#### I. NUTRITION SCREENING (19%) – Identify risk factors that affect client/group nutritional status.

Tasks		Associated Knowledge
T1. Obtain information regarding sedentary, moderate, or	active K1.	Knowledge of barriers to adequate food and nutrient intake for older
physical activity levels that affect calorie levels, balan	ice, mobility,	adults.
strength, flexibility, and endurance.	K3.	Knowledge of clinical signs of poor bone health.
T3. Identify food, fluid and nutrient intake patterns.	K4.	Knowledge of clinical signs of poor oral health.
T4. Identify effects of drugs, complementary and alternation and dietary supplements on nutrition status.		Knowledge of common interactions as related to older adults between drugs and herbal medicines, food and drugs, drugs and drugs, food and
T5. Identify physical and disease-related conditions affect		herbal medicines.
status.	K6.	Knowledge of continuum of care and tiers of nutrition services for older
T6. Identify activities of daily living/disabilities (ADL) limita		adults.
intake, nutrient intake, and activity level.	K7.	Knowledge of ethnic, cultural, and religious factors that alter nutritional
T7. Identify instrumental activities of daily living (IADL) lim		intake.
food intake, nutrient intake, and activity level.	K9.	Knowledge of nutritional factors that contribute toward healthy aging.
T8. Identify older adult's food security, food sufficiency an		Knowledge of markers of adequate hydration in older adults.
issues on food intake, nutrient intake and nutrition sta		Knowledge of nutrition and health concerns of older adults.
T9. Identify food and nutrition issues that impact health ar		Knowledge of physical changes that occur with aging in older adults.
independent living.	K14.	Knowledge of metabolic changes that occur with aging in older adults.
T10 Identify environmental conditions affecting food intake		Knowledge of physiological changes that occur with aging in older adults.
intake, and physical activity.	K16.	Knowledge of neurological changes that occur in older adults.
T11. Identify cognitive factors affecting food intake, nutrien		Knowledge of sensory changes that occur with aging in older adults.
nutrition status, and physical activity.	K18.	Knowledge of relationship of nutrition in primary, secondary and tertiary
T12. Identify mental health factors affecting food intake, nu	-	disease prevention.
nutrition status, and physical activity.	K19.	Knowledge of risk factors associated with poor nutritional status.
T13. Identify social, psychological and caregiver support fa food intake, nutrient intake, nutrition status, and phys	ical activity.	Knowledge of risk factors associated with socioeconomic, social, and psychological factors.
T14. Identify cultural, ethnic, and religious issues affecting nutrient intake, nutrition status, and physical activity.	food intake, K21.	Knowledge of standards and guidelines for screening and assessment of older adults.
T15. Identify socioeconomic factors affecting food intake, n		Knowledge of tools for assessing physical and functional activity level.
nutrition status, and physical activity.	K23.	Knowledge of screening tools appropriate for evaluating nutritional risk in
T17. Identify access and availability issues affecting food in		programs and facilities designed for and serving older adults.
intake, nutrition status, and physical activity.	K24.	5 5 7 1
T18. Identify chewing and swallowing issues affecting food		supply of safe and nutritious food, and safe recreational opportunities.
nutrient intake and nutrition status.	K26.	6 1
T20. Identify level of nutrition risk in order to determine whe		older adults.
intervention for groups/individuals is necessary.	K27.	Knowledge of prevalence of nutrition-related conditions.
	K108.	Knowledge of effect of physical activity on nutritional status.
T22. Select screening tools valid for use with older adults.	K108.	Knowledge of effect of physical activity on nutritional status.

### II. NUTRITION DATA GATHERING (9%) – Identify nutrition-related problems based on history, current health status and environmental conditions.

intake, nutrient intake, nutrition status, and physical K29. activity. K30.	Knowledge of methods and tools to assess socioeconomic support. Knowledge of methods and tools to perform an age-related nutrition assessment.
<ul> <li>participate in and implement nutrition care plan.</li> <li>T32. Assess anthropometric data against parameters specific for older adults pertaining to body composition.</li> <li>T34. Assess issues in home environment that affect nutritional status.</li> <li>T45. Assess client need for adaptive eating equipment.</li> <li>T46. Assess knowledge and skills of caregivers providing assistance with meals.</li> <li>T56. Perform nutrition-focused physical examination including oral health assessment.</li> <li>T58. Assess changes in nutritional risk factors for older adults.</li> <li>T63. Negotiate nutrition care plan with client, caregiver and k62.</li> </ul>	Knowledge of methods and tools to assess social support. Knowledge of methods and tools to perform cognitive assessment. Knowledge of impact of acute and chronic diseases and conditions on health and nutrition status. Knowledge of anthropometric measurements associated with body composition. Knowledge of Federal regulations associated with nutrition care assessment process in programs and facilities designed for and serving older adults. Knowledge of indicators of involuntary weight loss. Knowledge of methods to assess hydration status for older adults. Knowledge of methods to measure bone mineral content and density. Knowledge of methods to perform a nutrition-focused physical examination. Knowledge of standard anthropometric measures for older adults. Knowledge of educational theories impacting behavior change in older adults. Knowledge of social and psychological family and caregiver support for home safety. Knowledge of food availability, selection, preparation, safety, and adequacy and accessibility of kitchen facilities.

# III. NUTRITION DATA SYNTHESIS (28%) – Organize and categorize data in a meaningful framework that relates to nutrition problems and diagnosis.

Tasks	Associated Knowledge
T23. Assess age-related impact of food preferences on nutrient intake.	K34. Knowledge of age-related pharmacodynamic changes.
T24. Evaluate energy and nutrient intake in community or care setting.	K35. Knowledge of age-related pharmacodynamic changes.
T25. Evaluate family history of disease that may affect nutrient intake and nutrition status.	K35. Knowledge of biochemical tests and measures that affect
T26. Evaluate history and presence of food allergies, hypersensitivities and intolerances.	nutrition status.
T27. Evaluate use of meal replacements and fortified foods.	K38. Knowledge of methods to synthesize information from
T28. Assess food preferences that meet nutritional and cultural needs of older adults.	screening and assessment tools.
T29. Determine impact of activities of daily living (ADL) limitations on ability to consume an	K39. Knowledge of effect of aging on ability to regulate fluid
	balance.
adequate amount of food, nutrients and fluid, and ability to participate in physical activity.	K40. Knowledge of relationship between nutritional status and
T30.Determine impact of instrumental activities of daily living (IADL) on ability to access	skin integrity.
	<b>U</b>
food, nutrients and fluid, and ability to participate in physical activity.	K41. Knowledge of effect of oral health on nutrition status.
T33. Assess data regarding client's medical history and health status.	K42. Knowledge of effect of socioeconomic, social and
T35. Assess level of sedentary, moderate, or active physical activity that affects health conditions and nutrition risk.	psychosocial history on nutrition status.
	K43. Knowledge of effects of age-related physical changes on nutrition status.
T36. Determine client ability to perform physical activity.	
T37. Assess swallowing issues that affect nutrition intake.	K44. Knowledge of effects of age-related metabolic changes on
T38. Evaluate client for signs/symptoms of abuse, neglect or exploitation. T39. Evaluate current use of medications, complementary and alternative medicines,	nutrition status.
dietary supplements, and history and management practices.	K45. Knowledge of effects of age-related physiological changes on nutrition status.
T40. Evaluate laboratory data using gerontological parameters pertaining to nutrition	K46. Knowledge of effects of age-related neurological changes
status.	on nutrition status.
T41. Determine client hydration status.	K47. Knowledge of effects of age-related sensory changes on
T42. Determine etiology of hydration status using biochemical, medical, pharmaceutical,	nutrition status.
physiological, and functional data.	K48. Knowledge of impact of age-related sarcopenia on physical
T43. Evaluate overall health condition for nutrition-related consequences specific to older	and functional capacity, and quality of life.
adults.	K50. Knowledge of mandatory reporting requirements regarding
T47. Assess need for nutrition education of families, caregivers and older adults regarding	elder abuse, neglect and exploitation.
disease management, health promotion and wellness.	K54. Knowledge of methods to obtain information regarding
T50. Evaluate client/group's readiness to learn and change nutrition-related behaviors.	home environment.
T51. Evaluate factors related to food access, selection, and preparation.	K56. Knowledge of recommendations for maximizing
T52. Assess nutritional, physical activity, lifestyle barriers or other limitations that impact	independent eating by older adults.
ability to change eating behaviors or increase physical activity.	K58. Knowledge of continuum of care and tiers of nutritional
T53. Assess positive nutrition, physical activity and lifestyle behaviors.	services for older adults.
T55. Estimate client nutritional requirements.	
T57. Assess primary and secondary nutritional problems.	
T60. Integrate assessment data for diagnosis and plan of care	
T61. Determine need for medical nutrition therapy.	
T70. Identify signs/symptoms in the older adult established for nutrition diagnostic	
categories to provide evidence of a nutrition-related problem.	

### IV. NUTRITION DIAGNOSIS (4%) – Identify occurrence, risk or potential for developing nutritional problems.

Tasks	Associated Knowledge
<ul> <li>T68. Develop diagnostic statement describing nutritional problems associated with nutrient/fluid intake, clinical findings, and behavioral-environmental issues.</li> <li>T69. Identify etiologies of nutritional problems that affect food intake, nutrient intake, nutrition status, and physical activity.</li> <li>T71. Develop nutrition diagnosis for client.</li> <li>T73. Synthesize signs/symptoms of nutrition status to target nutritional interventions</li> </ul>	<ul> <li>K2. Knowledge of clinical signs of undernutrition and overnutrition in older adults.</li> <li>K64. Knowledge of the nutrition care process.</li> <li>K65. Knowledge of components of a nutrition diagnosis specific for older adults.</li> <li>K66. Knowledge of standards for developing nutrition diagnosis statements.</li> <li>K67. Knowledge of data sources and tools for nutrition diagnosis.</li> </ul>

# V. NUTRITION CARE PLAN (10%) – Develop strategies with expected outcomes to change nutrition-related behaviors, physical activity, risk factors, environmental conditions or aspects of health status for an individual, target group or community.

Tasks		Associated Knowledge
T54. Analyze barriers/solutions to implementation	K12.	5
of nutrition care plan.	112.	Dietary Guidelines for Americans and modifications necessary for management of acute and
T62. Determine need for referral to nutrition, social		chronic diseases and conditions.
services, medical and allied health care	K61	Knowledge of Federal regulations that pertain to programs and facilities as related to nutrition
professionals.	1.01.	care of older adults.
T74. Formulate goals and plan of action based on	K68	Knowledge of recommendations for maximizing independent eating by older adults.
severity of problem, safety, client's needs and	K69.	
priorities, and likelihood of success.		adults.
T75. Prioritize nutritional diagnoses/problems in	K70.	
terms of importance and urgency to determine	_	and formal caregiver support, and their impact on nutrition interventions.
most important nutritional interventions.	K71.	• • • •
T76. Prioritize opportunities for health promotion,	K72.	
disease prevention, risk reduction and chronic		different cultures/ethnicities/religions and food preferences of older adults.
disease management.	K73.	Knowledge of community programs providing food and nutrition services to older adults.
T81. Develop monitoring plan for outcomes	K74.	Knowledge of complementary and alternative therapies and medicines that may affect
indicators relative to the client/group defined		nutrition status.
needs, nutrition diagnosis, nutrition goals,	K76.	Knowledge of dining issues for the eating-disabled older adults.
physical activity goals, and disease state.	K77.	
T82. Provide interventions as defined by nutrition		drugs, drugs and nutrients that affect food and nutrition intake.
care plan.	K78.	<b>o i i</b>
T84. Implement interdisciplinary nutrition care	K79.	5 5 5
discharge plans.		nursing and other facilities.
T87. Recommend adaptive eating equipment needed to promote independence.	K80.	8 8
T88. Administer nutrition service programs in home	1/04	the home.
care, community-based programs, and health	K81.	0 0
care settings.	1/00	activity for older adults.
T89. Collaborate with interdisciplinary team	K82. K83.	8 81
regarding client care in health care and	103.	Knowledge of Medical Nutrition Therapy (MNT) protocols for chronic diseases and conditions of older adults.
community settings.	K84	Knowledge of protocols for anorexia of aging and failure to thrive.
	K85.	
	K86.	
	K87.	
		Knowledge of menu writing and food intake planning to liberalize diets for older adults in
		various settings.
	K89.	Knowledge of food texture modifications, and texture-modified products and availability for
		older adults.
	K90.	Knowledge of nutrition guidelines for clients receiving palliative care.
	K91.	
		standards.

Tasks	Associated Knowledge
	K92. Knowledge of physical, metabolic, physiological, psychosocial, neurological changes that affect nutrition, health, and physical activity.
	K93. Knowledge of acute and chronic diseases and conditions that affect nutrition, health status, physical activity and functionality status of older adults.
	K94. Knowledge of special considerations for older surgical patients.
	K95. Knowledge of theories of behavior change specific for older adults in adopting healthy lifestyles.
	K96. Knowledge of home and community-based nutrition service options, e.g. Medicaid Waivers, PACE, adult day service, day health rehabilitation.
	K97. Knowledge of nutrition services included in Medicaid and Medicare programs and services.
	K98. Knowledge of evidence-based physical activity programs and strategies for older adults.
	K99. Knowledge of standards and guidelines for nutrition counseling of older adults.
	K100. Knowledge of standards and guidelines for nutrition education of older adults.
	K107. Knowledge of congregate and home delivered meal services.

VI. NUTRITION COUNSELING AND EDUCATION (4%) – Provide information about nutrition of older adults to individuals, target groups or community to shape, guide and motivate behavior change for the purpose of improving health and managing disease.

Tasks	Associated Knowledge
T91. Select existing programs and materials for older adults.	K101. Knowledge of adult learning theories relevant to educating older adults, families, and caregivers in nutrition care.
T92. Provide nutrition counseling to manage acute and chronic diseases and conditions for older adults.	K102. Knowledge of language and literacy issues that affect the delivery of nutrition counseling and education.
T93. Develop materials that use evidence-based information to target audiences.	K103. Knowledge of techniques for providing culturally and religiously appropriate nutrition education, counseling, physical activity and health promotion.
T94. Provide nutrition education to older adults, families and caregivers regarding basic nutrition needs	K104. Knowledge of facilitation process in goal setting to assist behavior change for older adults.
regarding health promotion, wellness, and	K105. Knowledge of services and programs across socioeconomic levels.
disease/disability management.	K106. Knowledge of community mental health services relevant to older adults.
T96. Provide education and training to other professionals, decision makers, and policymakers	K109. Knowledge of counseling techniques and evidence-based behavior change principles appropriate for older adults, caregivers and families.
on role of nutrition and the registered dietitian in the health, independence, quality of life and cost	K110. Knowledge of Federal programs involving benefits, food assistance and preventive health services for older adults.
effective services for older adults. T97. Provide training to formal and informal caregivers	K111. Knowledge of health promotion programs related to alcohol and substance abuse reduction in older adults.
of older adults.	K112. Knowledge of health promotion programs related to prevention and reduction of chronic disabling conditions in older adults.
	K113. Knowledge of programs and services related to home safety for older adults. K114. Knowledge of programs and services related to smoking cessation.
	K115. Knowledge of programs and services related to stress management and grief counseling for older adults.
	K116. Knowledge of programs and services related to weight management for older adults. K117. Knowledge of physical activity programs and services for older adults.
	K118. Knowledge of programs and services providing caregiver and family support.
	K119. Knowledge of programs and services that address medication management for older adults.
	K120. Knowledge of home- and community-based programs and services that address health, social, nutritional, and educational needs of older adults.
	K138. Knowledge of techniques for communicating with older adults.

# VII. NUTRITION MONITORING AND EVALUATION (10%) – Review and measure client/group progress in response to nutritional and physical activity interventions at scheduled intervals.

Tasks	Associated Knowledge
<ul> <li>T99. Determine client/community intervention goals and expected outcomes</li> <li>T100. Develop qualitative and quantitative criteria to measure intervention outcomes.</li> <li>T101. Select instruments to measure nutritional outcomes.</li> <li>T103. Collect data relevant to progress in nutrition care plan.</li> <li>T104. Collect data relevant to program implementation and intervention.</li> <li>T105. Evaluate intervention outcomes by comparing to goals and established evidence-based standards.</li> <li>T106. Conduct outcomes assessment relevant to goals, nutrition diagnosis, interventions, outcomes and quality management indicators.</li> <li>T107. Incorporate monitoring data feedback to improve nutrition care process and intervention outcomes.</li> <li>T108. Evaluate ongoing need for nutrition services.</li> <li>T109. Evaluate need for continuation of nutrition/medical/social services at predetermined intervals.</li> <li>T110. Identify reference standards to which nutrition assessment data will be compared.</li> <li>T111. Establish outcome indicators for nutrition interventions in observable, measurable terms.</li> <li>T112. Collect data for documenting outcomes related to nutrition and physical activity status of older adults.</li> <li>T113. Coordinate quality assurance with other health care disciplines.</li> <li>T115. Modify practice based on scientific evidence for older adults.</li> </ul>	<ul> <li>K121. Knowledge of components of client/program nutrition monitoring and evaluation.</li> <li>K122. Knowledge of tools and methods to measure nutritional outcomes.</li> <li>K123. Knowledge of factors that determine whether to continue care, refer or discharge client/group from nutrition care.</li> <li>K124. Knowledge of methods for evaluating individual and group outcomes related to the nutrition diagnosis and goals established in intervention plan.</li> <li>K125. Knowledge of standards and guidelines for nutrition and case management.</li> <li>K127. Knowledge of nutrition care model as it relates to ongoing evaluation for older adults.</li> </ul>

VIII. FOODSERVICE (10%) – Develop food service programs that provide quality nutrition according to standards of care.

Tasks	Associated Knowledge
T116. Assess food safety, sanitation, and storage relative	K75. Knowledge of Dietary Reference Intakes, Dietary Guidelines for Americans,
to unique needs of older adults.	macronutrients, micronutrients, and other bioactive food components for older adults.
T117. Assess food handling methods relative to unique	K128. Knowledge of requirements pertaining to Older Americans Act and other Federal
needs of older adults.	nutrition programs targeting older adults.
T118. Assess nutrient and food quality relative to needs of older adults.	K129. Knowledge of food safety training and education materials designed for and serving older adults.
T119. Assess sensory qualities of food and meals relative	K130. Knowledge of Federal/state regulations pertaining to dining environments in programs
to needs of older adults.	and facilities serving older adults.
T120. Assess appropriateness of meals for older adult populations of diverse health conditions, religious	K131. Knowledge of Federal/state regulations pertaining to dietary service staffing in programs and facilities designed for and serving older adults.
customs/practices, and cultures.	K132. Knowledge of Federal/state regulations pertaining to dining and food service in
T121. Assess foodservice systems and preparation	programs and facilities designed for and serving older adults.
methods relative to texture modifications, age-	K133. Knowledge of Federal/state regulations pertaining to food storage and food storage
related nutrient needs, special diet needs, physical	rooms in programs and facilities designed for and serving older adults.
and functional abilities and availability of equipment.	K134. Knowledge of Federal/state regulations pertaining to kitchen/food service in programs
T122. Assess availability of adaptive/assistive devices to	and facilities designed for and serving older adults. K135. Knowledge of Federal/state regulations pertaining to menus and nutritional adequacy.
promote optimal food intake in older adults.	K136. Knowledge of Federal regulations pertaining to safety and sanitation in programs and
T123. Assess environmental condition of dining areas in	facilities designed for and serving older adults.
home, community-based or care settings.	K137. Knowledge of food safety issues that may affect older adults.
T125. Develop foodservice systems that incorporate	K139. Knowledge of standards and guidelines for training of personnel who work with food
client/resident-focused needs and preferences.	service programs for older adults.
T126. Propose revisions and changes in foodservice	K140. Knowledge of standards and guidelines pertaining to food service
systems to meet the needs of clients/residents.	equipment/water/physical facilities.
T129. Assess staff knowledge and skills related to	K141. Knowledge of standards of practice associated with estimating staffing needs in
providing food service to older adults.	programs and facilities designed for and serving older adults.
T130. Meet regulation standards within menu planning development.	K142. Knowledge of standards of practice associated with menu planning, calories and portion sizes for older adults.
T131. Assess disaster preparedness for older adults by	K143. Knowledge of best practices relating to dining experience/feeding of older adults with
ensuring adequate food and water supplies.	chronic diseases.
	K144. Knowledge of effects of time and environmental conditions on food quality and nutrient
	retention for congregate and home delivered meals.
	K145. Knowledge of standards for disaster preparedness for facility-based and community-
	based care settings.

IX. PROFESSIONAL PRACTICE (7%) – Integrate relevant continuing professional education with practice; advocate for providing nutrition services; maintain knowledge of current Federal regulations.

Tasks	Associated Knowledge
<ul> <li>T127. Use customer satisfaction survey results to drive quality improvements.</li> <li>T132. Recognize considerations and issues unique to initiating nutrition support in older adults.</li> <li>T133. Recognize responsibilities related to provision of palliative nutrition care of older adults.</li> <li>T134. Recognize appropriateness of liberalized nutrition interventions for frail, older adults.</li> <li>T135. Discuss pros and cons of aggressive nutrition support of frail, older adults with family and/or caregivers.</li> <li>T137. Advocate for client/resident in situations involving advanced directives, living will, code status, end of life issues.</li> <li>T138. Document nutrition services provided in home care, community-based programs and care facilities.</li> <li>T139. Document decisions regarding ongoing need for nutrition services.</li> </ul>	<ul> <li>K8. Knowledge of impact of nutrition on aging process.</li> <li>K25. Knowledge of Federal and national health indicators and disease prevention data.</li> <li>K146. Knowledge of ethical guidelines regarding end of life issues including refusal of treatment.</li> <li>K147. Knowledge of Federal regulations associated with the survey process in programs designed for and serving older adults.</li> <li>K148. Knowledge of Joint Commission of Healthcare Organizations (JCAHO) standards for abbreviations in documentation of nutrition care.</li> <li>K149. Knowledge of legal obligations regarding advanced directives in long term and end-of-life care.</li> <li>K150. Knowledge of standards and guidelines for documenting nutrition care.</li> <li>K151. Knowledge of authorizing legislation and implementing regulations (e.g., Medicare, Medicaid, USDA food assistance programs, Older Americans Act, etc.) that address needs of older adults.</li> <li>K153. Knowledge of evidence-based theories of aging.</li> <li>K154. Knowledge of ADA Position Papers related to older adults.</li> <li>K155. Knowledge of Nutrition Care Process and Standard Language.</li> </ul>