

Undergraduate Studies News

September 2009 Volume 7, Issue 1

Highlights:

OURE Update	2
Faculty Service Learning Award	3
Faculty Learning Communities	4
Clickers in the Classroom	5
Missouri S&T Service Learning	6
Curator's Teaching Summit	7
Voyager Seminars	8
On-Track	9

Special points of interest:

- GTA Workshops
- Hit the Ground Running
- Fall 2009 Advising Series
- On-Track Program

Welcome 2009 Freshman and Sophomore Class!

Missouri S&T welcomed 1,135 new freshmen for fall semester 2009 and began the process of helping them adjust to the demands of university life.

Opening Week orientation encouraged new students to make connections with other students, faculty, and staff and challenged them intellectually, personally, and professionally. All of the programs, such as Freshman Convocation, the Amazing Miner Race, and the Project X competition, were designed to help our students make an effective transition to the university, meet new friends, have fun and build a foundation for student success.

This year's freshman class has an average ACT score of 27.7, among the upper 10 percent in the nation. Five students have perfect ACT or SAT scores.

Missouri S&T also welcomed back its sophomore class. On Sunday, August 23rd, approximately one hundred students attended the inaugural Sophomore Welcome in St. Pat's Ballroom. Chancellor Carney welcomed second-year students, encouraging them to make important campus connections with faculty members in their academic departments. Vice Provost Collier spoke about the kinds of challenges and opportunities unique to the sophomore year, then led students in a pinning



Missouri S&T Fall 2009 Freshman Class at Opening Week

ceremony marking their entry into their second year at Missouri S&T.

Students attending Sophomore Welcome had the opportunity to reconnect with friends, browse a resource fair, enjoy refreshments, and enter a prize drawing. Departments participating in the resource fair included Student Life, Counseling & Disability Support Services, the Student Design Center, the Writing Center, Undergraduate Studies, Wilson Library, and Leadership & Cultural Programs. Sophomore Benjamin Sutton won the grand prize drawing for an iPod Nano.



Student Design and Experiential Learning display at the Sophomore Welcome

"Missouri S&T welcomed 1,135 new freshmen for fall semester 2009 and began the process of helping them adjust to the demands of university life. ...Missouri S&T also welcomed back its sophomore class. On Sunday, August 23rd, approximately one hundred students attended the inaugural Sophomore Welcome in St. Pat's Ballroom."

Missouri University of Science and Technology integrates education and research to create and convey knowledge to solve problems for our state and the technological world.

2009-10 OURE Update

This year, approximately 104 Missouri S&T undergraduates will participate in 88 research projects through the Opportunities for Undergraduate Research Experiences (OURE) program. OURE offers undergraduate students the opportunity to participate in individual or group research with a faculty research advisor in their department. Participating students receive \$1000 for the completion of their projects. Students receive a \$250 stipend during the fall semester and an additional \$750 in the spring, upon completion and submission of their final report.

OURE students, and others participating in undergraduate research at Missouri S&T, are encouraged to present the results of their research projects at the Missouri S&T Undergraduate Research Conference on April 7, 2010. For more information about the OURE program, please visit: <http://ugs.mst.edu/oure.html>.

2009-10 OURE Coordinators

Department	Coordinator
Arts, Language & Philosophy	Adam Potthast
Biological Sciences	Ron Frank
Business Administration	Bih-Ru Lea
Chemical & Biological Engineering	David Henthorn
Chemistry	Jay Switzer
Civil, Architectural and Environmental Engineering	Cesar Mendoza
Computer Science	Matt Buechler
Economics & Finance	Michael Davis
Electrical & Computer Engineering	Daryl Beetner
Engineering Management	Ray Luechtefeld
English & Technical Communication	David Wright
Geological Sciences & Engineering	John Hogan
History & Political Science	Diana Ahmad
Information Science & Technology	Bih-Ru Lea
Materials Science & Engineering	Von Richards
Mathematics & Statistics	Matt Insall Robert Paige
Mechanical & Aerospace & Engineering Mechanics	K. M. Isaac
Mining Engineering	Kwame Awuah-Offei
Nuclear Engineering	Arvind Kumar
Physics	John Schmitt
Psychological Science	Dee Montgomery



Missouri S&T students in class



115 Hit the Ground Running Students

This summer, 115 students participated in Hit the Ground Running (HGR), making it the second largest HGR group that the university has hosted.

HGR is a pre-freshmen college transition program and first year learning community that attracts nearly 10% of the incoming freshmen class. HGR is designed to help new students better understand coursework expectations, campus life, and community involvement at S&T. HGR students participate in a 3 week academic program that includes daily lectures in English, Chemistry and Mathematics, organized study sessions, social events and personal and professional development activities.

Fall GTA Communication Skills Workshop

The Fall GTA Communication Skills Workshop was conducted August 17-21 for 90 prospective GTAs from departments all over campus. A "Revision Conference" was held in conjunction with the workshop with several former workshop staff members in attendance. Leroy Cox, professor of Engineering Management at the University of Arkansas, Fort Smith, coordinated the conference, and attendees included Katie Grantham Lough, professor of Engineering Management, Cyndie Bolon, Instructor of Chemistry, and Elizabeth Kulp, Researcher in Materials Science.

These "old hands" joined current staff members, Lance Haynes, Irina Ivliyeva, Audra Merfeld-Langston, and Lucy Sutcliffe in formulating recommendations for revising and improving the workshop curriculum.

Call for Nominations!

Missouri S&T Faculty Service Learning Award

In 2009, The Office of Undergraduate Studies will award a select Missouri S&T faculty member who involves or influences students in academic service learning or community service activities outside the classroom. All Missouri S&T students, faculty and staff have the opportunity to submit nominations for this faculty award.

Nominations must include a supporting statement (maximum of one page) that describes how the nominee involves or influences students in community service or academic service-learning through his or her work with student groups, learning communities and/or classroom instruction. Nominations may include up to three letters of support from department chairs, colleagues and/or students.

Nominations are due November 4, 2009. The recipient of the 2009 Faculty Service Learning Award will be recognized at a campus award ceremony on January 19, 2010.

For more information about the Missouri S&T Faculty Service Learning Award, please contact the Office of Undergraduate Studies at (573) 341-7276 or visit <http://ugs.mst.edu/servicelearning.html>.

CERTI Hosts Faculty Learning Communities

CERTI's mission is to foster faculty contribution to the continual improvement of Missouri S&T's learning environment through programs that emphasize collaborative, experiential and technology-enhanced teaching and educational research. CERTI believes the quality of learning environment is dependent on the quality of course design and teacher-student interactions. Collaborative, experiential, and technology enhanced teaching methodologies coupled with effective assessment techniques are powerful tools in the quest to improve learning outcomes. Faculty ownership and contribution are the key elements in facilitating an institutional adoption of educational best practices. This fall, please join CERTI for the following events:

Active Learning - Faculty Learning Community

This group was formed with the goal of trying to get more faculty members involved with using Active Learning strategies in their classroom. This is an ongoing activity that focuses on faculty learning and sharing and is moderated by professionals that promote these instructional strategies in their academic life.

Meeting Info: Every third Wednesday of the month (September - November), 12:00 to 1:00 PM, Norwood 208.

New! Cyber Learning - Faculty Learning Community

CERTI and EdTech are offering a new faculty learning community this fall that will cover different "Cyber Learning" areas (Clickers, Blackboard, Wimba, Virtual Learning Environments)

Meeting Info: Every first Friday of the month (October – November), 12:00 to 1:00 PM, room to be announced

For more information, please contact Jennifer Shaner at 573-465-0524 or shanerj@mst.edu

Fall 2009 CERTI Activities

S&T Curator's Teaching Summit – Indispensable Advice from our Top Teachers

October 21st - Creative Teaching Techniques—St. Pats Ballroom A

November 11th —Mentoring -St. Pats Ballroom C

Active Learning / Faculty Learning Community (FLC)- The goal of this FLC is to get more faculty members involved with using Active Learning strategies in their classroom. This is an ongoing activity that focuses on faculty learning and sharing and is moderated by professionals that promote these instructional strategies in their academic life.

October 14th - 12:00 pm, Norwood 208

November 18th – 12:00 pm, 208 Norwood Hall

Cyber Learning / Faculty Learning Community –The Cyber Learning FLC was formed with the goal of gaining an understanding of how faculty on campus are using technology in their classrooms and sharing those experiences with colleagues.

October 2nd – 12:00 pm, *location to be announced*

November 6th – 12:00 pm, *location to be announced*

December 4th – 12:00 pm, *location to be announced*

CERTI Wiki - Digital community for members of the Missouri University of Science and Technology. Share ideas and thoughts that will improve the quality and effectiveness of teaching mst-certi.wikispaces.com

Clickers in the Classroom-Fall 2009

This fall, 25 Missouri S&T faculty members will use clickers in 34 different class sessions, impacting approximately 1,669 students across the campus. The table below includes a list of courses that will use the clicker technology this semester.

Faculty	Class Code	Class Name
Kimberly Henthorn	ChE120-LEC1A	Material Balances
Douglas Ludlow	ChE281-LEC1A	Reactor Design
Douglas Ludlow	ChE281-LEC1B	Reactor Design
Ralph Alexander	PHY31-LEC1A	College Physics I
Harvest Collier	CHEM1-LEC1AA	General Chemistry I
Thomas Schuman	CHEM1-LEC1BB	General Chemistry I
Terry Bone	CHEM1-LECDD	General Chemistry I
Joan Schuman	CHEM3-LEC1A	General Chemistry 3
Klaus Woelk	Chem1-LEC1CC	
David Westenberg	BIO231-LEC1A	General Genetics
Frances Montgomery	PSYC50-LEC1B	General Psychology
Carlos Castano	NE341-LEC1A	Nuclear Materials
Leslie Gertsch	GE50-LEC1AA	Introduction to Physical Geology
Ron Frank	BIO331-LEC1A	Molecular Genetics
Ron Frank	BIO235-LEC1A	Evolution
Richard Bryant	ECON121-LEC1A	Principles of Microeconomics
John Hogan	GEO220-LEC1A	Structural Geology
Jianmin Wang	CE265-LEC1A	Water and Wastewater Engr
Jianmin Wang	ENVE265-LEC1A	Water and Wastewater Engr
Jianmin Wang	CE263-LEC1A	Chemical Fundamentals of Environmental Eng
Jianmin Wang	ENVE263-LEC1A	Chemical Fundamentals of Environmental Eng
Wlodzimierz Chartonik	MATH15-LEC1AA	Calculus For Engineers II (Lec 1AA)
Kimberly Kinder	MATH15-LEC1BB	Calculus For Engineers II (Lec 1BB)
Elvan Akin	MATH15-LEC1CC	Calculus For Engineers II (Lec 1CC)
Vy Le	MATH15-LEC1DD	Calculus For Engineers II (Lec 1DD)
Wlodzimierz Chartonik	MATH331-LEC1A	Advanced Calculus II
Douglas Ludlow	ChE382-LEC1A	Hazard Materials Management
Don Sharpsteen	PSYCH50-LEC1A	General Psychology
Kristine Swenson	ENG225-LEC1A	Science Fiction and Fantasy Literature
Katie Shannon	BIO 101- LEC 1A	Genetics: Decoding your genes
Yoo-Mi Chin	EC121-LEC 1A	Principles of Microeconomics
Yoo-Mi Chin	EC211	Economic and Business Applications

Service Learning Courses Offered for Fall 2009 Semester

This year the Service Learning Advisory Committee will continue to build community partnerships, work with partners to identify their service needs, and identify courses within the curriculum that can help to meet those needs. Missouri S&T offers the following service-based courses for fall 2009:

- A&S 111 - Women as Global Leaders, INSTRUCTOR: Mrs. Jerri Arnold-Cook
- BIO 310 – Seminar, INSTRUCTORS: Dr. Anne Maglia & Dr. Robert Aronstam
- BUS 360 – Business Operations, INSTRUCTOR: Dr. Ray Kluczny
- BUS 380 – Strategic Management, INSTRUCTOR: Dr. Chihmao Hsieh
- COMP ENG 391 – Computer Engineering Senior Project 1, INSTRUCTOR: Dr. Badrul Chowdhury
- EDUC 104 - Teacher Field Experience, INSTRUCTOR: Mrs. Doyla Mentis
- EDUC 164 – Aiding Elementary, Middle and Secondary Schools, INSTRUCTOR: Mrs. Doyla Mentis
- EDUC 299 – Student Teaching, INSTRUCTOR: Mrs. Doyla Mentis
- ELEC ENG 391 – Electrical Engineering Senior Project 1, INSTRUCTOR: Dr. Badrul Chowdhury
- EMGT 254 (Section A) - Introduction to Project Management, INSTRUCTOR: Dr. Karl E. Burgher
- EMGT 254 (Section B) – Introduction to Project Management, INSTRUCTOR: Dr. Paul Hirtz
- ENG 111 – Experiential Design, INSTRUCTOR: Dr. Paul Hirtz
- IST 50 – Intro to Mgmt Information Systems, INSTRUCTOR: Dr. Yu-Hsiah Qiu
- IST 385 – Human Computer Interaction, INSTRUCTOR: Dr. Hong Sheng
- MKT 311 – Marketing, INSTRUCTOR: Dr. Morris Kalliny
- PSYCH 312 – Practicum in Human Services Psychology, INSTRUCTOR: Dr. Gene Gianladis
- PSYCH 350—Psychology of Women, INSTRUCTOR: Dr. Dee Montgomery

What is Service Learning?

Service Learning is a term used to describe a type of experiential learning where students engage in service to the community.

Academic Service Learning is used to describe a type of experiential learning where students in a course engage in service to the community; and the service activity enhances and relates to the course content. Academic service learning courses include reflective exercises through which students have the opportunity to describe what they learned from the service experience.

Missouri S&T Service Learning Partnerships

Boys and Girls Town of Missouri
 Ozark Rivers Chapter-National Audubon Society
 Phelps County Regional Medical Center
 The Community Partnership
 CASA of South Central Missouri
 Habitat for Humanity-Cape Area, Inc.

For more information, visit: <http://ugs.mst.edu/servicelearning.html>

Honor's Academy Welcome Reception

Chancellor Carney welcomed one hundred new and returning students at the annual Honors Academy Welcome Reception on Tuesday, August 25, 2009. Carol Smith and Summer Young, Honors Academy co-coordinators, provided an overview of the Honors Academy's three "stages" of membership, the New Student Honors Seminar, Honors Course Credit by Contract, and the Honors Senior Thesis. After the welcome and overview, students mingled while enjoying hors d'oeuvres.

Missouri S&T Curator's Teaching Summit

Indispensible Advice from our Top Teachers

Missouri S&T's Curator's Teaching Professors will be sharing with the rest of the campus faculty through a series of panel discussions this Fall:

Creative Teaching Techniques

October 14, 2009, 12:00 pm

Panelists: Jim Bogan, Yinfa Ma, Frances Montgomery

Mentoring

November 11, 2009, 12:00 pm

Panelists: Larry Gragg, Kent Peaslee, Lawrence Christensen

To register, please contact Jennifer Shaner at 341-7648 or email shanerj@mst.edu.

Student Design & Experiential Learning Center News

SDELDC August Workshops

The Student Design & Experiential Learning Center held student workshops on August 20 & 21. Each year the student officers return early to attend these workshops that focus on project planning, financial reporting, fundraising, shop and vehicle safety, and travel planning.

Solar Decathlon

The Solar House team <http://solarhouse.mst.edu/> is finalizing construction and travel preparations to Washington, D.C. for their fourth Solar Decathlon competition. The Solar Decathlon is a competition in which 20 international universities design and build a 100% solar powered home over a 2-year cycle. It is being held on the National Mall in Washington DC, October 9-18. The Missouri S&T team is one of only two universities that have competed in all four Solar Decathlons.

The competition consists of 10 contests that range from Market Viability to Energy Balance. The rules are constantly refined, but it has consistently been to design a home that is no larger than 800 square feet and has a net energy usage of 0. Each team decides the exact shape and technologies used in their home.

For more information on the decathlon, please visit: <http://www.solardecathlon.org/>.

Solar Car Redesign

The Solar Car team <http://solarcar.mst.edu/> is undertaking a new design approach for the 2010 North American Solar Challenge. Centered on economy, simplicity and ruggedness, Solar Miner VII will switch to less-powerful solar cells, mounting the array to a larger usable active area (following contest rules). This will save the team approximately \$100,000 by not buying the space grade cells, which can be hard to obtain. They will also be reverting to a steel chassis, and changing the body design to provide more aerodynamics.

Recruitment

The SDELDC has been posting flyers around campus (with takeaway tabs) announcing our new Join A Team web page at <http://design.mst.edu/joinateam>. The page offers students the contact information for each team, along with streaming photos of the projects. They will be able to click on the About the Teams link on the site to learn more information about a team they may be interested in.

Fall 2009 Voyager Seminar Series

“What’s in the S&T Archives?” - Dr. Diana L. Ahmad, Associate Professor, & Melody Lloyd, Archivist Asst., History & Political Science	Monday, 09/28/09, 4:00 PM, G-2 Library
“Note-Taking 101” - Dr. Diana L. Ahmad, Associate Professor, History & Political Science	Tuesday, 10/06/09, 4:00 PM, St. Pat’s B
“Ultimate Money Skills” - Monster.com	Tuesday, 10/06/09, 6:00 PM, St. Pat’s B
“Mid-Semester Check-Up” – Patti Fleck, The Counseling Center	Thursday, 10/08/09, 3:00 PM, Carver-Turner
MID-TERM FREE WEEK – No Seminars!	Week of 10/13/09
“Using Joe’sS” – Laura Stoll and Deanna Jackson, Registrar’s Office	Monday, 10/19/09, 3:00 PM, St. Pat’s B
“S&T Library @ your Desktop” - Matthew Pickens	Thursday, 10/22/09, 3:00 PM, Library
“Discover Research” – Vice Provost Harvest Collier, Office of Undergraduate Studies	Monday, 10/26/09, 5:00 PM, St. Pat’s C
“Service Learning Opportunities” – Vice Provost Harvest Collier, Office of Undergraduate Studies	Monday, 11/02/09, 5:00 PM, St. Pat’s B
“Honors Academy” – Carol Smith, Office of Undergraduate Studies	Thursday, 11/05/09, 4:00 PM, MO/Ozark
No Seminar! (Thanksgiving Vacation)	Week of 11/23/09
“How to Study for Exams” Dr. Diana L. Ahmad, Associate Professor, History & Political Science	Wednesday, 12/02/09, 4:00 PM, St. Pat’s C
Essay Requirements - Voyager Mentors	Thursday, 12/03/09, 6:00 PM, St. Pat’s B
Voyager Social! (Essays Due)	Thursday, 12/10/09, 6:00 PM, St. Pat’s B

Save the Date!

Fall 2009 Academic Advising Series

Freshmen Student Advising

(Presented by: Dr. Jeff Cawfield, Freshman Engineering)
September 28, 2009 from 12-1:30 PM
216 McNutt

Student Disability Support Services at Missouri S&T

Presented by: Connie Arthur, Counseling and Disability Support Services
October 12, 2009, from 12-1:30 PM
Meramec/Gasconade – Havener Center

Gaming Addiction

Presented by: Renee Getz, Counseling and Disability Support Services/Student Wellness
October 26, 2009 from 12-1:30 PM
Missouri/Ozark Room - Havener Center

Guidelines for Dealing with Issues related to Academic Dishonesty

Presented by: Dr. Harvest Collier, Office of Undergraduate Studies
November 9, 2009 from 12-1:30 PM
Missouri/Ozark Room - Havener Center

On-Track Academic Success Program

Presented by: Dr. Scott Miller and Matt Hume, Undergraduate Advising office
December 7, 2009 from 12-1:30 PM
Missouri/Ozark Room - Havener Center

The On-Track Academic Success Program



On-Track Mentors

The On-Track Academic Success Program, a program run out of the Office of Undergraduate Advising, is designed to help students get motivated and focus on increasing their personal and academic success while at Missouri S&T. Targeting primarily at-risk students, On-Track aims to significantly improve the quality of education for its participants by helping them optimize their goals and attitudes for academic success.

Summer 2009 brought on an evaluation of past participants' concerns and the program's performance. Now, the program has been reinvented from the ground up for students, by students to try to better create an environment where everyone is encouraged to actively participate in activities and discussions that develop their academic skills. One of On-Track's main goals throughout this semester will be to build a stronger sense of community amongst its participants to get them interacting with and supporting each other in their pursuit of success.

Using the slogan "Give us 12 hours!" On-Track is dedicated to helping students achieve success in the most efficient and direct way possible. The new On-Track program requires only a 12 hour time commitment from the participant spent through a combination of new progressive, interactive, student-led seminars, one-on-one meetings with a peer mentor, and "Prescribed Activities." Prescribed Activities are a new component of On-Track by which each participant works with their mentor to agree to attend up to 3 hours of various activities that they believe would most help them academically. These activities can range from going to talk to a professor, starting a study group with other members of your mentor group, and going to the Counseling Center to attending LEAD sessions or workshops put on by other departments that relate to On-Track.

Seven new mentors were hired for Fall 2009 bringing the total number of mentors to ten and giving the On-Track program a 9:1 participant to mentor ratio. The Fall 2009 On-Track Mentors came to us from eight different academic departments, all highly experienced from various other leadership programs. They've been a very effective and interesting group to work with thus far. Shown on the photo above they are: Back row (left to right) - Nik Moesch, Marcus-Tor Strickland, Matt Hume, Avery Watkins ; Front row (left to right) – Katie Bruce, Julie Speer, Sammi Schussele, Brandi Andersen, Stacy Bradfield, Stephany Rich.

So far this semester On-Track has been off to a strong start. After three seminars we are still seeing much higher attendance rates than in the past and feedback from the participants has been largely positive. We're excited to see what the rest of the semester brings! If you have any questions or would simply like more information about the program, e-mail on-track@mst.edu.

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*The mission of the Office
of Undergraduate Stud-
ies is to improve the
learning environment
and enhance the learning
outcomes of students by
working with Missouri
S&T students, faculty,
staff and the public.*

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Visit us on the Web!
<http://ugs.mst.edu/>

~ PLEASE JOIN US ~
for the

**Art Inspired by Writing
Art Show & Reception**

**Thursday, October 22, 2009
3:00—6:00 PM**

**The Writing Center
113 Campus Support Facility**

For more information,
contact Brandi Washburn at 341-4436.

Save the Date!

**6th Annual
Undergraduate Research
Conference**

~ April 7, 2010 ~

Missouri S&T Havener Center

For more information, visit:
<http://ugs.mst.edu/ugrc.html>