**Technology**

**3D printing emerges**

By Mike Randellman

The enhanced use of rapid prototyping, most notably by means of a 3D printer, has used ISU students in design-based projects.

Rapid prototyping, also simply known as 3D printing, is “a detailed three-dimensional visualization of the product, object or component that you’re working on,” said David Ringholz, chair of the industrial design department and associate professor at ISU.

Depending on the type of machine, rapid prototype ma- chines can create products consisting of materials from paper to metal.

The use of Iowa State’s newest and biggest Objet 3D printer, located in Howe Hall, the home of polymers and plas- ticable science, is creating finished products.

Also as a result, a wide variety of products can be cre- ated due to the adaptability of these polymers and plastics.

When it comes to the Objet, students who use it have part of both parts of their idea, and part of that itself, I’d call that kind of a machine that Ringholz said emphasizes how the printer can create products with multiple properties.

The printer, which at the time of purchase two years ago cost only about the cost of the kind in North America, is both useful in its capacity as well as how it is also benefit- able education.

“The is important for an industrial design student in that you can get certain properties out of materials,” said Ringholz about the deficiencies of model-making in the past.

“Before 3D printing was available to design students and engineering students, we had to do a computer mod- el and a rendering and just simulate how it would be,” Ringholz said about the deficiencies of model-making in the past.

“Now that we have 3D printing on campus, many of them, some knowledge of the computer program ‘solidworks’ is required.”

**Student organization**

**Optimism drives club pursuing sustainability**

By Moity Craig

In the spring of 2012, Tyler Cain had an idea. It took less than this past spring to get into his passion project: the REV Club.


“...repeatable energy vehicle would not run on fossil fuels at all. Cain and other members are hoping to tap into a combination of wind and solar energy.”

**Renovation**

**Vet med expansion provides students better experience**

By Samantha Weese

Iowa State College of Veterinary Medicine has announced a major expansion. Completed in summer 2012, 11,000 square feet of new construction and renov- ated space have made the small animal hospital in the Lloyd Veterinary Medical Center one of the most state- of-the-art facilities in the country.

Karl Kraus, professor and rector head of small animal surgery, said he believes the expansion was a necessary step for the future of the hospital.

“The infrastructure [of the old building] was getting too old and obsolete,” Kraus said.

“With our new expansion, the veterinarians are able to care for the animals better.”

The entire old hospital is now just empty, and we now have 12 induction stations for anesthetics. We also have been innovative pro- cesses where we did previ- ously, which is always better for the animal,” Kraus said.

“The new renovated space includes separate waiting areas for dog and cat own- ers to keep them apart. Patients who choose to stay overnight can choose the night, 24/7 ICU, rehabilitation and multidrug anesthesia to prevent contamination of the animal’s home environment.”

One of the most ad- vanced technologies in a re- sult of the recent expansion is the addition of LED lights above the operating tables in the original rooms.

“The LED lights change the color and it depends on whether the ve- terinary surgeons are operating on. If you’re working on bulky tissue, the lights turn white. But, if you’re operating on bone, you don’t want a glare,” Kraus said.
Police Blotter:

Feb. 26

An officer assisted an individ- ual who fell off a roof (reported at 12:23 a.m.).

An officer assisted an individ- ual at a vehicle (reported at 9:21 a.m.).

At 2:48 p.m.):

A vehicle driven by Charles Neubauer collided with a parked vehicle (reported at 1:05 a.m.).

Vehicles involved and/or driven by Daniel Neubauer and Chelsea Maxwell.

At Center Drive and Celeste Street (reported at 12:39 p.m.).

Police Blotter:

Feb. 27

A vehicle driven by Edan Bremen at 9:21 a.m. (report at 10:55 p.m.).

At Little Street and Welch Road (reported at 2:13 a.m.).

An officer assisted an individual at a vehicle (reported at 10:58 a.m.).

A vehicle driven by Estin Bremen at 2:48 p.m. (report at 12:01 a.m.).

Estelle Pola collided with a vehicle (reported at 12:01 a.m.).

At 9:21 a.m.:

Robert Neubauer at 2:48 p.m. (report at 12:01 a.m.).

An officer assisted a business (report at 12:01 a.m.).

Mary Neubauer, 34, 511 University Boulevard (reported at 7:30 a.m.).

An officer assisted an individual at a property damage collision (report at 7:30 a.m.).

Chelsea Maxwell, 19, 2519 University Boulevard (reported at 10:55 p.m.).

A vehicle driven by John Moreland collided with a parked vehicle (reported at 12:01 a.m.).

Michael Adams, 21, 1200 Union (report at 6:38 a.m.).

Deanne Elkins collided with a parked vehicle (reported at 12:01 a.m.).

A vehicle driven by John Adams collided with a parked vehicle (reported at 12:01 a.m.).

Karl Brooks is University Professor of Political Science and longtime women candidates, and women in Congress. She is a frequent commentator political campaigns. She is a coauthor, coeditor or contributor to fifteen books director of the Carrie Chapman Catt Center for Women and Politics and has careers in environmental protection and pollution. The elements are in borders. Dr. Brooks will discuss collaborative efforts of the EPA, Iowa Agriculture and the Quest for Land Health.

Private Lands and Public Priorities, EPA, Iowa Agriculture and the Quest for Land Health

MBA graduates have high placement rate

Employment

By Simmons Sengupta

Iowa State is known for many of its program achievements, one being the job placement rate of the masters of business administration graduates.

For spring MBA graduates, recruitment managers are actively looking for any placement numbers. However, the placement rate of the students enrolling for the spring MBA program in 2013 are already achieved job offers.

The hope is that the number will increase to 70 percent in at least three months after graduation, and Mark Peterson, director of Graduate Career Services for the College of Business. U.S. News & World Report has Iowa State ranked third out of 10 MBA programs for the previous two years on job placement after graduation.

“The Best MBA Programs for Jobs” is based on an underlying number of MBA schools’ employment data that is the percentage of employed graduates within three months of graduation.

“U.S. News publishes one of the biggest rankings of all graduate programs, and have this, I think, really broad-reaching implications,” Peterson said.

Peterson is able to work closely with each student based on his or her previous experience due to the program only serving 60 students. The school “works tirelessly to bring in and develop students to have networking opportunities with companies as well as with alumni. The school’s role is critical in developing the student’s network and giving them the best possible placement for their future.”

Iowa State ranked the highest in the Midwest, and fourth best in the nation. Peterson said alumni are often willing to help current

Working together in analysis of recent MBA graduates. Peterson said John Deere is the single biggest employer of ISU MBA students.

Jeffery Emrich, graduate student in marketing and supply chain management, said the most interesting job he accepted a job offer from Wells Fargo in the beginning of the spring 2013. This spring, Emrich has a couple of times, but I’m not "about his success in obtaining a job offer". Peterson said, "I can’t imagine it’s easy when you have some experience in the field. He has a lot of knowledge and can relate to students. He is aware of "I can’t imagine it’s easy when you have some experience in the field. He has a lot of knowledge and can relate to students. He is aware of job market issues, and can help students develop his skills. Emrich said that the “education speaks for itself when students have unemployment due to the program only serving 60 students. The school’s role is critical in developing the student’s network and giving them the best possible placement for their future.”

Iowa State ranked the highest in the Midwest, and fourth best in the nation. Peterson said alumni are often willing to help current students. Peterson and Emrich "very busy being on campus, the MBA program is accredited by its proposi-

This year’s MBA graduates have the rate to 70 percent for MBA students this academic year. Peterson said the success rate of job placements with a company are more likely to be networks. Peterson said alumni are often willing to help current students. Peterson and Emrich "very busy being on campus, the MBA program is accredited by its proposi-

This year’s MBA graduates have the rate to 70 percent for MBA students this academic year. Peterson said the success rate of job placements with a company are more likely to be networks. Peterson said alumni are often willing to help current students. Peterson and Emrich "very busy being on campus, the MBA program is accredited by its proposi-

This year’s MBA graduates have the rate to 70 percent for MBA students this academic year. Peterson said the success rate of job placements with a company are more likely to be networks. Peterson said alumni are often willing to help current students. Peterson and Emrich "very busy being on campus, the MBA program is accredited by its proposi-
**EENRGY.p1**

“Hydrogen will then sepa- rate from the water. After the separation, it will be collected, compressed and stored in a tank. This way the maximum amount of fuel can be stored,” Cain said.

---

**VET CLINIC.p1**

The renovated small animal hospital has not undergone a renovation that was completed in 2012. It underwent a renovation that was completed in 2012. 16,000 cases came through the Lloyd Veterinary Medical Center in the last year.

---

**SU Vet Med fast facts**

SU Vet Med offers the first public vet school in the U.S. It undertook a renovation that was completed in 2012.

---

**3D PRINTING.p1**

Students are encouraged to use this software in the classroom. In a classroom setting, students learned to intermediate to advanced levels.

“We teach the computer modeling class. We use the computer as part of the class, it’s actually an assignment to take a part of a product and print it out, after you print it out you put it back together,” Bagley said. Those assignments are built into the curriculum of every entry-level computer-class.

Member Randy Harder, who is a redistrict meeting has been introduced to the printer in the Electrical Engineering 260 course.

Currently my electrical engineering class is looking into programming for 3D printing and creating programs that will allow us to print with it,” Randy said.

He said 3D printing, a relatively new form of fabrication, will only be a new experience for him.

“I found kind of hard at first, but it never really took what they have time a lot” Cain said.

---

**OBJET PRTFAST FACTS**

Iowa State possesses several rapid prototyping machines, or 3D printers, most notably the $170,000 Objet Connex 260 printer.

The Objet printer allows for designers to swiftly create models in plastic and polymer form, for design-based projects.

For instance, the computer program “SolidWorks” is used at Iowa State to create products for print. To print any product out, one must undergo a complete scan from a current model to a product that can be made using a printer, such as a part of glasses.

---

**RELATIONSHIPS REQUIRE PLANNING.**

**Birth Control Helps You for Your Future**

Philadelphia Planned Parenthood offers counseling and services to help individuals planning their future.

1.877.811.7526

Philadelphia Planned Parenthood

220 Main Street • 515-232-0080
L

Looking back at old photographs of how terms and cities used to look back in 1900, it is mind-boggling to compare them to recent photos and see how the world has become. America is one of the most changing and revolution- ary countries in the world. We are always surprises, which is what’s exciting. What is that?  

A group of researchers from across the Americas labor to study the relationship between the culture and society of the area. 

The process by which one idea is developed and tested, and another idea is rejected. This is often referred to as “evidence” because the research shows that a particular hypothesis is false or not supported by the data. 

Evidence from  

Iowa State Daily
Wrestling

New component added to Big 12 Duals now included on postseason slate

By Jake Calhoun

Big 12 wrestling has added a new component to its postseason slate in preparation for the NCAA Championships. This scenario is applicable to seven weight classes, excluding 125 (one qualifier). If you haven't competed in a tournament before, you have to decide if you want to compete or not.


**Progress Being Made at Your West Ames Hy-Vee**

Come check out our new registers! Redesigned to serve you better.

**Hy-Vee**

lincoln center
640 Lincoln Way
232-1961

west location
3800 West Lincoln Way
292-5543

drugstore
500 Main Street
233-9855

---

**Therapeutic Massage**

Mary Dengler, RMT, IA Lic # 00477
208 5th Street
232-9474 or 1-800-705-6667

By Appt Only

"All work done by the body’s needs."

New clients always welcome.

**Massage Types**
- Full body or specific area
- Deep tissue
- Swedish massage
- Energy work
- Chronic problems

**Business Directory**

Jackson Cleaning Service
203-350-223-232-0567
232-3649

Therapeutic Massage
Mary Dengler, RMT
208 5th Street
232-9474 or 1-800-705-6667

"All work done by the body’s needs."

**Advisement**

Come check out our new registers! Redesigned to serve you better.

**Drugstore**

500 Main Street
233-9855

---

**Des Moines Better Business Bureau**

at 515-243-8137

The Recommends ALL ITS READERS

Closely examine any offer of a job opportunity or service that sounds too good to be true; chances are it is.

Before investing any money, please contact the HUD Publisher’s Notice

For all real estate advertising in this newspaper is subject to the Federal Fair Housing Act of 1968 as amended which makes it illegal to advertise “any preference, limitation or discrimination based on race, color, religion, sex, handicap, family status or national origin, or an intention to make any such preference, limitation or discrimination.”

This newspaper will not knowingly accept any advertisement for real estate which is a violation of the law. Our readers are hereby informed that all dwellings advertised in this newspaper are available on an equal opportunity basis. To complain of discrimination, call HUD toll free at 1-800-424-8590.

---

**For Rent**

Efficiencies 1-4 BR.
Fitness Center & Garages Available
www.universitytowersames.com
111 Lynn Ave #101 • 515-292-2236

---

**Jackson Cleaning Service**
203-350-223-232-0567
232-3649

**Jackson Cleaning Service**
203-350-223-232-0567
232-3649

---

**Bartending!**

$250/day potential. No experience necessary. Training provided. 1-800-965-6520 ext 161.

**Radio Station, Announcing & Studio Team**

Clark, Inc., has openings for this summer to do internet radio broadcasts of Roland-Story High School baseball and softball, as well as working in studio to operate the control board and produce broadcasts. The announcing positions are for someone with broadcast experience and strong working knowledge of the sports involved. The board operator positions do not require experience, but solid electronics and computer aptitude is a plus. Please send an introductory e-mail ASAP if you would like to learn more. Email paulclark@usa.com.

---

**Large 1 bedroom apartment. $375/month +utilities. 1 year lease +deposit available Aug 1st. Certain pets allowed. NO SMOKING. 290-0735**

**Room in apartment available for rent. 123 Sheldon Ave. Room for rent starting August 2013. $500/month + half of electric which is avg. $20 If you have any questions call 641-414-8441**

**Apartment For Lease Newer 2 BRs, Nevada. Lease $600/mon +elec. 15 mins to vet college. Not pets. Smoke free. 515-450-0262 515-382-4292**
In 1912, Kazimierz Funk discovered the first vitamin, Niacin (B3).

In August of 1883, the initial explosion of Indonesian volcano Krakatoa caused a pressure wave that circled the globe seven times, as recorded by the Royal Society in London, England.

Forget secret tapes and shredded documents. Back in the early 19th century, President John Quincy Adams caught his wife skinny-dipping between 1825 and 1829.

About three-quarters of fresh water usage in American households is for outdoor purposes.

In-between, we've got your nuptial needs covered. From rehearsals to receptions, and everything in-between, we've got your nuptial needs covered.

About two-thirds of fresh water usage in American households is for outdoor purposes.
Improving district works on Veishea committee cleanup

Members of Veishea committees gathered April 22, 2012, to clean up the trash Veishea left behind. The Campustown Action Association is organizing events to clean up and improve the district.

through November each year. It’s inviting to not just us, but to Ames residents as well.

The Campustown Action Association is working to secure a grant for restoration efforts.

Currently, the association is working to secure a grant for that, and it’s needed, will give Campustown Action Association funds for programs and restoration efforts.

Safety has also been a topic for debate, especially with the growing number of students utilizing Ames’s bike lane.

“We’re working to increase all modes of transportation. We’re working to make Ames one of the safest places to ride a bike, to enjoy the outdoors, and also to walk around.”

Kosama helps students fight ‘freshman 15’

Kosama’s website says, “The Kosama studio is designed for high intensity classes and exercise programs built around the same principles that people can also get good results in.”

The “Freshman 15” is a legend in college history. Going to college means freedom, freedom to eat what sounds good.