

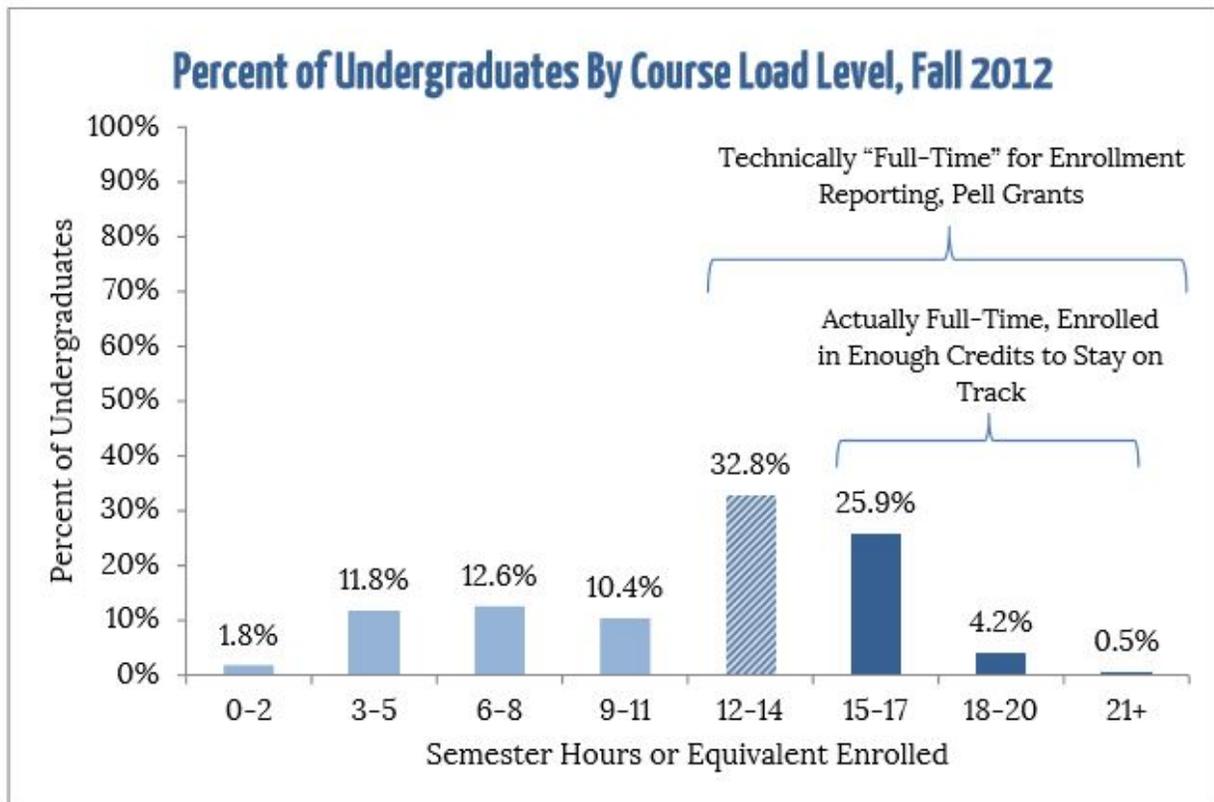
## CASA Dean's MMU (Monday Morning Update)

Monday, January 30, 2017

Dear Colleagues,

The Global Community for Academic Advising (NACADA) and Complete College America (CCA) are joining forces to teach students the skills, behaviors, and attitudes to thrive academically, boost on-time completion rates and reduce student loan debt in partnership with the nation's academic advisors. The initiative will reinforce academic advisors' integral role in college completion efforts and provide technical assistance and resources for advisors to help implement *15 to Finish* initiatives on their campuses.

Like most universities, SIU defines a "full-time student" as a student who takes 12 or more semester hours. But if "full-time" is the number of credits it takes to complete a bachelor's degree in four years (eight semesters), then 15 is the number required to be on track. A recent survey conducted for CCA found out that most college students (69%) were not enrolled in a schedule that would lead to on-time graduation; even among "full-time" students, most (52%) were actually taking fewer than 15 hours per semester, as shown in the following diagram:



Cliff Adelman [Adelman 1999, Answers in the Toolbox report] discovered that attendance intensity is a key factor in student success:

- Taking 12 credits per term instead of 15 can add a year to a Bachelor's degree, even if students never fail a course, change majors, or take a class beyond their degree requirements.
- Dropout rates are higher for students who take fewer credits. In the 2004/2009 BPS student, 17% of students who completed 30 credits their first year dropped out without a degree by the end of six years, compared to 23% of students who completed 24-29 credits.

We need to find out the patterns of our student attendance intensity, i.e., the number of credits our students typically take per semester, and raise attendance expectation to 15 hours per semester as the norm. Students can split up 15 however they want. It just has to add up to 30 credit hours for the entire year. Below are some of the examples of implementing *15 to Finish*:

<b>Fall</b>		<b>Spring</b>		<b>Summer</b>		<b>On-Time</b>
<b>15</b>	+	<b>15</b>	+	<b>0</b>	=	<b>30</b>
<b>12</b>	+	<b>12</b>	+	<b>6</b>	=	<b>30</b>
<b>15</b>	+	<b>12</b>	+	<b>3</b>	=	<b>30</b>
<b>12</b>	+	<b>15</b>	+	<b>3</b>	=	<b>30</b>

For students, *15 to Finish* has many advantages such as: Saving money by not paying extra tuition; Avoiding more debt; Starting to earn faster; and Reducing the odds to drop out.

## **2017 RESEARCH SYMPOSIUM**

The 2017 Applied Sciences and Arts Multidisciplinary Research Symposium will take place on Saturday, November 4<sup>th</sup>, 2017 in the Transportation Education Center. CASA is proud to continue this annual symposium series to empower, engage, and inspire faculty and students in the areas of applied sciences and arts. Please plan to attend this Symposium to learn about cutting edge research and emerging technologies. The Symposium will highlight the work of researchers from southern Illinois and across the nation, who are respected experts in the field of applied sciences and arts.

As you know, CASA consists of a diverse range of programs – transportation, architecture and design, allied health, and information systems and applied technologies – which all center on the tangible application of knowledge and technology in the world. As such, this year the Symposium will continue to highlight the emerging technologies and best practice in the applied sciences and arts that will or have served as a catalyst for progress, change, and evolution in our disciplines. The Research Committee is calling for suggestions for a central theme, if appropriate, for this year's symposium.

As a continuation of our successful past practice, the 2017 ASA Multidisciplinary Research Symposium will continue to include full paper presentations, extended abstract presentations, workshops, panel discussion, and posters. Faculty and students are encouraged to submit a paper, abstract, poster, or a proposal for a workshop or panel discussion in their areas. Please promote our Symposium by spreading the message and encouraging submission and sponsorship. We are all actively engaged in research motivated by a wide array of practical needs. In 2017, the Symposium seeks a wider participation from our faculty, students, alumni, industrial partners, and community members. We will also have

opportunities for the presentation of exceptional work that falls outside the scope of the Symposium theme, especially with regard to projects that are led by or that engage students and community members.

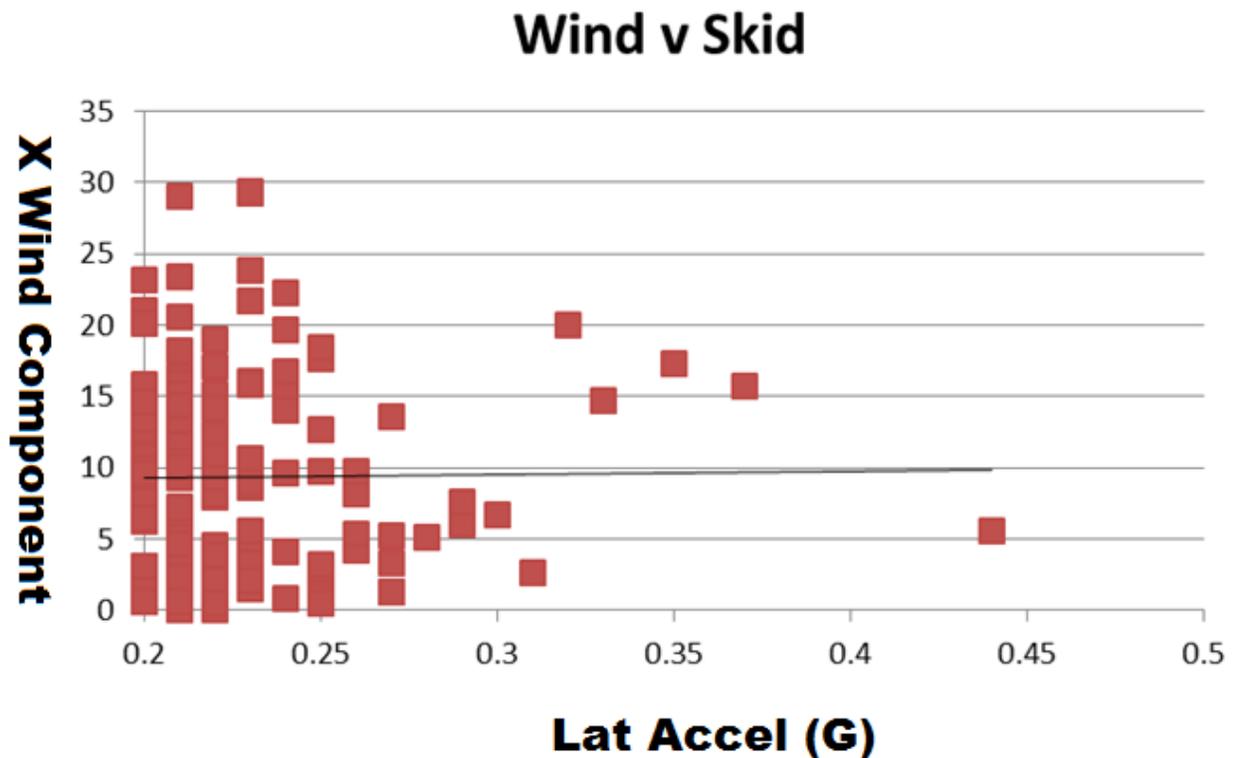
## CONGRATULATIONS

- **Jennifer S. Sherry**, RDH, MEd, Associate Professor of Dental Hygiene (DH), Norine M. Blackstad (4th year DH student), and Kasey Wheatley, RDH, BSDH (DH Class of 2016), published a continuing article entitled, *E-Cigarettes, Vaping, and Chairside Education*. It was featured on the website, Dental Academy of Continuing Education as well as in the January edition of *RDH Magazine* (<http://www.rdhmag.com/index.html>, peer-reviewed continuing education insert). This is the link to the continuing education article: [https://www.dentalacademyofce.com/dace/coursereview.aspx?url=3229%2FPDF%2F1612cei\\_Sherry-Vaping\\_web.pdf&scid=16546](https://www.dentalacademyofce.com/dace/coursereview.aspx?url=3229%2FPDF%2F1612cei_Sherry-Vaping_web.pdf&scid=16546)  
Congratulations!
- A grant proposal entitled “Oral Health Workforce Grant” has been submitted by the Principal Investigator (PI) **Faith Miller**, Associate Professor and Program Director of Dental Hygiene (DH), and Co-PI **Jennifer Sherry**, Associate Professor of DH, **Natalie Richardson**, Dental Hygienist of DH, and **Nathan Black**, CASA Network Administrator, to Illinois Department of Public Health. Congratulations!
- The second issue of the Journal of Applied Sciences and Arts (JASA Volume 1 Number 2) was published recently. Five peer-reviewed articles were published in this issue, and three authors (highlighted below) are from our College:
  - **Donald Barlett**: The Effects of Using Noise Reduction Turbofan Engine Nozzle Designs on a Turbojet Engine.
  - Giacomo Pala: Complexity as a Narrative.
  - Reza T. Ahmadi, Diana Saiki, and Charles Ellis: Post Occupancy Evaluation an Academic Building: Lessons to Learn.
  - **Qian Huang** and Chen Mao: Occupancy Estimation in Smart Building Using Hybrid CO2/Light Wireless Sensor Network.
  - **Blaine M. Heisner**: The Effect of Electronic Throttle Control Systems on Gasoline Internal Combustion Engine Compression Testing Procedures.

For more information please visit the JASA online page at:  
<http://opensiuc.lib.siu.edu/jasa/vol1/iss2/>. Congratulations!

- Dr. **Sandy Collins**, Associate Professor and Program Director of Health Care Management program, has been using a Hollywood movie titled *Damaged Care* in her HCM 420 Healthcare Ethics class for years. The movie was based on a real story of Dr. Linda Peeno, one of the first physicians in the nation who had the courage to stand up against managed care companies. Dr. Peeno has accepted an invitation to visit the HCM Program and speak to the class as a guest speaker. More information will follow as arrangements are finalized. Congratulations!

- Mr. **Ken Bro** is Assistant Instructor in our Aviation Flight program. His research work on flight data analytics has a great potential to become a formal publication. Aviation flight data are extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to pilot operations and interactions. Ken Bro collected enormous amount of data from five (5) G1000 aircraft,  $473 * 10^7$  data points per 2000-hour block, analyzing them using statistics and analytics tools such as R, SPSS, PSPP, etc. Then he was able to answer questions like: Do we skid dangerously? Why do we skid? He compared Xwind component to skid strength and location to figure out whether the pilot had overshoot. The picture below is a data visualization from Ken's research presentation. With this kind of data analytics research, Mr. Bro can also answer questions like: Do we skid dangerously? Does the wind cause our problem? Does location cause problem? This research has great potential to enhance flight safety, for instance, avoiding spin, pitching and stabilization, and overshoot correction training with students. This research could also help maintenance, such as leaning power management and engine longevity. Mr. Bro is investigating SIU BigDog and Amazon Web Services and their supporting tools for big data analytics research. This research has great potential toward publication, external funds, and real-world applications. Congratulations!



- **Kelsey Kauffman**, a graduate student in the Master of Architecture program, was selected as the *2016 Chapter President of the Year* for the American Institute of Architecture Students. She was chosen as the best president from among 151 chapters of the AIAS spread over 12 countries! This is a significant recognition and achievement. We are so proud of her!

Kelsey served as the SIUC AIAS chapter president in 2016. She is currently a graduate assistant in the School of Architecture completing the master's degree. Congratulations!



## **GREEN FUND CALL FOR PROPOSALS**

Proposals are now being accepted for the Green Fund awards at Southern Illinois University Carbondale. Applications are due by March 1, 2017, and the Green Fund Award recipients will be announced on April 21, the day before Earth Day 2017.

Every current SIU student, faculty, staff, or campus unit is eligible to apply for a Green Fund project grant. Awards are granted up to two times each semester by the green Fund Committee, which is composed of one faculty, one staff, and the three student members of the Sustainability Council. Green Fund projects should advance sustainability on the SIU campus in one or more of the following areas: energy, water, waste, buildings, transportation, purchasing, grounds, food and dining, social equity, social practices, academics and research, and education and outreach. More information on Green Fund proposal and the rubric for evaluation are available at: <http://sustainability.siu.edu/green-fee/green-fund/index.php>.

## **UMBRELLA DRONE**

Ever wanted to have a hands-free umbrella? The DJI Phantom 4 (drone) can give you 30 hands-free minutes to focus on the more important tasks at hand like walking the dog, or checking your mail, without

fumbling with an umbrella. The built-in collision avoidance technology provides maximum protection, even against strong and unexpected gusts of wind.



(Picture from Drones Direct)

#### **ON THIS WEEK'S CALENDAR**

- Monday, January 30, Annual Evaluation for 2016.
- Tuesday, January 31, 2017: 8:00am - 12:00pm, EAB Researcher David Attis Presentation, Morris Library 752/754; 3:00pm - 4:30pm, Special Meeting with Chancellor and Provost, Anthony Hall 116.
- Wednesday, February 1, 2017: 11:00am - 1:00pm, AWS Cloud Virtual Training - AWSome Day.
- Thursday, February 2, 2017: 8:00am - 10:00am, STEM Leadership Scholarship meeting, phone conference.
- Friday, February 3, 2017: 6:00pm - 8:00pm, Chancellor's and University Excellence Scholarships Program: Parents Dinner and Discussion, Student Center Ballrooms.
- Saturday, February 4, 2017: 8:00am - 4:00pm, Chancellor's and University Excellence Scholarships Weekend Programs.

#### **AND FINALLY ...**

If you see something in this update that you want to comment on, please send an email to my SIU email [awang@siu.edu](mailto:awang@siu.edu); or call me at 618-536-6682. Also, if you know of anyone interested in receiving the CASA Dean's MMU, please ask them to send me an email and we will gladly add them to our mailing list. If you prefer not to receive the CASA Dean's MMU, please let me know, as well. Thank you.

Andy Ju An Wang, Ph.D.  
Dean, College of Applied Sciences and Arts