Health & Exercise Science Department
Application for the Mildred Dahne Award
Submitted by Anne Farrell on behalf of the Department, Spring 2013

The Department of Health & Exercise Science (HES) has two track options, Health & Exercise Science- Non-teaching (HESA) and Teaching in K-12 Health & Physical Education (HEST). Although each track leads to different career choices, the main focus is to educate ourselves and others how to be proactive about maintaining or maximizing personal health and wellness. The research and findings within the areas of fitness, conditioning, rehabilitation, obesity and other areas specific to personal health are continually changing for both adults and children and we take great pride in providing HES students with a solid education that is both based in theory and current practices for both exercise science and teacher education. As you will see, several HES faculty are commonly at the forefront of the new practices and content information (Academic Excellence).

Currently, the HES department consists of seven full-time faculty members with roughly 265-275 majors. The faculty set high expectations for themselves and the students. We are pleased that, as faculty, we have consistently been able meet the expectations as both teachers (Teaching Excellence) and scholars. Even more pleasing is that after changing the curriculum and increasing minimal requirements, our students have risen to the challenge (Academic Excellence) and have continue to be involved in department, college, community, and professional organizations (Student Involvement). The areas of teaching excellence, academic excellence and student involvement will be presented in this application.

1. EXCELLENCE IN TEACHING AND/OR SUPPORT OF TEACHING

The department goal is to have highly qualified and capable teachers and exercise scientists graduate from the program who are ready to assume the roles, rules and responsibilities as teachers, scientists or graduate students in the health field of their choice. To ensure they are prepared, the faculty take their responsibility for providing “Excellent Teaching/Support of Learning” very seriously.

The program over the past decade has increased by over 100 students, from an average of 150 students 10 years ago, to ~265/270 students. The change has come from the dramatic demand in the health sciences. Although we continue to serve individuals in teaching careers and those wanting to work in corporate fitness or as strength & conditioning specialists, more students are viewing Health & Exercise Science as a viable way to pursue careers in physical therapy, occupational therapy, medicine, and other allied health fields. To accommodate all students, the department adapted both the HESA curriculum to meet the changing needs of students and the HEST curriculum to address the directional changes of the profession. By achieving this students are in a position to be highly successful in their pursuits after graduation and are provided with the opportunity to pursue careers in a wide variety of areas. In additional to the curriculum, the department will present supporting material to highlight excellence in teaching which include but are not limited to: 1) teacher effectiveness/student course evaluations, 2) activity based classrooms to enhance the learning environment, and 3) advising.

A. Teacher effectiveness/student course evaluations:
- I think the most important thing about our faculty is that everyone agrees that continual learning and engagement is critical. We are cognizant that the profession is dynamic and there is a need to stay abreast of new information and trends. In light of this, our faculty attend professional development experiences in order to bring new information (content, technology, equipment, curriculum, etc.) to the department. These learning experiences are shared and incorporated into our courses and serve our faculty and other department members with meaningful information. We lead by our example and advocate the motto “never stop learning.”
- HEST and HESA faculty periodically sit in on other faculty lead courses. This is particularly true for HEST faculty to sit in on HESA courses and vice versa. It is a time for faculty to understand what we each do, how we interact with our students, and the content being delivered. By assuming these roles, we create a consistency and fluidity between classes and better help students who may be experiencing difficulty.
- As indicated on the Summary Course forms, all HES full-time faculty earn average scores of 4.0 out of 5.0 in all categories on the Student Feedback evaluation forms. Usually the ~4.5 score is received on most. HESA student comments include “challenged me in a good way”, “course exceeded my expectations”, “Faigenbaum is the man...feel totally prepared to enter my internship”. HEST comments include, “Dr. Chandler understands what will really be expected when I start teaching”, “So much work, but it made me a better teacher”. “She knows her stuff”.
- Teacher hires: 66% (14/21) of last year’s HEST graduating class were hired for full-time teaching positions. A percentage representing an excellent number in relation to current hire rates. Additionally, two December 2012 graduating students have already been hired in full-time positions, and another 3 have been employed for long-term substitute positions.
- There is a >93% acceptance rate (physical therapy, medical school, occupations therapy, nursing, nutrition, & chiropractic) for HESA students who apply to graduate school.
- Regular feedback from graduates updating faculty on their progress as educators, graduate students, or professional health workers consist of “I well prepared”, “are cruising through grad school”, and “undergrad TCNJ program was more rigorous then some of the same work being done in grad school”. Cooperating teachers and student teaching supervisors regularly comment that TCNJ students are more prepared with content, have control of the classes, understand how to work with students with differing abilities and manage students and facilities much more easily than students from other programs.
- Student interns for HESA consistently receive stellar evaluations from both clinical and fitness centers throughout NJ (Robert Wood Johnson, University Hospital, Capital Health Systems, Velocity Sports Center, etc.). Consequently, upon completion of the internship, many interns at sport fitness centers are offered full-time employment positions.
• Internship site supervisors regularly comment how pleased they are to see that the full-time faculty/TCNJ Internship Coordinator conduct on-site visits. This type of interaction is not typical practice as most interns at other NJ institutions are left without supervision from the educational institution.

• Internship sites regularly request TCNJ students (RWJ Cardiac Rehab Center, Dow Jones Corporate Fitness center, etc.) based on the quality and professionalism they consistently bring to the experience.

• Externally, HEST students have a 100% pass rate on the NJ PRAXIS Health & Physical Education Content Knowledge Exam. Ninety-five percent of students pass the NSCA’s Certified Strength and Conditions Specialist (CSCS) exam, while 97% pass the American College of Sports Medicine - Health Fitness Specialist Exam.

B) Activity based classrooms to enhance the learning environment.

• Although Packer is an old building and space is very limited, course scheduling is well mapped out so that each core class has the necessary time it needs in the Human Performance Lab, multipurpose/gymnasium space, or K-12 schools to connect theory/lecture to practice. Anatomy & Physiology courses use computer based software as well as skeletal/muscular models & animal cadavers to enhance the learning process. Biomechanics and Kinesiology courses have students analyze a peer’s fitness movement or sport skill through software applications and equipment. Assessment courses evaluate athletic team members current fitness levels or assess fitness/skills of students in local elementary schools. Nutrition & Metabolism courses use the lab to calculate energy expenditure and energy replacement.

• Outside of Packer Hall, the HEST program has developed strong relationships with local school districts which include Hamilton, Ewing, Hopewell, & West Windsor as well as many other districts. Specifically with these four districts, each year students complete field experiences in the sophomore and junior year. It is here that students put their teaching education into practice. The department does have training sessions for cooperating teachers so that the roles and responsibilities of all parties during the field experience are clearly articulated and understood. Students spend more time in the schools than in the TCNJ classroom. A total of five hours a week are spent in the schools working both with a trained teacher, or now running some of the “structured recess” programs as demonstrated in the Hamilton school district. During select teaching episodes, students are hooked up to phones or walkie-talkies and instant feedback is provided to assist with lesson improvement. Just as we want to give immediate feedback to K-12 students, this principle is being used with HEST students. Lastly, with permission from the schools and informed consent, TCNJ HES students are able to view video recordings of their lessons thereby allowing them to see firsthand their strengths and the areas of improvement needed. These techniques have proven to be incredibly effective and majors indicate that they feel secure teaching while being able to hear what the feedback is and make quick, appropriate modifications that help achieve lesson success. It does not appear that other NJ PETE programs are utilizing these current techniques.

• Four years ago, both on the course evaluation forms and exit surveys, the students indicated they wanted more hands on learning experiences. We believe we have answered their request in a way appropriate to meet their needs and within our available resources. It is the part of the curriculum that students speak most highly of and what gives them the ability and confidence to be successful during their field experiences, internships, or employment.

C) Advising:

• As previously noted the department has seven full-time faculty members who advise 265-275 majors each year. In recent years, approximately 165 majors are HESA and 100 majors are HEST. Department faculty divide the student population by program track which means that two HEST faculty members are advising ~100 (50 per faculty member) students and five HESA faculty members are advising ~165 (33 per faculty member) students. Even though these numbers are difficult to manage, faculty provide high quality advising sessions for all students. This is achieved by utilizing group advising as well as individualized attention which is necessary for some students. All department faculty have an open door policy and are available to all students including students that are not their primary advisees. It is the opinion of the faculty that they have the responsibility to answer questions about the program, provide critical information with regards to career options, and to intervene when problems occur. Each spring, a departmental exit survey is completed by graduating seniors and 87% of students indicated they were happy with the advising they received from faculty.

2. ACADEMIC EXCELLENCE

Department members truly embrace the teacher-scholar model. They pursue their own research agenda and work collaboratively within the department. Every effort is made to allow undergraduates to be part of the research, conduct their own research, or to become engaged in scholarly activities that allow them the opportunity to contribute to the profession. Below is an outline of some of these accomplishments:

A) Research:


Together, in the past five years, the three tenured HESA faculty have published over one hundred articles, over a half-dozen books, hundreds of presentations, and have been invited speakers to every major health and fitness organization both nationally and internationally. For example:
Dr. Faigenbaum: Well-known both nationally and internationally for his research and contributions to youth fitness. He has written 34 book chapters, 7 books, 171 peer reviewed article (10 currently in review), 83 abstracts, 74 invited articles, has 49 invited international professional presentations, and 255 presentation. Additionally, he serves on many advisory positions to state, district and national organizations.


Book Chapters: Samples from 2012:
- Peer Reviewed A sampling of his articles for 2012.

International presentations (21 from 2009-2012):
- International Pediatric Congress, University Europea de Madrid. Pediatric resistance exercise: Beyond sets and repetitions, May, 2011
- University of Greenwich, England, “Pediatric exercise science: From the laboratory to the playing field” October, 2011
- University Europea de Madrid, Spain. Pediatric exercise science; Exercise deficit disorder in youth; Strength training for children and adolescents; Practical sessions; May, 2012
- Universita degli Studi di Palermo, Sicily, Italy. Integrative neuromuscular training: Enhancing health and fitness in children and adolescents, June, 2012.

Dr. Kang: Primary focus is on exercise physiology and energy expenditure. Since 2008, he has written two textbooks, over 30 peer reviewed articles, 10 presentations, six invited presentations, multiple international presentations, and two grants. Dr. Kang continues to serve as an ACSM Advisory Board member.

Textbooks: Dr. Kang is the author of the most widely used sports nutrition textbook:
- Kang, J. and N.A. Ratamess. Resistance exercise before aerobic or aerobic before resistance exercise? ACSM Fitness Journal (In review)

Presentations:

Invited Presentations:
- Certified Strength and Conditioning Specialist Workshop. Shanghai Sports Institute, Shanghai, China, 2010.

Grants:
Dr. Ratamess: Best known for his expertise in strength & conditioning. In his career at TCNJ he has written three textbooks, 14 book chapters, 100+ peer reviewed scientific articles, 99 presentations, 19 invited lectures and 10 grants. It should be noted that in 2012, Dr. Ratamess was one of five exercise physiologists in the country to be invited to assist NASA with their strength training effort for future space visits.

Textbook:
Considered the ‘bible’ text to be used for foundational strength training

Book Chapters

Peer Reviewed Scientific Articles: (12 in 2011-2012)
- Four currently in print & six in review

Scientific Presentations & Abstracts

Grants
- Ratamess, N.A. Equipment grant from Exerbotics, Inc., Tulsa, OK. Chest Press/Row Isokinetic Machine valued at $24,000.00. 2009

Scientific Editorial & Review Activity / Editorial Boards
- Senior Editor: Strength and Conditioning Research, 2011 - present

As previously indicated, there are currently five exercise science faculty. One five faculty members, Dr. John. Farrell is a temporary line and research is not a requirement.

For the 2012-2013 a new faculty member, Dr. Jill Bush-Wallace joined the department. Dr. Bush is currently involved in collaborative efforts in the HES Human Performance Lab and continues to expand her research agenda. Dr. Bush comes to TCNJ as an associate professor with a strong research background and we are both excited and fortunate to have her in our department. Additionally, Dr. Bush is currently serving as the Vice President on the Board of Directors, National Strength & Conditioning Association, Colorado Springs. (2009-present) and has served as the Vice President, American College of Sports Medicine (2008-2011).

HES-Teaching faculty demonstrate academic excellence through publications, presentations, and also are highly involved with getting students actively involved in contributing to the profession. Additionally, something that may be unique to HES, is that faculty work collaboratively with each other in and across both program tracks.

Dr. Farrell & Dr. Chandler:


Peer Reviewed Articles:
- Effects of Exercise Training with Balloons on Fitness Performance in Elementary School Children. The Reporter: Journal of the New Jersey Association for Health, Physical Education, Recreation and Dance, Fall, 80(1).


Farrell, A. & Chandler, D. *Cooperating Teacher’s Impression of the Whisper-In-My-Ear (WIME) and Traditional Communication Feedback Methods for Pre-Service Teachers.* The Journal of Education & Human Development. Spring 2008

**Presentations:**


**B. Student Publications**

All education programs should promote literacy, reading and writing. The HEST curriculum provides students with the opportunity to create and submit personal responses and summaries to the Journal of Physical Education Recreation and Dance (JOPERD) which is the main journal of the National Association of Sport & Physical Education (NASPE) which is out NCASTE accrediting body. Students write the response or research review, the faculty provides feedback, and the students submit as their own work. Below are some of the students whose work has been published in JOPERD. We are incredibly proud to say that we have multiple students published each semester. A feat not equaled by most other HES programs.

**JOPERD “Research Works”**


**JOPERD “Issues” All individually submitted.**

- Kathleen Morgan, Maura McCall, Gina Quaranzta, Justine Clarke, August & September 2007
- Greg Burns, Anthony Piraino, February 2011/Megan Okuniewicz, Rachel Scheuermann, Matt Lee, Amanda DeFiccio, April 2011/Alexis Walker August’11
- Stephanie Carr, Shannon Boise, January 2012/Schuyler Antane, April 2012 & May/June 2012

**3. STUDENT INVOLVEMENT**

HES students are highly involved in a variety of areas both on campus and off. The HES Club, professional development, NJAHPERD involvement, research, and contributing to the field will be addressed.

**HES Club.** This club organizes event, rallies, on and off campus activities for the major and for Outside organizations. In the past several years club members have taken part in:

- **Healthy Heart Seminar:** Co-hosting with the student Nursing Club for the past two years, the clubs offered a seminar where guest speakers from multiple areas of health addressed health-related issues to future health promoters and care-givers. The seminar was attended by both students and community members (~200 attendees in 2012/150 attendees in 2013).
- **Trenton YMCA’s Wellness day:** sample activities were: providing healthy snacks all day to pre-school/elementary student (2012), planting a vegetable garden (2011) and leading movement activities to PreK/elementary student (2010).
- **TCNJ Health and Wellness fair** created booth that emphasized appropriate exercise and sleep for college students.
- Organized a *shoe drive* for needy students in Africa where over 1000 pairs were donated and forwarded to the intended party
- **Special Olympics:** over 20 volunteers (year 2009-present)
- **KidsBridge:** Provided both health and physical education activities that focused on cooperation, acceptance, and teamwork (2009-2012)

**Professional Development/NJAHPERD**

The former HES Club President, Shannon Boise, was so involved in professional related activities (research, publications, presentations, club president) she earned one award: Eastern District Outstanding Undergraduate Student (2013) and has been invited to the National conference in North Carolina this year to see if she will win the National Outstanding Undergraduate Award. We think she has it in the bag! In 2012, Kasey Baldwin was elected by all NJAHPERD students to be the next Student Division President. She is the second in 4 years, Keri Post served in the
position in 2009. This is a feat in itself, since the other programs are much more heavily enrolled and have larger voting power. By serving in this role, we believe Kasey encouraged HEST students to become even more engaged in the state conference this year.

All HES majors are required to attend four professional development workshops as a requirement for graduation. However, we found that students were attending more than the required four. On the exit survey they indicated they were a valuable part to the learning experience. Another wonderful accomplishment and demonstration of a commitment to the profession, and confidence that the program had appropriately prepared them, HEST students began submitting proposals to present at the NJAHPERD conference (this was not a requirement). More students are presenting this year from TCNJ than in previous years, and as a student body, they are contributing more to the conference than any other NJ PETF training program.

- **NJAHPERD 2013 Conference student presenters:** All students who have completed the HES 390 course are encouraged to spread their knowledge and contribute to the profession. The following students submitted workshop proposal applications and were accepted to present. All students are asked to list a faculty advisor, Dr. A. Farrell was provided. The following present on February 25 & 26, 2013. (S. Antane, A. Sanchez, B. Johnson, D. Smalls) (K. Smith, & K. Baldwin, D. Cultera, R. Huff) (E. Doehler) (L. Ashman, J. LaFerlita, A. Carbone, K. Goitz) (K. Brusetti, G. Burns) (J. Nealon, J. Colecia, J. McGlew, K. Reilly, R. Cordero, A. Pinairo) (J. DeAndre) (V. McEnroe, A. Rayak, M. Kiley) (K. O’Gorman & J. Geman) (K. Shelus & T. Prall)


- **NJAHPERD 2011 Conference student presenters:** (J. Casey & A. Mc Carthy) (K. Regan & E. Harman) (P. Gennau) (M. Fabbiano)

Students are also provided the opportunity to be part of HES laboratory and school based research. Student can choose to assist with data collection, volunteer to be part of the student if they meet the subject qualifications, and data analysis. Many students have their work published as abstracts or articles or present at state, district or national conferences. Although faculty may oversee the research, the majority of the work and writing is done by the student. The faculty is primarily there for guidance and assistance with the writing, formatting, and submission.

- Voss, A. Recess: To have or Not to Have. The Reporter NJ Journal for Health, Physical Education, Recreation & Dance Fall 2009
- LaFerlita, A. Namaste: Youth Yoga for Well-Being and Longer Life, The Reporter Fall 2009

**Additional Off-Campus Involvement**

The program is regularly contacted to locate students who will volunteer as coaches to middle & high school teams in a variety of sports. We have dozens of students who are currently serving as unpaid coaches, assistant coaches or conditioning specialists in schools in NJ and eastern Pennsylvania.

Glenn Sliker, the HPE coordinator for Hamilton School District, recently notified the department that in 6 district elementary schools, roughly 15 TCNJ HEST majors are volunteering to run programs during the ‘Structured Recess’ program that was adopted last year. HES 292 students were introduced to the program last year during the sophomore field experience and most of those volunteering are from that course. Students create developmentally appropriate activities that focus primarily on health-related fitness activities. Because of the students’ initial involvement, the district has contacted the department to see if this can be expanded to something more formal.

Thank you for your time and consideration.