Rubrics for Assessing the Bachelor of Exercise Science Student Learning Outcomes

1. Demonstrate proficiency in health and fitness assessment

Description: demonstrating proficiency in health and fitness assessments includes:

- Pre-Activity Screens: administration of pre-activity screens to maximize client safety and minimize risks (*e.g.,* informed consent, PAR-Q, health/medical history)
- Readiness Assessment: Determination of a client's readiness to participate in a health-related physical activity program(*e.g.,* CVD risk stratification)
- Physiology Fitness Assessment: Conducting and interpreting cardiorespiratory fitness assessments (*e.g.,* measuring HR, measuring blood pressure, cycle ergometer submaximal tests, calculating VO_2max)
- Kinesiology Fitness Assessment: Conducting and interpreting muscular strength, endurance and flexibility assessments (*e.g.,* identification of bony landmarks, 1-RM, goniometry, movement screens)
- Body Composition Assessments: Conducting and interpreting anthropometric and body composition assessments (*e.g.,* skinfold, circumference measurements, BOD POD)

Criteria	1	2	3*	4
Pre-Activity Screens and Readiness Assessment	Completely omits pre-activity screens or readiness assessments from their initial client assessment invalidating the results of their assessment	Omits either the informed consent or health & medical history in their initial client assessment. Omission of select questionnaires and screens substantially influences exercise prescription	Adequately administers both the informed consent and health & medical history but had some errors in their administration. Errors would nominally influence exercise prescription decisions	Properly administers pre-activity screens and readiness assessments
Assessment of Risk Stratification	Demonstrates substantial errors in a client's risk assessment that would lead to a faulty selection of exercise assessment and/or prescription	Demonstrates substantial errors in a client's risk assessment that may result in the selection of faulty exercise assessments and/or prescription	Demonstrates minimal errors in a client's risk assessment that would have nominal influence on exercise assessment and/or prescription	Properly determines the assessment of risk for a client
Physiology Fitness Assessments *(apply rubric for each skill)*	Demonstrates errors in either the selection, administration and/or interpretation of assessment that would invalidate the results of the assessment completely	Displays substantial errors in either the selection, administration and/or interpretation or assessment that would substantially influence training prescription decisions	Displays minimal errors in either the selection, administration and/or interpretation of assessment that would nominally influence training prescription decisions	Properly selects, administers and interprets results from assessment
Kinesiology	Demonstrates	Displays substantial	Displays minimal	Properly selects,

Fitness Assessments *(apply rubric for each skill)*	errors in either the selection, administration or interpretation of assessment that would invalidate the results of the assessment completely	errors in either the selection, administration and/or interpretation or assessment that would substantially influence training prescription decisions	errors in either the selection, administration and/or interpretation of assessment that would nominally influence training prescription decisions	administers and interprets results from assessment
Body Composition Assessments *(apply rubric for each skill)*	Demonstrates errors in either the selection, administration or interpretation of assessment that would invalidate the results of the assessment completely	Displays substantial errors in either the selection, administration and/or interpretation or assessment that would substantially influence training prescription decisions	Displays minimal errors in either the selection, administration and/or interpretation of assessment that would nominally influence training prescription decisions	Properly selects, administers and interprets results from assessment

*** A score of "3" represents the minimum passing grade for an undergraduate student.**

2. Develop safe and effective exercise programming based on the FITT principles which address all health-fitness related variables

Description: demonstrating proficiency in developing safe and effective exercise programs based on the FITT principles, addressing all health-fitness related variables includes:

- General exercise program prescription: appropriate exercise program creation based on client health status, baseline fitness assessment data, and client goals
- Cardiorespiratory exercise program prescription: using the FITT-VP model in creation of a comprehensive cardiovascular exercise training program
- Muscular strength/endurance program prescription: using the FITT-VP model in creation of a comprehensive muscular strength/endurance training program
- Flexibility exercise program prescription: using the FITT-VP model in creation of a comprehensive flexibility exercise training program
- Exercise progression guidelines: adjusting the FITT-VP model in response to changes in cardiorespiratory, muscular strength/endurance, and flexibility exercise program participation
- Exercise prescription for select populations: Make appropriate modifications to each FITT-VP exercise program variable for select populations (persons with chronic diseases, pregnancy, youth and the elderly)

Criteria	1	2	3*	4
General exercise program prescription	Displays substantial errors in program design in more than one of the areas: client's health status, baseline fitness assessment, or client's goals.	Displays substantial errors in program design in one of the areas: client's health status, baseline fitness assessment, or client's goals.	Designs an exercise program with nominal errors (i.e., won't negatively impact client) based on client's health status, baseline fitness assessment, and client's goals.	Designs an appropriate exercise program based on client's health status, baseline fitness assessment, and client's goals.
Cardiorespiratory exercise program prescription	Displays substantial errors in the exercise prescription in three or more elements of the FITT-VP model.	Displays substantial errors in the exercise prescription in up to two elements of the FITT-VP model.	Designs an exercise prescription based on the FITT-VP model with minor errors or generalities (i.e., won't negatively impact client).	Designs an appropriate comprehensive exercise prescription based on the FITT-VP model.
Muscular strength/ endurance program prescription	Displays substantial errors in the exercise prescription in	Displays substantial errors in the exercise prescription in up	Designs an exercise program based on the FITT-VP model with nominal errors	Designs an appropriate comprehensive exercise program

	three or more elements of the FITT-VP model.	to two elements of the FITT-VP model.	(i.e., won't negatively impact client).	based on the FITT-VP model.
Flexibility exercise program prescription	Displays substantial errors in the exercise prescription in three or more elements of the FITT-VP model.	Displays substantial errors in the exercise prescription in up to two elements of the FITT-VP model.	Designs an exercise program based on the FITT-VP model with nominal errors (i.e., won't negatively impact client).	Designs an appropriate comprehensive exercise program based on the FITT-VP model.
Exercise progression guideline	Does not adjust the program in at least two of the areas: client's progress, changes in health status, and goals according to the FITT-VP model.	Displays substantial errors in the adjustment of the program based on client's progress, changes in health status, and goals according to the FITT-VP model.	Adjusts the program based on client's progress, changes in health status, and goals according to the FITT-VP model with nominal errors (i.e., won't negatively impact client).	Properly adjusts the program based on client's progress, changes in health status, and goals according to the FITT-VP model.
Exercise prescription for select populations	Does not use modifications of the program for special populations based on the FITT-VP model.	Displays substantial errors in the modifications of the program for special populations based on the FITT-VP model.	Modifies most aspects of the program for special populations based on the FITT-VP model with nominal errors (i.e., won't negatively impact client).	Properly modifies the program for special populations based on the FITT-VP model.

3. Develop safe and effective programming to enhance athletic performance

Description: Developing safe and effective training programs to enhance athletic performance based on current evidence includes:

- Proper assessment of performance factors and biomechanical screens for the purpose of improving performance and preventing injury
- Proper training program and periodization planning for the purpose of improving performance
- Proper resistance training prescription for the purpose of improving performance and preventing injury
- Proper metabolic conditioning prescription for the purpose of improving performance
- Proper speed, agility and plyometric prescription for the purpose of improving performance and preventing injury

Criteria	1	2	3*	4
Assessment and Injury Prevention	Did not implement assessment strategies prior to implementation of the S&C or injury prevention program.	Demonstrated errors in assessment selection and/or interpretation of assessments leading to inadequate S&C program design and/or implementation of injury prevention strategies.	Generally utilized appropriate assessments with some errors in interpretation of assessments. Errors lead to minor program design flaws in S&C programming or injury prevention strategies	Utilized appropriate assessments and correctly interpreted assessments to influence and design appropriate S&C programs and injury prevention strategies
Periodization and Programming	Periodization strategies are not used resulting in flawed training programming	Inadequate periodization or training plan structure resulting in inadequate training programming.	Able to create a clear and logical training plan based on most current evidence but flawed implementation results in suboptimal programming	Creates clear and logical training programs based on most current periodization evidence and implements programs effectively
Resistance Exercise Prescription	Is unable to properly prescribe resistance exercise	Resistance training prescription is flawed and errors significantly detract from program's effectiveness	Able to implement resistance training prescription with minimal error which does not significantly detract from	Implements resistance training prescription based on current evidence as it relates to hypertrophy, strength and power.

			program's effectiveness	
Metabolic Conditioning	Is unable to properly prescribe metabolic conditioning	Metabolic conditioning prescription is flawed and errors significantly detract from program's effectiveness	Able to implement metabolic conditioning with minimal error which does not significantly detract from program's effectiveness	Implements metabolic conditioning prescription based on current evidence as it relates to metabolic power, endurance performance and sports conditioning.
Speed, Agility, and Plyometric Prescription	Is unable to properly prescribe speed, agility and plyometric exercise	Speed, agility and plyometric prescription is flawed and errors significantly detract from program's effectiveness	Able to implement speed, agility and plyometric training prescription with minimal error which does not significantly detract from program's effectiveness	Implements speed, agility and plyometric prescription based on current evidence as it relates to strength endurance, power production and speed training.

4. Apply effective strategies for promoting physical activity initiation and maintenance

Description: Applying effective strategies for physical activity (PA) initiation and maintenance includes:

- Effective interpersonal communication (e.g., open posture, eye contact, targeted praise, empathy)
- Application of behavior change theories (e.g., transtheoretical model, health belief model, theory of planned behavior)
- Application of an Ecological Approach (individual, interpersonal, environment, and policy levels of influence) to address the four domains of physical activity (recreation, transportation, occupation, and household)
- Identification of recommended strategies for promoting physical activity in communities (according to the Community Guide for Preventive Service and National PA Plan)
- Application of behavior modification strategies (e.g., goal setting, planning skills, value linking) appropriate to clients' situations (e.g., age, income, education, environment)

Criteria	1	2	3*	4
Effective Interpersonal Communication	Uses innapropriate verbal and non-verbal behaviors	Uses verbal or non-verbal behaviors that that communicate confidence and encouragement	Uses verbal and non-verbal behaviors that communicate confidence and encouragement	Uses verbal and non-verbal behaviors that exude confidence and encouragement
Behavior Change Theories	Incorrectly selects and applies behavior change theory to influence PA behavior	Selects and applies behavior change theory to explain and influence PA behavior with substantial errors	Selects and applies behavior change theory to explain and influence PA behavior with minor errors	Selects and applies behavior change theory appropriate to explain and influence PA behavior
Application of Ecological Model to PA Domains	Unable to apply the ecological model to influence the various domains of physical activity	Applies approach incorporating more than one, level of the ecological model to influence some of the domains of physical activity	Applies approach incorporating more than one, level of the ecological model to influence each domain of physical activity	Applies approach incorporating all levels of the ecological model to influence each domain of physical activity
Recommended Approaches	Unable to identify recommended approaches for promoting PA in communities	Identifies some, but not all of the recommended approaches for promoting PA in communities with substantial errors	Identifies recommended approaches for promoting PA in communities with minor errors	Correctly identifies and describes all recommended approaches for promoting PA in communities

Behavioral Modification Strategies	Unable to identify or apply behavior modification strategies based on client situation/needs	Applies behavior modification strategies appropriate for some aspects of the client's situation/needs but with substantial errors	Applies behavior modification strategies based on client situation/needs with minor errors (i.e., doesn't impact client negatively)	Correctly applies appropriate behavior modification strategies based on client situation/needs

5. Effectively manage fiscal, physical, and human resources for health fitness facilities

Description: Effective management of fiscal, physical, and human resources for health fitness facilities includes:

- Creating an appropriate risk management plan
- Creating an appropriate injury prevention program
- Managing human resources in accordance with leadership organization, and management techniques
- Managing fiscal resources in accordance with leadership organization, and management techniques
- Developing an appropriate marketing plan to promote programs, services, and facilities

Criteria	1	2	3*	4
Risk Management	Unable to create a risk management plan to reduce client, employee and business risk	Creates an appropriate risk management plan with major errors to reduce client, employee and business risk	Creates an appropriate risk management plan with minor errors to reduce client, employee and business risk	Creates an appropriate risk management plan to reduce client, employee and business risk
Injury Prevention Program	Unable to create an injury prevention program including emergency policies and procedures	Creates an appropriate injury prevention program, including emergency policies and procedures, with major errors	Creates an appropriate injury prevention program, including emergency policies and procedures, with minor errors	Creates an appropriate injury prevention program, including emergency policies and procedures
Human Resource Management	Unable to identify strategies for managing human resources in accordance with leadership, organization, and management techniques.	Identifies strategies for managing human resources in accordance with leadership, organization, and management techniques with substantial errors	Identifies strategies for managing human resources in accordance with leadership, organization, and management techniques with minor errors	Correctly identifies strategies for managing human resources in accordance with leadership, organization, and management techniques
Fiscal Resource Management	Unable to identify strategies for managing fiscal resources in accordance with leadership, organization, and	Identifies strategies for managing fiscal resources in accordance with leadership, organization, and	Identifies strategies for fiscal human resources in accordance with leadership, organization, and	Correctly identifies strategies for fiscal human resources in accordance with leadership,

	management techniques.	management techniques with substantial errors	management techniques with minor errors	organization, and management techniques
Marketing Plan	Unable to develop a marketing plan to promote programs, services and facilities.	Develops a marketing plan to promote programs, services and facilities with a few major errors	Develops a marketing plan to promote programs, services and facilities with a few minor errors	Develops appropriate marketing plan to promote programs, services and facilities.