



Western Michigan University  
ScholarWorks at WMU

---

Honors Theses

Lee Honors College

---

4-27-2015

## Outline Plan for a Student-Involved Fitness Assessment Program at Western Michigan University

Joanna Gangwisch

*Western Michigan University*, joanna.gangwisch@gmail.com

Follow this and additional works at: [https://scholarworks.wmich.edu/honors\\_theses](https://scholarworks.wmich.edu/honors_theses)

 Part of the Exercise Physiology Commons, Exercise Science Commons, and the Systems and Integrative Physiology Commons

---

### Recommended Citation

Gangwisch, Joanna, "Outline Plan for a Student-Involved Fitness Assessment Program at Western Michigan University" (2015). *Honors Theses*. 2615.

[https://scholarworks.wmich.edu/honors\\_theses/2615](https://scholarworks.wmich.edu/honors_theses/2615)

This Honors Thesis-Open Access is brought to you for free and open access by the Lee Honors College at ScholarWorks at WMU. It has been accepted for inclusion in Honors Theses by an authorized administrator of ScholarWorks at WMU. For more information, please contact [wmu-scholarworks@wmich.edu](mailto:wmu-scholarworks@wmich.edu).



**Outline Plan for a Student-Involved Fitness Assessment Program  
at Western Michigan University**

**Joanna Gangwisch**

**Lee Honors College,  
Western Michigan University**

## **Abstract**

This research was aimed at developing a fitness assessment program that would provide undergraduate exercise science students at Western Michigan University (WMU) with hands on experience that would successfully prepare them for their internships and future careers as well as benefiting the campus community at large. Data for this research was obtained by examining the student recreation center websites and sending out an email/phone questionnaire to WMU's 10 peer institutions. Direct comparisons were made and evaluated. On the basis of the results of this research, it can be concluded that WMU's exercise science department and student recreation center together could start a pre-internship program via required practicum, project, or optional classes that would enhance the skills and better prepare the undergraduate exercise science students for their future careers interacting with the general population.

## I. Introduction

It is common knowledge that obesity is a major problem plaguing our generation with 93 million Americans who are affected by obesity (Obesity Action Coalition, 2015). Attention is also drawn to childhood obesity, which, according to the Obesity Action Coalition, includes 9 million children and teens who are more than likely to continue to be obese into adulthood. But a lack of attention and research is drawn to the obesity and activity levels for the ‘in-between’ age range of university students across the country. Although the popular phrase referring to the rapid weight gain during college of “the freshman fifteen” is a bit of an overestimation, the fact of weight gain still holds true. Weight gain in college students has been attributed to increased stress levels, binge drinking, and poor eating habits (Nelson, Kocos, Lytle, & Perry, 2009). The change to a more sedentary college lifestyle has lead to an average weight gain of 3.5-7.8 lbs just in the first semester, widening the percentage of students who classify as overweight by 11% at the end of their freshman year (Gow, Trace, & Mazzeo, 2010). In addition to weight gain, less than half of these students don’t meet the federally recommended 5 days of moderate physical activity per week (Sparling, 2007).

In order to combat the obesity of American college students, the Office of Disease Prevention and Health Promotion continues to update the Healthy People initiative, Healthy People 2020. This is a ten year itinerary first launched in 1980, based on information from the 1979 Surgeon General’s Report: *Healthy People: The Surgeon General’s Report on Health Promotion and Disease Prevention* that looked at multiple health indices such as mental health, nutrition, physical activity, obesity, substance abuse, etc. Data is collected over ten year periods and goals are set forth to improve America’s overall health for the next ten years. (Office of Disease Prevention and Health Promotion, 2015). The American College Health Association (ACHA) has a similar approach that focuses on the health of American college students and faculty/staff called Healthy Campus 2020. The Healthy Campus Coalition was formed to act as a

resource for professionals to incorporate these initiatives into self-selected higher education communities. The itinerary uses randomly selected self-reported data that looks at multiple indices, including but not limited to physical, mental, and sexual health. Similar to the Healthy People 2020 initiative, the baseline data is collected and 10 year goals are established (American College of Health Association, 2012). For the purposes of the current research, the focus was on the four main ACHA topic areas related to physical health: 1) the proportion of students who were obese, 2) proportion of students who were at a healthy weight, 3) the proportion of students who got in the federally recommended amount of aerobic physical activity (moderate intensity for at least 30 minutes on  $\geq 5$  days per week), and 4) proportion of students who got in the federally recommended amount of muscle-strengthening activity (performed on  $\geq 2$  days per week). Table 1 includes the 2010 baseline comparison of the nationally collected surveys from schools who chose to participate, the 2011 Western Michigan University (WMU) data, and the 2020 target goals.

| <b>Topic Area: Goal for 2020</b>  | <b>Baseline 2010</b> | <b>WMU 2011</b> | <b>Target 2020</b> |
|---|----------------------|-----------------|--------------------|
| Reduce proportion of students who are obese   | 11.6%                | 16.2%           | 10.4%              |
| Increase proportion of students who are at a healthy weight   | 61.6%                | 54.9%           | 67.8%              |
| Increase proportion of students who report meeting current federal guidelines for aerobic physical activity     | 48.7%                | 45.6%           | 53.6%              |
| Increase proportion of students who report meeting current federal guidelines for muscle-strengthening activity | 37.6%                | 35.4%           | 41.4%              |

Table 1, American College Health Association, 2012

When the 2010 baseline data are compared to the 2011 WMU data, it is noted that WMU is comparably poor in all four topic areas. With this data in mind, it is clear that WMU is far below the target goals of weight and physical activity of its student population, creating a deficit of 12.9% between the target proportion of students at a healthy weight and the actual proportion of

students at a healthy weight. A potential solution to reach the Healthy Campus 2020 goals could be involving students in the health and recreation programs offered on campus. It is the author's hypothesis that exercise science and other health related students would be effective ambassadors to perform services and educate their peers on the importance of exercise and physical activity.

Reddan and Rauchle explained how society expects students to graduate as critical thinkers with creative capabilities (2012). An effective method for student to attain these qualities from their education is when the curriculum concentrates on content knowledge as well as practical experiences, including labs, practicums, and fieldwork. Students able to directly apply the information learned in the classroom enhance their work readiness and employability through the real-world experience while still working towards their degree (Reddan & Rauchle, 2012). One of the most beneficial ways for students to gain this valuable knowledge-based experience is through service learning. According to Brown, Lynott, and Heelan in 2008, "service learning is a technique in which learning is enhanced through the use of skills learned in the classroom and laboratory in an appropriate setting outside of the classroom, such as in a community clinic." Brown et. al also noted that service learning has been an approach successfully used for years in fields such as nursing, dentistry, and teaching. Service based learning gives students more than just work experience, it encourages students to take pride and ownership in the skills they successfully complete in addition to being more prepared for a future career. The research also shows that this specific type of learning is helpful for students who have difficulty performing well on tests because it allows them to apply the knowledge without the anxiety of taking a handwritten test.

The service learning involvement of exercise science (ES) students has the potential to be extremely useful for the college community. For example, assessing blood pressure and informing their peers about the importance of knowing one's blood pressure in addition to providing preventative tips to those who are prehypertensive or suggesting further treatment for

those who are hypertensive aids both the student conducting the tests and the client. The student learns under the supervision of an instructor how to explain and communicate the reasoning behind basic health tests while the client is informed of their blood pressure and becomes more aware of their health status. The ES students can also conduct basic fitness assessments and communicate to the client where their fitness level is compared to the norms and direct them in ways to reach their fitness or weight loss goals. Hands on experience of service learning provides the ES students opportunities to perform technical skills on members of their community while enhancing communication skills and increasing employability prior to the internship.

Internship supervisors desire applicants with basic skills, including graded exercise testing and fitness assessments. The experience of a desired opportunity meets these expectations. This is not a current practice at WMU. With the intent of determining the best practice of such a program, the current question is what are other schools doing to provide these valuable opportunities for undergraduate exercise/health students and what is a practical model for developing such a program at WMU. Therefore, the purpose of this project was to survey peer institutions on involvement of undergraduate health and ES majors in on-campus recreation/health programming via website analysis.

## **II. Methods**

Data was collected from WMU and compared to 10 peer institutions. Peer schools were selected based on the 2010 Carnegie Classification of Institutions of Higher Education with specific classifications that allow schools to compare and contrast each other. The WMU Office of Institutional Research used six criteria to find 10 peer institutions, focusing on enrollment profile, basic framework, graduate programming, size, setting, and community involvement (WMU Office of Institutional Research).

| <b>Criteria</b>                | <b>WMU &amp; Peer Classification</b>   |
|--------------------------------|--|
| Basic Framework                | Research University (high research activity)   |
| Graduate Instructional Program | Comprehensive doctoral with and without medical/veterinary schools                     |
| Enrollment Profile             | High Undergraduate   |
| Undergraduate Profile          | Full-time 4-year, selective, low transfer-in and high transfer-in                      |
| Size and Setting               | Large 4-year, primarily non-residential, primarily residential, and highly residential |
| Community Engagement           | Curricular Engagement and Outreach & Partnerships                                      |

Table 2, Peer Institution Classification Criteria

The 10 peer schools listed alphabetically include: 1) Kansas State University, 2) Northern Illinois University, 3) Temple University, 4) Texas Tech University, 5) University of Akron, 6) University of Alabama- Tuscaloosa, 7) University of North Carolina at Greensboro, 8) University of North Dakota, 9) University of Southern Mississippi, and 10) West Virginia University. In the current study, the examination of the peer institution's student recreation center websites were evaluated to determine programs and services commonly available across the 11 universities. The comparison criteria were established based on the available information gathered and sorted by each institution's student recreation center websites.

The criteria were categorized into three areas: 1) services offered and undergraduate student involvement, 2) educational offerings, and 3) cost and availability of the services offered. For the preliminary evaluation, 10 tables were constructed that directly compared each peer school to WMU in the three criteria categories. While several institutions had active websites with recently updated information available, others did not. To increase the likelihood that a fair comparison could be made, a request for further information was gathered via email and/or telephone questionnaire (refer to email in Appendix A). All correspondence by the primary

author. If the student recreation center representative did not respond to the initial request for information, a maximum of two additional requests were made. If no response was obtained, the webpage information was considered as the only data source.

As indicated in the questionnaire (Appendix A), questions regarding each of the three areas were developed based on information provided from the exemplary institutions. The first area, services offered and involvement of undergraduate students, focused on topics such as personal training, fitness assessments, group fitness class offerings, and nutrition counseling/classes. The educational offerings category requested for specific certification preparation courses/workshops, specialty fitness certifications, and undergraduate internships. The additional questions for the third category of cost and availability of services concentrated on memberships offered (students, faculty, alumni, community members) as well as incentive programming for the campus community at large. Hours of operation were also collected. It is important to note that the university recreation center websites and contact of fitness and academic program directors via email or phone were the only way that research was obtained for this study. Examination of tuition, university funding models, student recreation center annual reports, or state funding were not used for comparison purposes.

### **III. Results**

The following evaluations include the indices descriptive data from each institution compared to WMU. The evaluations and tables are listed in alphabetical order of peer institution. The data presented includes information from the institutions' student recreation center website as well as the 64% (7/11) email questionnaire return rate and is current as of June 30, 2015. Complete detailed data is found in tables 3-12 located in Appendix B.

**1) Kansas State University (Table 3)**

**Services and Undergraduate Student Involvement:** Most trainers are students who are nationally certified, free weight room orientation, fitness testing included and purchased separately from personal training (PT) package, offer 27 different group fitness (GF) classes, nutrition education available.

**Educational Offerings:** ACE PT and group fitness instructor (GFI) prep and shadowing courses offered, no undergraduate internships indicated.

**Cost & Availability:** GF classes are free with membership, Instagram wellness challenge where winners receive groceries or a Fitbit, center is open 5:30am - midnight or 11pm on weekdays.

**WMU**

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

**2) Northern Illinois University (Table 4)**

**Services and Undergraduate Student Involvement:** Most trainers are ES students who are nationally certified, extensive fitness assessments can be purchased, offer 19 different GF classes with nationally certified GFI, nutrition education is offered through recreation center and School of Family, Consumer, and Nutrition.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships are offered for many different majors and fields.

**Cost & Availability:** Student membership is free, RecRewards program where students earn points for each completed workout, center is open 6am- 8 or 11pm on weekdays.

**WMU**

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

**3) Temple University (Table 5)**

**Services and Undergraduate Student Involvement:** No information about trainers was indicated, fitness assessments included and purchased separately from PT package, offer 28 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** Offer AAAI- ISMA PT, yoga, pilates, and GFI certifications, no undergraduate internships indicated.

**Cost & Availability:** GF classes purchased separately from membership, no incentives programming indicated, center is open 6am - 10 or 11pm on weekdays.

**WMU**

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

**4) Texas Tech University (Table 6)**

**Services and Undergraduate Student Involvement:** Most trainers are students who are nationally certified, offer a variety of types of training (sport specific, lifestyle, general, etc), fitness assessments are included in PT package but submax fitness tests can be purchased, offer 28 different GF classes as well as Crossfit and partner yoga, nothing about nutrition education through the recreation center was indicated

**Educational Offerings:** No prep courses or workshops were indicated, no undergraduate internships indicated.

**Cost & Availability:** GF classes are free with membership, Raider Fit Rewards and Fitness 2 You incentive programs offered, center is open 6am - midnight on weekdays.

**WMU**

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

5) University of Akron (Table 7)

**Services and Undergraduate Student Involvement:** All trainers are students who are nationally certified, offer many orientations such as stretching, circuit, weight room, etc, each member is able to have 1 free fitness assessment per year, other program designs and assessments can be purchased, offer 20 different GF classes taught by nationally certified GFI, can purchase nutrition counseling package.

**Educational Offerings:** A variety of workshops are offered for students each year, five scholarships are awarded, undergraduate internships in recreation or exercise science.

**Cost & Availability:** GF classes are included with membership, ZipFit and workout cards are used as incentives for prizes, center is open 6am - 11pm on weekdays.

WMU

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

6) University of Alabama- Tuscaloosa (Table 8)

**Services and Undergraduate Student Involvement:** Some trainers are students but all are nationally certified, offer use of the BodPod, workout assessments, and 3-site skinfold assessments, offer 17 different GF classes, nutritional counseling and advice is offered by fitness staff.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships are offered and can last for a semester or up to one year.

**Cost & Availability:** Student membership is free, UAchieve is a bonding incentive program offered, center is open 5:30am - 9pm or midnight on weekdays.

WMU

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

**7) University of North Carolina at Greensboro (Table 9)**

**Services and Undergraduate Student Involvement:** Most trainers are students who are nationally certified, offer full fitness assessment and body fat analysis with PT package, offer 17 different GF classes taught mostly by nationally certified students, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** Offer On The Beat GFI prep course and ACE PT prep course, no undergraduate internships indicated.

**Cost & Availability:** Student membership is free with discount on a full fitness assessment, offer a variety of incentives programming like couch to 5k and jumpstart weight loss, center is open 6am - 9 or 11pm on weekdays.

**WMU**

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

**8) University of North Dakota (Table 10)**

**Services and Undergraduate Student Involvement:** Some trainers are students who are nationally certified and majoring in health sciences, offer standard fitness assessments and skinfold tests for free, offer 25 different GF classes, have Culinary Corner where chefs visit and give cooking tips, classes, and recipes to members.

**Educational Offerings:** Many certification prep courses are offered such as ACE PT and specialty GFI certifications, undergraduate internships are offered for course credit through kinesiology and public health education program.

**Cost & Availability:** Student membership is free, all members get six free fitness assessments and cooking classes, Work Well is an incentive program for faculty and staff that offers reimbursements, center is open 5:30am - 11pm on weekdays.

**WMU**

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

9) University of Southern Mississippi (Table 11)

**Services and Undergraduate Student Involvement:** All trainers are students who are nationally certified, can purchase a full fitness assessment or body fat assessment, offer 18 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, some undergraduate internships are available in various majors and fields.

**Cost & Availability:** Student membership is free, Wellness on Wheels is an a la carte list of fitness programs for individuals or organizations offered to the campus community, center is open 6am - 8 or 10:30pm on weekdays.

WMU

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

10) West Virginia University (Table 12)

**Services and Undergraduate Student Involvement:** All trainers are students who are nationally certified and majoring in exercise/athletic field, offer body fat percentage tests and basic fitness assessments, offer 9 different GF classes with some GFI as nationally certified students, nothing about nutrition education through the recreation center was indicated.

**Educational Offerings:** No prep courses or workshops were indicated, no undergraduate internships indicated.

**Cost & Availability:** PT, body fat percentage test, and basic fitness assessment is free to all recreation members, no incentives programming was indicated, center is open 6am - 10pm or midnight on weekdays.

WMU

**Services and Undergraduate Student Involvement:** All trainers are nationally certified and offer free weight room orientation, fitness assessment only available with PT package, offer 14 different GF classes, nothing about nutrition education through the recreation center was indicated

**Educational Offerings:** No prep courses or workshops were indicated, undergraduate internships offered at one off-site fitness center.

**Cost & Availability:** GF classes purchased separately from membership, incentives programming for employees but none were indicated for students, center is open 6am - 10 or 11pm on weekdays.

#### **IV. Discussion**

After evaluation of all 11 schools was complete and comparisons were made in three category areas, it was clear that certain institutions excelled in offering programs that actively involved undergraduate ES students and engaged the campus community. For example, the University of Akron was superb in having excellent programs for services and undergraduate student involvement. Akron hires undergraduate students for all personal training and GFI positions and offers multiple free orientations for recreation members. Each recreation member also gets one free complete fitness assessment per year with offerings for exercise program design and metabolic rate screening available for purchase. 20 different GF classes are offered and free nutritional counseling is included with a meal plan and can also be purchased separately. The University of Akron student recreation center works with the various health and wellness programs/majors on campus to promote undergraduate student involvement and employment.

In regards to educational offerings, the University of North Dakota had extensive options for prep courses or workshops for certifications. They present prep courses for a variety of specialty fitness certifications including but not limited to PiYo, Insanity, P90X, rock wall climbing, as well as ACE PT and CPR/AED/First Aid. North Dakota's student recreation center and kinesiology & public health education (KPHE) program work hand-in-hand to provide students with opportunities for employment as well required undergraduate/graduate internships. The recreation center requires that all fitness positions (PT, GFI, etc.) are health sciences majors or have prior fitness experience upon hire. Internships required by the KPHE program are offered at the recreation center which gives students an opportunity to focus on an area of interest and develop a project that could be applicable to the recreation facility in the future.

Looking at cost and availability of services, the institution that was most exceptional was again, the University of Akron. Students at Akron do not have to pay extra for student membership and all GF classes are included with available memberships (student, faculty/staff,

alumni, community member). The center is open 6am - 11pm on weekdays and has hours that are easy to access on the weekends, being open from 9am - 10pm on Saturdays and 12pm - 11pm on Sundays. The student recreation center also offers an extensive “ZipFit Challenge” incentives program that encourages all members of the campus community to live a healthier lifestyle. This challenge can be completed individually or in groups where members log minutes of exercise or physical activity that raises heart rate per week and build points that relate to minutes of activity completed. Members can also earn points by visiting a dietician, purchasing a PT package, getting a BodPod test, or getting blood work done. This challenge includes all recreation center members and utilizes multiple departments across the university as well as incorporating students in various health science majors (nursing, dietetics, sports science) and brings about a new form of unity among the campus community.

Additional institutions that stood out were the University of North Carolina at Greensboro and again, the University of North Dakota. The University of North Carolina at Greensboro had multiple different incentive programs available for any member that ranged from “Couch to 5K” to “Spartan Bootcamp”. The recreation center also offered service-learning programs where fitness staff go out to grade schools in the community and teach the students about health and wellness. The University of North Dakota was the one school that was outstanding in regards to nutrition counseling and classes. They have a program called “Culinary Corner” where students and groups can go to the basement of the recreation center and participate in cooking classes or listen to a chef speak about recipes and tips on cooking and eating healthier.

Even though all of the 10 peer institutions are accredited programs with differing ways of involving students, there seems to be a common trend among the highlighted institutions that make their programs so useful and exceptional. The incorporation of ES students into the student recreation center services that the University of Akron, University of North Carolina at

Greensboro, and University of North Dakota put forth not only includes the ES students, but also involves staff, campus community, and other resources on campus. Having different academic departments and services on campus work concomitantly allows the students to benefit the most by having multiple areas to get hired, fulfill shadowing hours, or find internships in.

## **V. Recommendation for Action**

After review of the opportunities available for undergraduate ES students at the 10 peer institutions compared to WMU, it was observed that WMU falls far short in providing pre-internship service learning options, especially compared to the University of Akron, University of North Dakota, and University of North Carolina at Greensboro. There are a variety of steps WMU can take to improve undergraduate ES student preparation. Pre-internships, practicums, projects, demonstrations, or promotion of employment selective to ES students, are the recommendations of the current author. These experiences would be valuable for students, college community at large, as well as the student recreation center.

One example that demonstrates student skill development was researched by Brown et al. at the University of Nebraska. Brown et al. evaluated the impact of student involvement in a participatory fitness assessment program. The authors shed light on many benefits that ES students and the campus community can receive from application-based responsibilities performed by ES students. The researchers looked at the model used for the ES capstone class, PE 468: Public Health Aspects of Physical Activity, where the undergraduate students gained monitored, practical, hands-on experience that used the principles and theories taught prior to the course. The students would first practice the health screenings on each other before performing them on the actual participants. After passing the practice testing which demonstrated skill competence, students developed hypotheses on the participants' baseline fitness levels that were tested using data collected from the community's free fitness assessments. This fitness screening

learning exercise involved 40 ES students and 305 voluntary student and faculty/staff participants. Cohorts were created with 6-8 participants paired with 2 student technicians. The ES students conducted all fitness assessments (submaximal cardiovascular, 7-site skinfold, submaximal muscular strength and endurance, resting blood pressure) as the initial health screening. Following the assessments, the results were provided to the participant and all questions were answered to the participant's satisfaction. To determine the baseline level of physical activity, a step counter was provided and the participants were instructed how to use the counter to collect the number of steps completed on a typical day. Each participant returned the step counter and was given the opportunity to have a fasted blood cholesterol panel. After all data were collected, the ES students tested their individual hypotheses and presented the results to the PE 468 capstone class.

To evaluate the effectiveness of the program, an anonymous 5-point likert scale questionnaire was randomly distributed to 120 participants. 85% of participants perceived they were more informed of their personal fitness levels as well as physical fitness in general; and a majority were impressed with the expertise and abilities of the student technicians. They learned their fitness status and had an opportunity to ask questions to knowledgeable students if clarity was necessary. In addition to these results, 95% of the student technicians reported the experience beneficial with comments such as, “[the experience] opened their eyes to how confused people can be about health and fitness...” The student technicians profited from this by applying skills (fitness assessing, communication, etc.) and knowledge (exercise physiology, statistics, etc.) in a setting that simulates their future career paths.

The Brown et al. program could serve as a model for the WMU Exercise Science Program. This would necessitate development of a working relationship between the ES faculty and student recreation center (SRC) staff. An option could be implementing a practicum portion of the undergraduate ES student curriculum. Offering a practicum as demonstrated by Brown et

al. could be an elective course or a project portion of a required capstone such as HPHE 4450: Exercise Testing and Prescription. This would allow students to use critical thinking skills and content from the classroom to be put into practice. As Brown et al. reported, this could be a free service available for all WMU students, faculty, and staff for a portion of each semester and could include introduction to fitness explanations, full fitness assessments, and follow ups. Collaboration with other WMU departments such as Dietetics, Holistic Health, Counselor Education, and Nursing could be incorporated to enhance the experience.

Other pre-internship options could be available for the ES students to practice exercise leadership and programming. Different practicums could be developed to address the variety of career paths of students. Areas of skill development may overlap or vary, depending on intended career path, such as physical therapy, strength and conditioning, corporate wellness, etc. Student preparation for the internship may require practice with addressing mobility constraints, exercise programming, evaluation of previous injuries, or improving sport performance. For example, an option would be to require students to lead group exercise classes, such as group fitness, weight training, or circuit fitness classes currently offered in the Human Performance and Health Education (HPHE) Department. After a period of observation, while supervised, students would be graded while leading the exercise session. It may be applicable for a student to shadow/work in the physical therapy satellite clinic in the SRC, or the strength and conditioning program in the Athletics Department. Students could also shadow the PTs and GFIs within the SRC current programming. Grading would be based upon the ES student attendance and performance as observed by a faculty member or designated supervisor.

In addition to a curriculum based program, directed recruitment of ES students in SRC programming would be beneficial. An example could be having a policy to give preference in hiring certified (or working toward certification) ES students for positions such as PT's, GFI's or various other positions revolving around exercise and physical activity. Hiring ES students who

have a passion for fitness can result in enhanced (SRC) employee retention rates and job performance. The ES students would desire to excel because it is the industry of their future career. Giving undergraduate ES students opportunities such as these could help guide and better prepare the students for their future career paths in exercise science.

There are barriers that must be addressed for change to occur. Changes in curriculum, relationship building between the SRC staff and HPHE faculty would need to be developed. The SRC is not affiliated within an academic college, but with Student Services Branch, resulting in a separate funding model. The financial cost of developing these programs would need to be evaluated and factored into the annual budget. It isn't within the scope of this project to address these issues, but they must be recognized. Addressing how these programs would be monitored via staffing, faculty, etc. would also require attention.

## **VI. Conclusion**

There are many schools that are successfully including ES students in their recreation center services and programs revolving around health, exercise, and nutrition. With the growing trend of obesity and sedentary lifestyle plaguing our universities, institutions can utilize the talent, expertise, and excitement of their own ES students through the incorporation of campus health and exercise programming. Providing ways of valuable pre-internship experience like those utilized by WMU's peer institutions, such as required practicum, project, or optional classes would allow undergraduate ES students to practice and apply the knowledge obtained from textbooks, as well as engaging the campus community in the importance of physical activity. Teaching the student body about fitness can become advantageous for WMU's SRC. Increased exposure to the facility and awareness of personal fitness status may lead to expansion of program participation, which in turn could lead to greater funding, budget allocation, and increased sales in PT and GF class packages. Although there are roadblocks, collaboration

between WMU's HPHE Department and the SRC director and staff, the result would be a prosperous program and wildly successful and experienced ES students ready to tackle their required internships and future careers.

## References

- American College Health Association. (2012, June). Healthy Campus 2020. Retrieved from <http://www.acha.org/HealthyCampus/student-obj.cfm>.
- Gow, R. W., Trace, S. E., & Mazzeo, S. E. (2010). Preventing weight gain in first year college students: an online intervention to prevent the “freshman fifteen”. *Eating behaviors*, 11(1), 33-39.
- Gregory A. Brown, Frank Lynott, & Kate A. Heelan. (2008). A fitness screening model for increasing fitness assessment and research experiences in undergraduate exercise science students. *Advances in Physiology Education*, 32(3). doi:10.1152/advan.00025.2007.
- Nelson, M. C., Kocos, R., Lytle, L. A., & Perry, C. L. (2009). Understanding the perceived determinants of weight-related behaviors in late adolescence: A qualitative analysis among college youth. *Journal of Nutrition Education and Behavior*, 41(4), 287-292.
- Obesity Action Coalition. (2015). *Obesity Statistics*. Retrieved from <http://www.obesityaction.org/educational-resources/obesity-statistics-fact-sheets>.
- Office of Disease Prevention and Health Promotion. (2015). *About Healthy People 2020*. Retrieved from <http://www.healthypeople.gov/2020/About-Healthy-People>.
- Reddan, G., & Rauchle, M. (2012). Student perceptions of the value of career development learning to a work-integrated learning course in exercise science. *Australian Journal of Career Development*, 21(1), 38-48. doi:10.1177/103841621202100106.
- Sparling, P. (2007). Obesity on campus. *Preventing Chronic Disease*, 4(3).
- Western Michigan University Office of Institutional Research. *Peer Institutions*. Retrieved from [www.wmich.edu/ir/peers.html](http://www.wmich.edu/ir/peers.html).

## **Appendices**

Appendix A:

Initial Email Sent to the 10 Peer Institutions (including WMU)

Appendix B:

Peer Institution Direct Comparison to WMU Charts

Table 3: Kansas State University vs WMU

Table 4: Northern Illinois University vs WMU

Table 5: Temple University vs WMU

Table 6: Texas Tech University vs WMU

Table 7: University of Akron vs WMU

Table 8: University of Alabama- Tuscaloosa vs WMU

Table 9: University of North Carolina at Greensboro vs WMU

Table 10: University of North Dakota vs WMU

Table 11: University of Southern Mississippi vs WMU

Table 12: West Virginia University vs WMU

## Appendix A

“Hello,

My name is Joanna and I am senior undergraduate exercise science student at Western Michigan University. For my undergraduate thesis project, I decided to research our 10 peer institutions and analyze their student recreation center webpage. I wanted to see if these schools involved the undergraduate exercise science students in services like personal training/fitness assessing, group fitness instructing, and nutritional counseling (if available).

As a result of my initial work, my adviser, Dr. Weideman, suggested it would be beneficial to speak directly to someone with further questions. As one of our peer institutions, I would like to contact you with some questions regarding the undergraduate exercise science program and how (if at all) the students are involved or encouraged to be involved with the student rec center on campus.

Is there a good time that I can contact you, or would you prefer that I send you the questions electronically?

If you are not the correct contact, please feel free to forward.

Thank you so much for your time!

Best,  
Joanna”

## Appendix B

Table 3

| <b>Factors Evaluated</b>                                | <b>Kansas State University</b><br>  | <b>Western Michigan University</b><br>  |
|---|--|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |  |  |
| Personal Training                                       | <ul style="list-style-type: none"> <li>-Trainers are officially hired on once they pass certification exam.</li> <li>-7 out of 9 trainers are students.</li> <li>-Offer nutrition and wellness education as well as a free weight room orientation.</li> </ul> | <ul style="list-style-type: none"> <li>-All 6 trainers are nationally certified.</li> <li>-Not indicated whether the trainers are students or not.</li> <li>-Offer group training packages.</li> <li>-Provide weight room orientation for free.</li> </ul> |
| Fitness Assessments                                     | <ul style="list-style-type: none"> <li>-Tests include resting HR, BP, cardiovascular endurance, muscular strength/endurance, flexibility, and body composition.</li> <li>-Test can be purchased separate from a training package.</li> </ul>                   | <ul style="list-style-type: none"> <li>-Included with purchase of personal training package.</li> <li>-Not indicated whether it can be utilized/purchased separately.</li> </ul>   |
| Group Fitness Classes                                   | <ul style="list-style-type: none"> <li>-Offer 27 different classes.</li> <li>-Not indicated whether students were instructors or not.</li> </ul>   | <ul style="list-style-type: none"> <li>-Offer 14 different classes.</li> <li>-Not indicated whether students were instructors or not.</li> </ul>   |
| Nutrition Counseling or Classes                         | <ul style="list-style-type: none"> <li>-Trainers are able to offer some nutrition education and analysis.</li> </ul>   | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| <b>Educational Offerings</b>                            |  |  |
| Certification Prep Courses/Workshops                    | <ul style="list-style-type: none"> <li>-ACE personal training and group fitness instructor prep course and shadowing program offered.</li> </ul>   | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| Undergraduate Internships                               | <ul style="list-style-type: none"> <li>-None for undergraduate, only graduate students.</li> </ul>   | <ul style="list-style-type: none"> <li>-Only available at one off-site fitness center; none at SRC.</li> </ul>   |
| <b>Cost &amp; Availability</b>                          |  |  |
| Memberships   | <ul style="list-style-type: none"> <li>-All group fitness classes are free with a membership.</li> </ul>   | <ul style="list-style-type: none"> <li>-Student membership is free.</li> <li>-All group fitness classes and personal training must be purchased separately or in a semester-long package.</li> </ul>   |
| Incentives Programming                                  | <ul style="list-style-type: none"> <li>-Instagram wellness challenge where winner receives a FitBit.</li> <li>-Healthy eating promotions where bags of groceries are raffled off.</li> </ul>   | <ul style="list-style-type: none"> <li>-"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.</li> <li>-Nothing indicated for students.</li> </ul>                                |
| Hours   | <p>Monday- Thursday: 5:30am- 12am<br/>       Friday: 5:30am- 11pm<br/>       Saturday: 9am- 10pm<br/>       Sunday: 12pm- 12am</p>   | <p>Monday- Thursday: 6am- 11pm<br/>       Friday: 6am- 10pm<br/>       Saturday: 10am- 7pm<br/>       Sunday: 10am- 9pm</p>  |

Sources: <http://recservices.k-state.edu/fitness-wellness/> and <http://www.wmich.edu/rec/>

Table 4

| <b>Factors Evaluated</b>                                | <b>Northern Illinois University</b><br>  | <b>Western Michigan University</b><br>  |
|---|---|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |   |  |
| Personal Training                                       | -All 8 trainers are nationally certified.<br>-5 out of the 8 trainers are students majoring in exercise science related fields.<br>-Give hiring preference to individuals who are certified or working towards certification. | -All 6 trainers are nationally certified.<br>-Not indicated whether the trainers are students or not.<br>-Offer group training packages.<br>-Provide weight room orientation for free. |
| Fitness Assessments                                     | -Fitness testing includes body weight, body fat %, BMI, BP, flexibility, upper and lower body strength tests, physical activity screening, and a cardiovascular test.   | -Included with purchase of personal training package.<br>-Not indicated whether it can be utilized/purchased separately.   |
| Group Fitness Classes                                   | -Offer 19 different classes.<br>-All instructors are nationally certified.<br>-Many instructors are students, but not all.<br>-Give hiring preference to individuals who are certified or working towards certification.      | -Offer 14 different classes.<br>-Not indicated whether students were instructors or not.   |
| Nutrition Counseling or Classes                         | -SRC works with School of Family, Consumer, and Nutrition for members to obtain nutrition education.  | -None were indicated or seen on the website.   |
| <b>Educational Offerings</b>                            |   |  |
| Certification Prep Courses/Workshops                    | -None were indicated or seen on the website.  | -None were indicated or seen on the website.   |
| Undergraduate Internships                               | -Yes, offer many in various fields like fitness, recreation, business, etc.   | -Only available at one off-site fitness center; none at SRC.   |
| <b>Cost &amp; Availability</b>                          |   |  |
| Memberships   | -Student membership is free.<br>-Faculty and staff are able to do payroll deduction for membership payment.<br>-Membership options for community.   | -Student membership is free.<br>-All group fitness classes and personal training must be purchased separately or in a semester-long package.   |
| Incentives Programming                                  | -Rec Rewards program allows you to build points for every workout you check in at. You earn prizes at the end of the semester based on the point levels you earned.   | -"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.<br>-Nothing indicated for students.                    |
| Hours   | Monday- Thursday: 6am- 11pm<br>Friday: 6am- 8pm<br>Saturday: 11am- 7pm<br>Sunday: 1pm- 10pm   | Monday- Thursday: 6am- 11pm<br>Friday: 6am- 10pm<br>Saturday: 10am- 7pm<br>Sunday: 10am- 9pm   |

Sources:<http://www.niu.edu/campusrec/index.shtml> and <http://www.wmich.edu/rec/>

Table 5

| <b>Factors Evaluated</b>                                | <b>Temple University</b><br>  | <b>Western Michigan University</b><br>  |
|---|--|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |  |  |
| Personal Training                                       | <ul style="list-style-type: none"> <li>-Nothing about trainers was indicated or listed on the website.</li> <li>-All rec members (including students) must purchase a personal training package in order to utilize the services.</li> </ul>   | <ul style="list-style-type: none"> <li>-All 6 trainers are nationally certified.</li> <li>-Not indicated whether the trainers are students or not.</li> <li>-Offer group training packages.</li> <li>-Provide weight room orientation for free.</li> </ul> |
| Fitness Assessments                                     | <ul style="list-style-type: none"> <li>-Offer comprehensive fitness assessment including resting HR and BP, circumference measurements, body composition, muscular endurance and strength, cardiorespiratory endurance, and flexibility.</li> <li>-Assessment can be purchased separately without a training package.</li> </ul> | <ul style="list-style-type: none"> <li>-Included with purchase of personal training package.</li> <li>-Not indicated whether it can be utilized/purchased separately.</li> </ul>   |
| Group Fitness Classes                                   | <ul style="list-style-type: none"> <li>-Offer 28 different classes.</li> <li>-All instructors are nationally certified.</li> <li>-Not indicated whether students were instructors or not.</li> </ul>   | <ul style="list-style-type: none"> <li>-Offer 14 different classes.</li> <li>-Not indicated whether students were instructors or not.</li> </ul>   |
| Nutrition Counseling or Classes                         | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| <b>Educational Offerings</b>                            |  |  |
| Certification Prep Courses/Workshops                    | <ul style="list-style-type: none"> <li>-Offer AAAI-ISMA personal trainer, yoga, pilates, aerobic instructor, and BOSU workout system certifications.</li> </ul>  | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| Undergraduate Internships                               | <ul style="list-style-type: none"> <li>-None for undergraduate, only graduate students.</li> </ul>   | <ul style="list-style-type: none"> <li>-Only available at one off-site fitness center; none at SRC.</li> </ul>   |
| <b>Cost &amp; Availability</b>                          |  |  |
| Memberships   | <ul style="list-style-type: none"> <li>-Student membership is free.</li> <li>-Faculty and staff are able to do payroll deduction for membership payment.</li> <li>-All rec members (including students) must purchase group fitness packages.</li> </ul>   | <ul style="list-style-type: none"> <li>-Student membership is free.</li> <li>-All group fitness classes and personal training must be purchased separately or in a semester-long package.</li> </ul>   |
| Incentives Programming                                  | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   | <ul style="list-style-type: none"> <li>-"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.</li> <li>-Nothing indicated for students.</li> </ul>                                |
| Hours   | <p>Monday- Thursday: 6am- 10pm<br/>       Friday: 6am- 10pm<br/>       Saturday: 9am- 8pm<br/>       Sunday: 9m- 10pm</p>  | <p>Monday- Thursday: 6am- 11pm<br/>       Friday: 6am- 10pm<br/>       Saturday: 10am- 7pm<br/>       Sunday: 10am- 9pm</p>  |

Sources: <http://www.temple.edu/studentaffairs/campusrec/> and <http://www.wmich.edu/rec/>

Table 6

| <b>Factors Evaluated</b>                                | <b>Texas Tech University</b><br>   | <b>Western Michigan University</b><br>  |
|---|---|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |   |  |
| Personal Training                                       | -All 17 trainers are nationally certified.<br>-13 out of the 17 trainers are students.<br>-Offer a variety of training types: overall, sport specific, lifestyle, area specific, time-limited, one-on-one, and partner. | -All 6 trainers are nationally certified.<br>-Not indicated whether the trainers are students or not.<br>-Offer group training packages.<br>-Provide weight room orientation for free. |
| Fitness Assessments                                     | -Offer initial fitness assessment (standard) at consultation of personal training package with subsequent assessments to measure progress.<br>-Can purchase an advanced sub-max fitness analysis for \$45-\$50.         | -Included with purchase of personal training package.<br>-Not indicated whether it can be utilized/purchased separately.   |
| Group Fitness Classes                                   | -Offer 28 different classes, including prenatal fitness classes.<br>-Not indicated whether students were instructors or not.<br>-Also offer Crossfit, Iron Man Triathlon Challenge, and partner yoga.                   | -Offer 14 different classes.<br>-Not indicated whether students were instructors or not.   |
| Nutrition Counseling or Classes                         | -Have a link on SRC website that leads to campus health smart nutrition choices page.   | -None were indicated or seen on the website.   |
| <b>Educational Offerings</b>                            |   |  |
| Certification Prep Courses/Workshops                    | -None were indicated or seen on the website.  | -None were indicated or seen on the website.   |
| Undergraduate Internships                               | -None were indicated or seen on the website.  | -Only available at one off-site fitness center; none at SRC.   |
| <b>Cost &amp; Availability</b>                          |   |  |
| Memberships   | -Student membership is free.<br>-All aerobic/yoga classes are free for all rec members.<br>-Faculty and staff can opt for payroll deduction method for membership.  | -Student membership is free.<br>-All group fitness classes and personal training must be purchased separately or in a semester-long package.   |
| Incentives Programming                                  | -Raider Fit Rewards are rewards you earn by getting a fit card and get a stamp for every group fitness class you participate in.<br>-Fitness2You allows fitness staff to come to your organization or business.         | -"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.<br>-Nothing indicated for students.                    |
| Hours   | Monday- Friday: 6am- 12am<br>Saturday: 8am- 10pm<br>Sunday: 10am- 12am  | Monday- Thursday: 6am- 11pm<br>Friday: 6am- 10pm<br>Saturday: 10am- 7pm<br>Sunday: 10am- 9pm   |

Table 7

| <b>Factors Evaluated</b>                                | <b>University of Akron</b><br>   | <b>Western Michigan University</b><br>  |
|---|---|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |   |  |
| Personal Training                                       | -All trainers are nationally certified students.<br>-Offer initial user, stability ball, weight room, stretching, bosu ball, stretch band, and circuit training orientations for free.  | -All 6 trainers are nationally certified.<br>-Not indicated whether the trainers are students or not.<br>-Offer group training packages.<br>-Provide weight room orientation for free. |
| Fitness Assessments                                     | -Each student/member can get 1 free assessment/year that includes aerobic capacity, flexibility, body composition, muscular strength and endurance.<br>-Offer exercise program design and metabolic rate screening for \$12-\$20. | -Included with purchase of personal training package.<br>-Not indicated whether it can be utilized/purchased separately.   |
| Group Fitness Classes                                   | -Offer 20 different classes.<br>-All instructors are nationally certified students.   | -Offer 14 different classes.<br>-Not indicated whether students were instructors or not.   |
| Nutrition Counseling or Classes                         | -Free nutrition counseling and personal nutrition plan with meal plan, but can be purchased separately.   | -None were indicated or seen on the website.   |
| <b>Educational Offerings</b>                            |   |  |
| Certification Prep Courses/Workshops                    | -Workshops are offered for students as well as 5 scholarships offered per year.   | -None were indicated or seen on the website.   |
| Undergraduate Internships                               | -Yes, they promote unpaid internships for those majoring in recreation/sports management and exercise science.  | -Only available at one off-site fitness center; none at SRC.   |
| <b>Cost &amp; Availability</b>                          |   |  |
| Memberships   | -Student membership is free.<br>-Group fitness classes are included with membership purchase.<br>-Alumni, faculty/staff and community are encouraged and able to be rec members as well.  | -Student membership is free.<br>-All group fitness classes and personal training must be purchased separately or in a semester-long package.   |
| Incentives Programming                                  | -"ZipFit" is an individual or team challenge where you compete for prizes in weekly activities related to health and wellness.<br>-Also have workout cards that help you keep track throughout the semester.                      | -"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.<br>-Nothing indicated for students.                    |
| Hours   | Monday- Friday: 6am- 11pm<br>Saturday: 9am- 10pm<br>Sunday: 12pm- 11pm  | Monday- Thursday: 6am- 11pm<br>Friday: 6am- 10pm<br>Saturday: 10am- 7pm<br>Sunday: 10am- 9pm   |

Sources: <http://www.uakron.edu/srws/> and <http://www.wmich.edu/rec/>

Table 8

| <b>Factors Evaluated</b>                                | <b>University of Alabama-Tuscaloosa</b><br>  | <b>Western Michigan University</b><br>  |
|---|---|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |   |  |
| Personal Training                                       | -All 21 trainers are nationally certified.<br>-12 out of the 21 trainers are students.<br>-Offer one-on-one training as well as group training sessions.  | -All 6 trainers are nationally certified.<br>-Not indicated whether the trainers are students or not.<br>-Offer group training packages.<br>-Provide weight room orientation for free. |
| Fitness Assessments                                     | -MicroFit (computerized assessment), BodPod, consultation (assessment of current workouts), and 3-site skinfold assessment.   | -Included with purchase of personal training package.<br>-Not indicated whether it can be utilized/purchased separately.   |
| Group Fitness Classes                                   | -Offer 17 different classes.<br>-Certification is preferred, but in-house training is required.<br>-Goal is to hire students first.   | -Offer 14 different classes.<br>-Not indicated whether students were instructors or not.   |
| Nutrition Counseling or Classes                         | -Fitness staff provide nutritional counseling based on questionnaire and 3 days of dietary recall sheets.<br>-Offer advice on saving money with groceries as well as healthy options.                           | -None were indicated or seen on the website.   |
| <b>Educational Offerings</b>                            |   |  |
| Certification Prep Courses/Workshops                    | -None were indicated or seen on the website.  | -None were indicated or seen on the website.   |
| Undergraduate Internships                               | -Yes, they can be semester or year long practicums or internships.  | -Only available at one off-site fitness center; none at SRC.   |
| <b>Cost &amp; Availability</b>                          |   |  |
| Memberships   | -Student membership is free.<br>-Faculty/staff membership is deducted from paycheck and is a flat rate of \$28/month.<br>-Recent graduates and family of the student can also have a membership for \$28/month. | -Student membership is free.<br>-All group fitness classes and personal training must be purchased separately or in a semester-long package.   |
| Incentives Programming                                  | -"UAchieve" is a program that brings anyone who is an SRC member together based on common interests.<br>-Participants get active and move while bonding.  | -"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.<br>-Nothing indicated for students.                    |
| Hours   | Monday- Thursday: 5:30am- 12am<br>Friday: 5:30am- 9pm<br>Saturday: 9am- 9pm<br>Sunday: 9am- 12am  | Monday- Thursday: 6am- 11pm<br>Friday: 6am- 10pm<br>Saturday: 10am- 7pm<br>Sunday: 10am- 9pm   |

Sources: <http://urec.sa.ua.edu/> and <http://www.wmich.edu/rec/>

Table 9

| <b>Factors Evaluated</b>                                | <b>University of North Carolina at Greensboro</b><br>  | <b>Western Michigan University</b><br>  |
|---|---|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |   |  |
| Personal Training                                       | -All 10 trainers are nationally certified.<br>-9 out of the 10 trainers are students in kinesiology or related majors.<br>-Offer equipment orientation for free and a 6-week Spartan Boot Camp.           | -All 6 trainers are nationally certified.<br>-Not indicated whether the trainers are students or not.<br>-Offer group training packages.<br>-Provide weight room orientation for free. |
| Fitness Assessments                                     | -Offer body fat analysis and full fitness assessment (HR, BP, flexibility, cardiovascular endurance, muscular strength and endurance).  | -Included with purchase of personal training package.<br>-Not indicated whether it can be utilized/purchased separately.   |
| Group Fitness Classes                                   | -Offer 17 different classes.<br>-All instructors are nationally certified.<br>-Most of the instructors are students majoring in various fields.   | -Offer 14 different classes.<br>-Not indicated whether students were instructors or not.   |
| Nutrition Counseling or Classes                         | -None were indicated or seen on the website.  | -None were indicated or seen on the website.   |
| <b>Educational Offerings</b>                            |   |  |
| Certification Prep Courses/Workshops                    | -"On The Beat" group fitness instructor prep course and ACE personal training prep course.  | -None were indicated or seen on the website.   |
| Undergraduate Internships                               | -None for undergraduate, only graduate students.  | -Only available at one off-site fitness center; none at SRC.   |
| <b>Cost &amp; Availability</b>                          |   |  |
| Memberships   | -Student membership is free.<br>-Students get discount on full fitness assessment (\$10 off).<br>-Alumni get discounts and can continue to use the SRC.   | -Student membership is free.<br>-All group fitness classes and personal training must be purchased separately or in a semester-long package.   |
| Incentives Programming                                  | -Offer a variety of different programs like couch to 5k, jumpstart weight loss, and host fitness competitions.<br>-Have service learning programs where trainers come to your organization or department. | - "Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.<br>-Nothing indicated for students.                   |
| Hours   | Monday- Thursday: 6 am-11pm<br>Friday: 6am- 9pm<br>Saturday: 10am- 7pm<br>Sunday: 12pm- 11pm  | Monday- Thursday: 6am- 11pm<br>Friday: 6am- 10pm<br>Saturday: 10am- 7pm<br>Sunday: 10am- 9pm   |

Sources: <http://campusrec.uncg.edu/> and <http://www.wmich.edu/rec/>

Table 10

| <b>Factors Evaluated</b>                                | <b>University of North Dakota</b><br>   | <b>Western Michigan University</b><br>  |
|---|--|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |  |  |
| Personal Training                                       | <ul style="list-style-type: none"> <li>-All 7 trainers are nationally certified.</li> <li>-3 out of the 7 trainers are students that are health science majors or have prior experience.</li> <li>-Offer equipment orientation, intro to weight training, and give strength tests for free.</li> </ul> | <ul style="list-style-type: none"> <li>-All 6 trainers are nationally certified.</li> <li>-Not indicated whether the trainers are students or not.</li> <li>-Offer group training packages.</li> <li>-Provide weight room orientation for free.</li> </ul> |
| Fitness Assessments                                     | <ul style="list-style-type: none"> <li>-Offer standard fitness assessment and skinfold body fat assessment for free.</li> <li>-Also have BodPod tests for \$20/test.</li> </ul>  | <ul style="list-style-type: none"> <li>-Included with purchase of personal training package.</li> <li>-Not indicated whether it can be utilized/purchased separately.</li> </ul>   |
| Group Fitness Classes                                   | <ul style="list-style-type: none"> <li>-Offer 25 different classes.</li> <li>-All instructors are nationally certified.</li> <li>-About half of the instructors are students.</li> </ul>   | <ul style="list-style-type: none"> <li>-Offer 14 different classes.</li> <li>-Not indicated whether students were instructors or not.</li> </ul>   |
| Nutrition Counseling or Classes                         | <ul style="list-style-type: none"> <li>-"Culinary Corner" which is a kitchen in the SRC where chefs come and offer cooking tips and workshops.</li> <li>-Students can meet with registered dietitians or dietetic students.</li> </ul>   | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| <b>Educational Offerings</b>                            |  |  |
| Certification Prep Courses/Workshops                    | <ul style="list-style-type: none"> <li>-Many certifications (PiYo, Insanity, P90X) and prep courses (ACE personal training) offered.</li> <li>-Also offer rock wall climbing certs.</li> </ul>   | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| Undergraduate Internships                               | <ul style="list-style-type: none"> <li>-Yes, work with kinesiology and health education program to have course credit internship opportunities.</li> </ul>   | <ul style="list-style-type: none"> <li>-Only available at one off-site fitness center; none at SRC.</li> </ul>   |
| <b>Cost &amp; Availability</b>                          |  |  |
| Memberships   | <ul style="list-style-type: none"> <li>-Student membership is free.</li> <li>-All faculty gets a discount with Health Club Credit through insurance.</li> <li>-All members get 6 free fitness assessments and free cooking classes.</li> </ul>   | <ul style="list-style-type: none"> <li>-Student membership is free.</li> <li>-All group fitness classes and personal training must be purchased separately or in a semester-long package.</li> </ul>   |
| Incentives Programming                                  | <ul style="list-style-type: none"> <li>-Work Well is a successful program offered for any faculty or staff with or without a membership to complete 5 of the 6 weeks of classes and receive a 30% reimbursement.</li> </ul>  | <ul style="list-style-type: none"> <li>-"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.</li> <li>-Nothing indicated for students.</li> </ul>                                |
| Hours   | <ul style="list-style-type: none"> <li>Monday- Friday: 5:30am- 11pm</li> <li>Saturday: 9am- 8pm</li> <li>Sunday: 12pm- 9pm</li> </ul>  | <ul style="list-style-type: none"> <li>Monday- Thursday: 6am- 11pm</li> <li>Friday: 6am- 10pm</li> <li>Saturday: 10am- 7pm</li> <li>Sunday: 10am- 9pm</li> </ul>   |

Sources: <http://und.edu/health-wellness/wellness/index.cfm> and <http://www.wmich.edu/rec/>

Table 11

| <b>Factors Evaluated</b>                                | <b>University of Southern Mississippi</b>  | <b>Western Michigan University</b>   |
|---|--|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |  |  |
| Personal Training                                       | -All 11 trainers are nationally certified.<br>-All trainers are students majoring in various fields.   | -All 6 trainers are nationally certified.<br>-Not indicated whether the trainers are students or not.<br>-Offer group training packages.<br>-Provide weight room orientation for free. |
| Fitness Assessments                                     | -Can purchase full fitness assessment and/or body fat % assessment.<br>-Assessment focuses on cardiovascular, endurance, flexibility, and muscular strength.                       | -Included with purchase of personal training package.<br>-Not indicated whether it can be utilized/purchased separately.   |
| Group Fitness Classes                                   | -Offer 18 different classes.<br>-All instructors are nationally certified.<br>-Not indicated whether students were instructors or not.   | -Offer 14 different classes.<br>-Not indicated whether students were instructors or not.   |
| Nutrition Counseling or Classes                         | -None were indicated or seen on the website.   | -None were indicated or seen on the website.   |
| <b>Educational Offerings</b>                            |  |  |
| Certification Prep Courses/Workshops                    | -None were indicated or seen on the website.   | -None were indicated or seen on the website.   |
| Undergraduate Internships                               | -Yes, one currently listed for social media marketing.   | -Only available at one off-site fitness center; none at SRC.   |
| <b>Cost &amp; Availability</b>                          |  |  |
| Memberships   | -Student membership is free.<br>-Faculty/staff membership is taken out of paycheck if desired.<br>-No indication of prices for group fitness classes or personal training.         | -Student membership is free.<br>-All group fitness classes and personal training must be purchased separately or in a semester-long package.   |
| Incentives Programming                                  | -"Wellness on Wheels" is an a la carte list of wellness programs offered for individuals and organizations. You can choose one or more programs and the trainers will come to you. | - "Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.<br>-Nothing indicated for students.                   |
| Hours   | Monday- Thursday: 6am-10:30pm<br>Friday: 6am- 8pm<br>Saturday: 9am- 6pm<br>Sunday: 2pm- 10:30pm  | Monday- Thursday: 6am- 11pm<br>Friday: 6am- 10pm<br>Saturday: 10am- 7pm<br>Sunday: 10am- 9pm   |

Sources: <http://www.usm.edu/rec-sports> and <http://www.wmich.edu/rec/>

Table 12

| <b>Factors Evaluated</b>                                | <b>West Virginia University</b><br>   | <b>Western Michigan University</b><br>  |
|---|--|--|
| <b>Services &amp; Undergraduate Student Involvement</b> |  |  |
| Personal Training                                       | <ul style="list-style-type: none"> <li>-All 6 trainers are nationally certified.</li> <li>-All trainers are students majoring in an exercise/athletic related field.</li> <li>-No training packages or rates were listed.</li> </ul>     | <ul style="list-style-type: none"> <li>-All 6 trainers are nationally certified.</li> <li>-Not indicated whether the trainers are students or not.</li> <li>-Offer group training packages.</li> <li>-Provide weight room orientation for free.</li> </ul> |
| Fitness Assessments                                     | <ul style="list-style-type: none"> <li>-Offer body Fat % test by use of a tanita scale and basic assessment (resting HR, BP, girth measurements, and body fat composition).</li> </ul>   | <ul style="list-style-type: none"> <li>-Included with purchase of personal training package.</li> <li>-Not indicated whether it can be utilized/purchased separately.</li> </ul>   |
| Group Fitness Classes                                   | <ul style="list-style-type: none"> <li>-Offer 9 different classes.</li> <li>-All instructors are nationally certified.</li> <li>-Some instructors are undergraduate students, but not all.</li> </ul>                                    | <ul style="list-style-type: none"> <li>-Offer 14 different classes.</li> <li>-Not indicated whether students were instructors or not.</li> </ul>   |
| Nutrition Counseling or Classes                         | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| <b>Educational Offerings</b>                            |  |  |
| Certification Prep Courses/Workshops                    | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   |
| Undergraduate Internships                               | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   | <ul style="list-style-type: none"> <li>-Only available at one off-site fitness center; none at SRC.</li> </ul>   |
| <b>Cost &amp; Availability</b>                          |  |  |
| Memberships   | <ul style="list-style-type: none"> <li>-Personal training is free to all students, faculty, and rec members.</li> <li>-Body Fat % test and basic fitness assessment are free.</li> <li>-Extensive fitness assessment is \$20.</li> </ul> | <ul style="list-style-type: none"> <li>-Student membership is free.</li> <li>-All group fitness classes and personal training must be purchased separately or in a semester-long package.</li> </ul>   |
| Incentives Programming                                  | <ul style="list-style-type: none"> <li>-None were indicated or seen on the website.</li> </ul>   | <ul style="list-style-type: none"> <li>-"Zest For Life" employee wellness program includes facility orientation, group fitness classes, and women on weights programs.</li> <li>-Nothing indicated for students.</li> </ul>                                |
| Hours   | <p>Monday- Thursday: 6am- 12am<br/>       Friday: 6am- 10pm<br/>       Saturday: 8am- 10pm<br/>       Sunday: 10am- 10pm</p>   | <p>Monday- Thursday: 6am- 11pm<br/>       Friday: 6am- 10pm<br/>       Saturday: 10am- 7pm<br/>       Sunday: 10am- 9pm</p>  |

Sources: <http://studentreccenter.wvu.edu/> and <http://www.wmich.edu/rec/>