chicago: Author

- Academy of Nutrition and Dietetics. (2014). *The Chicago Dietetics Association and The South Suburban Dietetic Association Nutrition Care Manual*. Chicago: Author. Available at: <u>http://www.nutritioncaremanual.org</u>
- Academy of Nutrition and Dietetics & American Diabetes Association. (2014). *Choose Your Foods: Food Choices for Diabetes*. Chicago: Authors.
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- American Dietetic Association. (2010). Position of the American Dietetic Association: Child and Adolescent Nutrition Assistance Programs. *Journal of the American Dietetic Association*, *110*(5), 791-799. Available at <u>http://www.eatrightpro.org/~/media/eatrightpro%20files/practice/position%20and%20practice%</u> <u>20papers/position%20papers/pp\_childadolescentnutritionassistanceprograms.ashx</u>
- Centers for Disease Control and Prevention, National Center for Health Statistics. (2010). 2000 CDC Growth Charts for the United States. Available at: <u>http://www.cdc.gov/growthcharts/</u>

- Center for Disease Control and Prevention. (2000). CDC Growth Charts. Birth to 36 months: Boys Length-for-Age and Weight-for-Age percentiles. Available at: <u>http://www.cdc.gov/growthcharts/data/set1clinical/cj41l017.pdf</u>.
- Commission on Dietetic Registration of the Academy of Nutrition and Dietetics. (n.d.) *Study Guide for the Registration Examination for Dietitians* (10th ed.). ISBN 978-0-88091-970-8. Available at: <u>https://admin.cdrnet.org/vault/2459/web/files/RD%20Study%20Guide%20Order%20Form%2</u> <u>02017.pdf</u>
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- Gropper, S. S., Smith, J. L. & Carr, T. P. (2017). Advanced nutrition and human metabolism (7th ed.). Boston: Cengage Learning.
- Gibson, R. S. (2005). *Principles of nutritional assessment* (2<sup>nd</sup> ed.). Oxford: Oxford University Press.
- Hess & Hunt. (2017). *Review of Dietetics: Manual for the Registration Examination for Dietitians* (2017-2019 ed.). Akron: Culinary Nutrition Publishing, LLC. ISBN-10: 0981676995
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- Morrison, G. & Hark, L. (2009). *Medical Nutrition and Disease: A Case Based Approach*, Cambridge, MA: Blackwell Science.
- National Academy of Sciences. (1989). *Recommended Dietary Allowances* (8th ed.). New York: Author.
- Nelms, M. N. (2017). *Medical Nutrition Therapy: A Case Study Approach* (5<sup>th</sup> ed.) Boston: Cengage Learning. ISBN-13: 978-1-305-62866-3.
- Nelms, M., Sucher, K., & Lacey, K. (2016). *Nutrition Therapy and Pathophysiology* (3rd ed.). Boston: Cengage Learning. ISBN-13: 978-1305111967
- Pennington, J. A., Bowes & Church. (2010). *Food Values of Portions Commonly Used* (19th ed.). Philadelphia: J. B. Lippincott Co.
- Pronsky, Z. (2015). *Food Medication Interactions*, (18th ed.). Pottstown, PA: <u>http://www.foodmedinteractions.com/</u>

Torres, L. (2002). Estrategias de intervención para la inclusión. San Juan, PR: Isla Negra.

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- Willis, M.C. (2011). *Medical Terminology: The Language of Health Care* (3rd ed.). Philadelphia: McGraw-Hill.
- Winterfeldt, E. A., Bogle, M. L. & Ebro, L. L. (2013). *Dietetics Practice and Future Trends* (4th ed.) Burlington, MA: Jones & Bartlett Learning. ISBN: 144967903X

### **Other references and sites:**

MyPlate http://www.choosemyplate.gov/

Dietary Reference Intakes http://fnic.nal.usda.gov/dietary-guidance/dietary-reference-intakes https://www.nap.edu/

Practice Paper of the American Dietetic Association: Using the Dietary Reference Intakes <u>http://www.adajournal.org/article/S0002-8223%2811%2900285-9/abstract</u>

Standard of Medical Care in Diabetes 2017 http://professional.diabetes.org/sites/professional.diabetes.org/files/media/dc\_40\_s1\_final.pdf

KDOQI Clinical Practice Guidelines for Nutrition in Chronic Renal Failure <u>http://www2.kidney.org/professionals/KDOQI/guidelines\_nutrition/dogi\_nut.html</u>

2016 Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically III Patient <a href="http://www.nutritioncare.org/Guidelines">http://www.nutritioncare.org/Guidelines</a> and Clinical Resources/Clinical Guidelines/

Position of the American Dietetic Association: Weight Management <u>https://www.andeal.org/files/files/WeightManagement.pdf</u>

Position of the American Dietetic Association: Integration of Medical Nutrition Therapy and Pharmacotherapy <u>http://www.adajournal.org/article/S0002-8223%2810%2900422-0/abstract</u>