PROGRAM PROPOSAL FORM

☒ **Preliminary Approval** – Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.

☐ **Final Approval** – Check here when completing this form after the Vice President for Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

Program Name: **Division and Department:** **Type of Award:** **Effective Term/Year:** **Initiator:**	Exercise Science Division of Mathematics, Natural, and Behavioral Sciences Department of Life Sciences ☐ AA ☒ AS ☐ AAS ☐ Cert. ☐ Adv. Cert. ☐ Post-Assoc. Cert. ☐ Cert. of Comp. September, 2008 Marvin Boluyt	**Program Code:** ASESCI **CIP Code:** 31.0505
Program Features Program's purpose and its goals. Criteria for entry into the program, along with projected enrollment figures. Connection to other WCC programs, as well as accrediting agencies or professional organizations. Special features of the program.	Purpose: The Exercise Science program is designed to prepare students for employment at the entry level in health and fitness-related occupations and/or for higher education by training in the sciences that relate to physical activity, health, fitness, nutrition, wellness, and weight control. Completion of the two-year degree will prepare students for the ACSM certification exams for personal trainer and/or health/fitness instructor. The AS degree in Exercise Science from WCC is designed to prepare students for transfer to a 4-year institution that offers degrees in Sports Medicine-Exercise Science, Kinesiology, Movement Science, and Physical Education. Individuals that transfer to 4-year institutions in these fields (and in some cases go beyond the 4-year degree) can be expected to find employment in a wide variety of occupations, including (but not limited to) physician, physician's assistant, physical therapist, physical therapist assistant, research scientist, fitness manager, worksite wellness coordinator, exercise specialist, clinical exercise physiologist, coach, physical education teacher, and other exercise-related positions. Goals: All graduating students will be prepared for the certification exams for "Personal Trainer" or "Health/Fitness Instructor" by the American College of Sports Medicine (ACSM), thereby qualifying them for entry level positions in the health/fitness industry. Some students will matriculate to 4-year colleges and universities and successfully graduate from those institutions. Some students will continue in graduate and profession post-graduate education. Entry criteria: None beyond WCC admission criteria Connections: Students will be required to obtain certification by the Red Cross (First AID/AED). Students are encouraged to become certified as either "Personal Trainer", or "Health/Fitness Instructor" by the ACSM Special features: Relies heavily on existing courses at WCC. Proposes 3 new courses. Provides a unique COD course in Exercise Science. Provides laboratory experiences in Motor Control, Biomechanics, and Exercise Physiology. Provides career awareness material. Provides a capstone course that integrates testing procedures, interpretation of tests and of scientific literature, and requires students to report their results and conclusions in a scientific journal-style manner.	
Need Need for the program with evidence to support the stated need.	1. Given the rapid and unprecedented rise in prevalence of obesity in the United States and in Michigan in the last 3 decades coupled with the reduction in physically demanding jobs in modern economies, there is a need for individuals trained in the sciences that relate to physical activity, health, fitness, nutrition, wellness, and weight control. The evidence for this need is well-documented in the literature, and is summarized quite well in the Surgeon General's report entitled "Physical Activity and Health" released in 1996.	

	2. EMU seeks qualified transfer students and has helped craft an articulation agreement for students to complete a combined degree program culminating in an Associate in Science degree in Exercise Science from WCC, and a Bachelor of Science degree in Sports Medicine-Exercise Science from EMU. 3. UM seeks qualified transfer students and has helped craft a draft articulation agreement for students to complete a combined degree program culminating in an Associate in Science degree in Exercise Science from WCC, and a Bachelor of Science degree in Kinesiology-Movement Science from UM. 4. UM seeks qualified transfer students in Physical Education (working with Pat VanVolkinburg and Julie Simon at UM to enhance transfer procedures).	
Program Outcomes/Assessment State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program. Include assessment methods that will be used to determine the effectiveness of the program.	Outcomes 1. Demonstrate proficiency in interpreting & evaluating performance and biometric data 2. Demonstrate competence in the knowledge, skills, and abilities required of the Certified Personal Trainer or Health/Fitness Instructor 3. Demonstrate success in Exercise Science coursework at 4-year institutions	Assessment 1. Performance on Final Project in BIO 225 Tests and Measurements in Exercise Science 2. ACSM Certification Examinations (one of these) A. Personal Trainer B. Health/Fitness Instructor 3. Performance data of transfer students at 4-year schools

Please return completed form to the Office of Curriculum & Assessment and email an electronic copy to **sjohn@wccnet.edu** for posting on the website.

Curriculum

List the courses in the program as they should appear in the catalog. List minimum credits required. Include any notes that should appear below the course list.

MACRAO Requirements (33 credits)

1. English Writing Requirement (7 credits)
ENG 111 Composition I 4
ENG 226 Composition II 3

2. Math/Science Requirement (8 credits)
[1] MTH 160 Basic Statistics 4
BIO 101 Concepts of Biology 4

3. Humanities Requirement (9 credits)
Complete one speech course: 3
COM 101, 102, 142, 183, 200, or 225
Complete two courses: ***See note below*** 6
Choose from courses approved by WCC to satisfy
The MACRAO humanities requirement.

4. Social Science Requirement (9 credits)
PSY 100 Introductory Psychology 3
Complete two courses: ***See note below*** 6
Choose from courses approved by WCC to satisfy
The MACRAO social science requirement
(See the WCC catalog)

Exercise Science Specific Requirements (34 credits)

BIO 103 General Biology II 4
[2] BIO 110 Physiology of Exercise (new) 3
* BIO 111 Anatomy & Phys-Normal Structure & Func 5
[2] BIO 201 Biology of Exercise (new) 4
BIO 215 Cell and Molecular Biology 4
CEM 111 General Chemistry I 4
MTH 178 General Trigonometry 3
PHY 111 General Physics I 4
HSC 131 CPR/AED/First Aid 1
[2,3] BIO 225 Tests & Measurements in Exercise Sci (new) 3

Total for AS degree in Exercise Science ..... (68 credits)

[1] Prerequisite for BIO 225
[2] New course
[3] Capstone course

Budget Specify program costs in the following areas, per academic year: See attached budget planning detail		START-UP COSTS	ONGOING COSTS
	Faculty	**$ see attached**	**$ see attached**
	Training/Travel	**$1,000.00**	**$1,000.00**
	Materials/Resources	.	.
	Facilities/Equipment	**$35,000.00**	**$1,000.00**
	Other	.	.
	TOTALS:	**$ 36,000**	**$ 2,000.**
Program Description for Catalog and Web site	The Exercise Science program is designed to prepare students for employment at the entry level in health and fitness-related occupations and/or for higher education by training in the sciences that relate to physical activity, health, fitness, nutrition, wellness, and weight control. Completion of the two-year degree will prepare students for the ACSM certification exams for personal trainer and/or health/fitness instructor. The AS degree in Exercise Science from WCC is designed to prepare students for transfer to a 4-year institution that offers degrees in Sports Medicine-Exercise Science, Kinesiology, Movement Science, and Physical Education. Individuals that transfer to 4-year institutions in these fields (and in some cases go beyond the 4-year degree) can be expected to find employment in a wide variety of occupations, including (but not limited to) physician, physician's assistant, physical therapist, physical therapist assistant, research scientist, fitness manager, worksite wellness coordinator, exercise specialist, clinical exercise physiologist, coach, physical education teacher, and other exercise-related positions.		
Program Information	**Accreditation/Licensure** - None **Advisors** – Marvin Boluyt **Advisory Committee** – to be created (Suggested personnel include Shel Levine from EMU, Victor Katch and Pat VanVolkinburg from UM, John Harris from Healthways, and individuals from local fitness facilities) **Admission requirements** – None beyond those required for admission to the college **Articulation agreements – 1.** Negotiated with EMU, 2) In the process of negotiating with UM-Movement Science, and UM-Physical Education **Continuing eligibility requirements** – Computer Literacy and Information Technology Test		

Assessment plan:

Learning outcomes to be assessed	Assessment tool	When assessment will take place	Describe population to be assessed	Number of students to be assessed
A. Demonstrate proficiency in interpreting & evaluating performance data and biometric data	Performance on Final Project in BIO 225 Tests and Measurements in Exercise Science	Winter 2010 Annually thereafter	All students in all sections of BIO 225	All students who complete BIO 225
B. Demonstrate competence in the knowledge, skills, and abilities required of the Certified Personal Trainer or Health/Fitness Instructor Exam	ACSM Certification Examinations (one of these) A. Personal Trainer B. Health/Fitness Instructor	Winter 2010 Annually thereafter	All students who take the certification exam(s) and agree to share the outcome(s)	All students who to take the certification exam(s) and agree to share the outcome(s)

C. Demonstrate success in Exercise Science coursework at 4-year institutions	Performance data of transfer students at 4-year schools	Winter 2011 Annually thereafter	Transfer students to Sports Medicine-Exercise Science at EMU and Kinesiology at UM	All transfer students to Sports Medicine-Exercise Science program at EMU and to Kinesiology at UM

Scoring and analysis of assessment:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric/scoring guide.
   A. Performance on Final Project in BIO 225 course (rubric attached).
   B. External evaluation (ACSM Certification Exam results reported by students to Faculty).
   C. Performance data of transfer students to EMU and UM.

2. Indicate the standard of success to be used for this assessment.
   A. 70% students who complete BIO 225 will earn a composite average score of 2 or better on the Final Project.
   B. 70% of students who take an ACSM certification exam will successfully gain a certification credential within 2 attempts.
   C. 70% of students who transfer to Sports Medicine-Exercise Science at EMU and Kinesiology at UM will maintain a GPA of 2.8 or better and 70% will graduate within 3 years of transfer.

3. Indicate who will score and analyze the data (data must be blind-scored).
   A. Performance on Final Project in BIO 225 course as evaluated by full time Life Sciences Faculty.
   B. External evaluation by ACSM Certification Exams. Students provide evidence of certification to Life Sciences Faculty.
   C. Performance data of transfer students to Sports Medicine-Exercise Science at EMU and Kinesiology at UM.

4. Explain the process for using assessment data to improve the program.
   The assessment data gathered in this way will provide information for program review and revision. The full time faculty of the Life Sciences department will review the data and determine whether changes in emphasis and/or revisions to the program should be made to improve the outcomes.

REVIEWER	PRINT NAME	SIGNATURE	DATE
Department Chair/Area Director	Esta Grossman Bill Nevers	Esta Grossman Willa Nevers	1/15/08 1/15/08
Dean	Martha Showalter	M. Showalter	1/15/08
Vice President for Instruction ☐ Approved for Development ☒ Final Approval	R	Roger M. Paley.	2/11/08
President		Larry C. Whitwell	4/26/08
Board Approval			

logged 1/15/08 sj ✓
2/26/08 sh

Program Information Report

Transfer and University Parallel Programs
Math and Science
Exercise Science (ASESCI)
Associate in Science Degree

Program Effective Term: **Fall 2008**

The Exercise Science program is designed to prepare students for employment at the entry level in health and fitness-related occupations and/or for higher education by training in the sciences that relate to physical activity, health, fitness, nutrition, wellness, and weight control. Completion of the two-year degree will prepare students for the ACSM certification exams for personal trainer and/or health/fitness instructor. The AS degree in Exercise Science from WCC is designed to prepare students for transfer to a four-year institution that offers degrees in sports medicine-exercise science, kinesiology, movement science, and physical education. Individuals that transfer to four-year institutions in these fields (and in some cases go beyond the four-year degree) can be expected to find employment in a wide variety of occupations, including (but not limited to) physician, physician's assistant, physical therapist, physical therapist assistant, research scientist, fitness manager, worksite wellness coordinator, exercise specialist, clinical exercise physiologist, coach, physical education teacher, and other exercise-related positions.

Continuing Eligibility Requirements:
Students must meet the Computer and Information Literacy Graduation Requirement. See General Education Graduation Requirements in the WCC Bulletin.

General Education Requirements		**(30 credits)**
ENG 111	Composition I	4
ENG 226	Composition II	3
Speech	Elective(s)	3
MTH 160	Basic Statistics	4
BIO 101	Concepts of Biology	4
Soc. Sci.	Elective(s)*	6
Arts/Human.	Elective(s)	6

Major/Area Requirements		**(38 credits)**
BIO 103	General Biology II	4
BIO 110	Introduction to Exercise Science	3
BIO 111	Anatomy and Physiology - Normal Structure and Function	5
BIO 201	Physiology of Exercise	4
BIO 215	Cell and Molecular Biology	4
BIO 225	Tests and Measurements in Exercise Science	3
CEM 111	General Chemistry I	4
HSC 131	CPR/AED for the Professional Rescuer and First Aid	1
MTH 178	General Trigonometry	3
PHY 111	General Physics I	4
PSY 100	Introductory Psychology	3

Minimum Credits Required for the Program: **68**

Notes:

**Transfer students should select 2 MACRAO approved Social Science courses.*