Kapi'olani Community College
Program Review

Exercise and Sport Science (ESS)
2009

Based on Data from 2006 – 2009
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Kapi'olani Community College
Mission Statement 2003-2010
Approved October 7, 2002 by KCC Faculty Senate

Kapi'olani Community College

- is a gathering place where Hawai'i’s cultural diversity is celebrated, championed and reflected in the students, faculty, staff, administration and curriculum.
- is a nurturing workplace of choice for strong and caring faculty, staff, and administrators committed to a shared vision and set of values.
- strives to be the first choice for education and training for Hawai'i’s people.
- provides open access, and promotes students’ progress, learning and success with low tuition and high quality instructional programs, student development and support services, and selective areas of excellence and emphasis.
- prepares students to meet rigorous baccalaureate requirements and personal enrichment goals by offering a high quality liberal arts program.
- prepares students to meet rigorous employment and career standards by offering 21st century career programs.
- prepares students for lives of ethical, responsible community involvement by offering opportunities for increased civic engagement.
- leads locally, nationally and internationally in the development of integrated international education through global collaborations.
- uses human, physical, technological and financial resources effectively and efficiently to achieve ambitious educational goals.
- builds partnerships within the University and with other educational, governmental, business, and non-profit organizations to support improved learning from preschool through college and lifelong.
- uses cycles of qualitative and quantitative assessment to document degrees of progress in achieving college goals and objectives.

While the ESS Major does not have a mission statement, the following description outlines the objectives of the program.

Kapi’olani Community College offers an Associate in Science degree and Certificate of Achievement program in Exercise and Sport Science that provides students with the knowledge and skills to succeed as fitness professionals and personal trainers.

Part I. Executive Summary of Program Status
This is the first report of the newly developed three-year program review. There are no recommendations from previous reports to discuss at this time.
Part II. Program Description
Kapiʻolani Community College offers an Associate in Science degree and Certificate of Achievement program in Exercise and Sport Science that provides students with the knowledge and skills to succeed as fitness professionals and personal trainers.

Students complete a rich curriculum in anatomy and physiology, kinesiology, nutrition, exercise, and other health-related areas that provides an excellent foundation for their future careers. Graduates of the program have the knowledge required and are highly encouraged to take a national certification examination to enhance their academic training.

History
The ESS program was implemented to provide qualified health and fitness professionals to the fitness industry in Hawaiʻi. The program Spring 2004 program proposal also cited the Hawaiʻi Tourism Authority’s objective to promote Hawaiʻi as a world class leader in health programs and services.

A survey was done in the spring of 1998 to ascertain the employment prospects for individuals wishing to work in the fitness profession. The data indicated that there existed a need for qualified fitness personnel. A Certificate of Achievement in Exercise and Sport Science was developed and approved at Kapiʻolani Community College with the primary objective to prepare students for careers and employment in the fitness profession. The survey was repeated in the spring of 2002 and the results indicated an immediate and long term need for fitness instructors and personal trainers in the community.

In the Spring of 2001, the University of Hawaiʻi Board of Regents approved a 31-credit Certificate of Achievement in Exercise and Sport Science effective Fall 2001. The Certificate of Achievement was designed to prepare students for career and employment as fitness instructors.

In the spring of 2002, a student survey was distributed in all the ZOOL 141 and 142 lecture classes and an ESS 100 class. A total of 323 surveys were received. The results suggested that many students were interested in a career in the health and fitness fields. A great number of students were also interested in taking credit courses in the area of exercise and sport science.

Based on feedback from the Advisory Committee and changing requirements for national certifications, it was recommended that the Certificate of Achievement undergo substantive changes to the curriculum and become the foundation for a two-year A.S. degree. The curriculum for the proposed A.S. degree in Exercise and Sport Science
was designed with two goals in mind: (1) provide students with the theoretical and practical scientific background needed to prepare them for immediate employment in the fitness profession; and (2) make students eligible to sit for nationally recognized certifications in the fitness field. The curriculum was also designed based on feedback from the community survey and support from professional fitness organizations. The A.S. program began in fall semester 2004.

Program Goals/Professions

**Associate in Science in Exercise & Sport Science**
The objective of the AS in Exercise & Sport Science is to prepare students for a career as a fitness instructor and personal trainer, and to provide students with a solid foundation that will allow graduates to obtain a national fitness certification.

**Certificate of Achievement in Exercise & Sport Science**
The Certificate of Achievement provides the vocational instruction needed to work as a fitness professional.

Program SLOs

**Student Learning Outcomes (SLOs) for ESS (Exercise and Sport Science)**

**A.S. Degree**

1. Identify the educational requirements for various career pathways within exercise science.
2. Apply human anatomy and physiological principles to exercise and sport performance.
3. Demonstrate the appropriate knowledge, skills, and abilities for client assessment and exercise program design for apparently healthy individuals and those at risk for lifestyle related diseases.
4. Incorporate knowledge of diverse populations to promote wellness and healthy lifestyles within the state of Hawai‘i.
5. Communicate and interact effectively with clients and health care professionals.
6. Apply business/marketing strategies and utilize technology to improve the professional scope of an organization or an individual’s private practice.
7. Operate within the scope of practice as well as the ethical and legal parameters that have been established by national fitness organizations and certification agencies.
8. Demonstrate the appropriate knowledge, skills, and abilities to pass national certification exams.
9. Utilize various professional organizations, resources, and certifications to promote lifelong learning within the fitness profession.
10. Demonstrate a commitment to professional excellence by performing at or above industry standards, and in doing so maintain a positive image of the fitness profession in the community.

**Student Learning Outcomes (SLOs) for ESS (Exercise and Sport Science) Certificate of Achievement**

1. Identify the educational requirements for various career pathways within exercise science.
2. Apply human anatomy and physiological principles to exercise and sport performance.
3. Demonstrate the appropriate knowledge, skills, and abilities for client assessment and exercise program design for apparently healthy individuals and those at risk for lifestyle related diseases.
4. Communicate and interact adequately with clients and health care professionals.
5. Identify business/marketing strategies needed to improve the professional scope of an organization or an individual’s private practice.
6. Operate within the scope of practice as well as the ethical and legal parameters that have been established by national fitness organizations and certification agencies.
7. Demonstrate the appropriate knowledge, skills, and abilities to pass national certification exams.
8. Utilize various professional organizations, resources, and certifications to promote lifelong learning within the fitness profession.
9. Demonstrate a commitment to professional excellence by performing at or above industry standards, and in doing so maintain a positive image of the fitness profession in the community.

**Admission Requirements**

There are currently no admission requirements for the ESS major. Requiring students to apply for the ESS major after taking prerequisite courses is currently under consideration.

**Credentials, Licensures Offered**

There is no state or federal licensing of personal trainers or group fitness instructors. The ESS program prepares students to pass national certification exams of organizations such as the American Academy of Sports Medicine (ACSM), National Academy of Sports Medicine (NASM), and American Council on Exercise (ACE).
Faculty and Staff

As will be discussed in further detail, the ESS program has moved from the Math/Science department to the Health Sciences department as of August, 2009. Currently there is one full-time staff member and three lecturers teaching ESS courses.

Interim ESS Coordinator: Amy Patz Yamashiro, M.S., Instructor

Lecturers: Will Jonen, PhD
           Donna Lee, M.S.
           Nyki Silberstein, M.S.

Advisor: Florentino Abara

With the move to Health Sciences, it is planned that Will Jonen will be assuming the ESS Coordinator position starting in January, 2010. Amy Patz Yamashiro will continue to teach classes in the ESS program along with the two lecturers. Advising will fall under the Health Sciences advisors.

Resources

Ohia 103 is assigned to the ESS program. This room is a small exercise laboratory containing exercise equipment, including selectorized machines, free weights, cardio equipment, testing equipment, and miscellaneous fitness equipment. The program does not require a significant amount of expensive equipment that needs to be replaced on a regular basis. The program does need to replace small items occasionally, such as stopwatch batteries and balance balls. The Zoology program generously lends equipment such as bioelectric impedance scales and blood pressure cuffs to the ESS program to use when needed.

Articulation Agreements

The ESS program has no articulation agreements at this time. An informal discussion was held in 2007 between former ESS Coordinator Doug Crowell, advisor Flo Abara, and the UH Mānoa KRS Chair Nathan Murata. While the meeting did not result in an articulation agreement, it did open up a friendly discussion of the topic which should be further pursued.
Advisory Committee
The ESS Advisory Committee meets two times per year to provide input regarding curriculum, student preparation, and other matters.

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Internships
An internship is required of all ESS majors, and is considered a capstone experience of the ESS program. The following organizations have served as internship sites for ESS majors.
The YMCA
24-Hour Fitness
Tri-Fitness
University of Hawai‘i at Mānoa Athletics Department, Strength and Conditioning
Diamond Head Therapeutic
Rehab Hospital of the Pacific
Honolulu Club
First Hawaiian Bank Fitness Center
Oahu Club
Hawaiian Telcom Fitness Center
Pearl Harbor Naval Fitness Center
Semper Fit (MCCS) Fitness Centers
Department of Parks and Recreation (City and County of Honolulu)

Part III. Quantitative Indicators for Program Review
(data will come from the annual program reviews)

Part IV. Assessment Results Chart for Program SLOs
The ESS SLOs were just passed in June 2009. The grid aligning program SLOs with course outcomes has been completed and shared with all members of ESS faculty. The Assessment Plan is currently being drafted with the goal of assessing three of the program SLOs by the end of 2009.

Part V. Curriculum Revision and Review
The following list indicates the year the courses were last reviewed. According to the 5-year cycle, ESS 263, 280, 288, and 294E need to be reviewed. This should be done in 2010. ESS 263 and ESS 288 are no longer offered in the ESS program.

ESS 263 Sport Biomechanics AR MS 200140
ESS 280 Nutrition for Fitness Professionals AR MS 200340
ESS 288 Body Composition and Weight Management AR MS 200340
ESS 294E ESS Practicum AR MS 200340
ESS 100 Introduction to Total Fitness AR MS 200730
ESS 215 Pro Issues Fitness Management AR MS 200830
ESS 215L Professional Issues in Health Promotion/Fitness Management Laboratory AR MS 200830
ESS 254 Phys Basis for Exercise AR MS 200830
ESS 254L Phys Basis for Exercise Lab AR MS 200830
ESS 273 Strength Training/Conditioning AR MS 200830
ESS 180 Foundations of Exercise Science and Sports Medicine AR MS 200930

Part VI. Survey Results
1. **Student Satisfaction.** No surveys were conducted in the period from 2006 – 2009, so there is no data from the Office of Institutional Effectiveness on student satisfaction or employer satisfaction. Members of the ESS faculty are currently surveying ESS majors and graduates to get their feedback regarding the ESS program.

2. **Occupational Placement in Jobs.**
   There were 14 ESS graduates in the period from 2006-2009. A survey conducted by Amy P. Yamashiro in Fall 2009 resulted in 5 responses. These five graduates are all working in the fitness industry (four graduates work at two different YMCAs in Honolulu, one works at a fitness facility on the mainland). Other graduates worked at HMSA (health education) and for the Marine Corps Base Hawaii Semper Fit after graduation. Graduates are often offered (and often accept) positions at their place of internship.

3. **Employer Satisfaction.** No data has been on employer satisfaction with the ESS graduates. This survey should be implemented in 2010.

4. **Graduate/Leaver.** There were 14 graduates in the period from Spring 2006-Spring 2009, and approximately 135 students who declared ESS as their major during that period. The resulting 9.6% graduation rate is considered “unhealthy.” The graduation rate needs to be at least 20% to be considered “healthy.”

### Part VII. Analysis of Program

**Alignment with Mission.** The goal of the ESS program is to provide students with the knowledge and skills to succeed as fitness professionals and personal trainers. The ESS program is aligned with this goal, as the curriculum and instruction prepares the students very well for the fitness profession. Unfortunately, very few of the many majors who sign up for the ESS major actually complete the program, which undermines the overall effectiveness of the program.

**Strengths Based on Analysis of Data.** One strength of the ESS program is the class fill rate. Fill rates were 67%, 81%, and 79% for 2006, 2007, and 2008.

**Weaknesses Based on Analysis of Data.** Major areas of weakness for the ESS program are the number of graduates and the persistence rate. As mentioned above, there were 14 graduates in the period from Spring 2006-Spring 2009, and approximately 135 students who declared ESS as their major during that period. The resulting 9.6% graduation rate is considered “unhealthy.” The graduation rate needs to be at least 20% to be considered “healthy.” The rate of Persistence Fall to Spring is 58%, which is unhealthy. Persistence needs to be at least 75% in order to be healthy.

**Evidence of Quality.** While not reflected in the data, evidence of quality includes the hiring of ESS majors by the internship sites. Most ESS majors are offered paid positions at their internship sites after the internship is completed. Internship site coordinators typically have very positive reviews of the interns. In addition, in 2009, two
fitness organizations requested a meeting with the ESS coordinator to establish a relationship with the program so that interns might work at their organizations.

Evidence of Student Learning. In addition to the positive internship outcomes, which reflect student learning and preparation for the field, evidence of student learning is seen in the success of graduates in taking national certification exams. More than half of the graduates have taken and passed accredited national certification exams. A Fall 2009 graduate reported that the program prepared her so well for the ACSM exam that she passed without studying for the exam.

Resource Sufficiency. The ESS currently has the physical resources it needs to be successful. Having a fitness center open to the campus community would provide a wealth of practical experience for the ESS majors, but that is not realistic at the present time. With creative leadership, the ESS faculty can provide practical experience for the majors both on-campus and at the internship sites.

Recommendations for Improving Outcomes. The interim ESS coordinator is compiling data collected from other ESS Associate degree programs on the mainland, former ESS majors, ESS graduates, and current ESS majors. This will be presented in a separate report. Please see action plan.

Part VIII. Action Plan
To address the issue of student retention and persistence, a research project is being conducted in summer and fall, 2009. Aspects of the research process include: (1) researching Associate level Exercise Science programs on the mainland to see how many graduates they have each year, how the more successful programs are structured, and any other aspects of their success; (2) meeting one-on-one with as many ESS majors as possible for the dual purpose of establishing a relationship with each student for future tracking and learning what obstacles are typically faced by the ESS students; (3) contacting ESS graduates to request feedback about their experience in the program, (4) contact former ESS majors who did not graduate. The information from this research will be presented to the KCC administration, Health Sciences Chair, and incoming ESS coordinator, with recommendations for changes. After this discussion, the research results and recommendations will be discussed with the ESS Advisory Committee. These discussions should be completed by the end of 2009. If necessary, a focus group of current ESS majors will be formed to further examine challenges, obstacles, and other feedback about the ESS program.

ESS faculty members are investigating potential ways to broaden the scope of program to attract new majors and to fill positions in the growing health and wellness industry. Whether such positions exist in the community is also under investigation.

An additional area of consideration is whether or not to change the ESS program to a selective program, and potentially a cohort-based program. These changes would
dramatically improve the graduation rate by simply reducing the number of majors per graduate, but perhaps also by increasing the number of graduates due to a more cohesive group dynamic among ESS majors.

**Part IX. Budget Implications**

With the recent move of the ESS program from Math/Science to Health Sciences, there are resource implications. The coordinator position will be part of the Health Sciences faculty. Currently, the interim ESS coordinator is stepping down and a new coordinator is taking over in January, 2010. In addition, the addition of the ESS program will shift advising from the current ESS advisor to the Health Sciences advisors. This large influx of majors should be taken into account when considering workload for the Health Sciences advisors.