EAPS WEEKLY NEWSLETTER
28 Nov. 2016 | EAPS on Facebook | EAPS on Twitter

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EAPS MEETINGS & EVENTS

COLLEGE OF SCIENCE-FALL FACULTY MEETINGS
November 29, 2016
3:30-4:30 PM
LWSN 1142

EAPS-FALL/SPRING FACULTY MEETINGS
December 6, 2016
January 31, 2017
February 28, 2017
March 28, 2017
May 2, 2017
3:00 PM
HAMP 3201

AGU RECEPTION (ALUMNI & FRIENDS RECEPTION)
December 15, 2016
ThirstyBear, Billar Room
7:00-9:00 PM
San Francisco, CA

CoS COMMENCEMENT
December 18, 2016
9:30 AM
Elliott Hall of Music

EAPS MINI-FACULTY RETREAT
January 6, 2017
9:00 AM-Noon
HAMP 2244

EAPS AWARDS BANQUET
April 17, 2017
5:30 PM
Ross-Ade Pavilion, Buchanan Club

EAPS ALUMNI ADVISORY BOARD
April 18, 2017
8:30 AM-4:00 PM
HAMP 2201

http://www.eaps.purdue.edu/
EAPS STAFF HOLIDAY SCHEDULE
(MAIN OFFICE CLOSINGS)

Christmas: Dec. 23-26, 2016
Winter recess: Dec. 27, 28, 29, 2016
President’s Designated Holiday: Dec. 30, 2016
New Year’s Holiday: Jan. 2, 2017

CONGRATULATIONS TO DR. ROBIN TANAMACHI--2016 RECIPIENT OF THE VIOLET HAAS FELLOWSHIP AWARD!

The Susan Bulkeley Butler Center
For Leadership Excellence invites you to the

Violet Haas Award Reception

2016 Violet Haas Award Recipients:
Dr. Linda Mason
Department of Entomology
&
Department of Chemistry
College of Science

2016 Violet Haas Fellowship Recipient:
Dr. Robin Tanamachi
Department of Earth, Atmospheric, and Planetary Sciences

Thursday, December 1, 2016, 2-3:30 PM
PMU Anniversary Drawing Room

butlercenter@purdue.edu

EAPS OMBUDSMAN

What is an Ombudsman? The ombudsmen are an informal, neutral, confidential resource for people in the department, especially students, to raise questions or concerns about any aspect of their academic experience. The EAPS ombudsman is Barbara Gibson (HAMP 2169B; barbara@purdue.edu) –please feel free to contact her if needed.

EAPS LIBRARY NEWS
FREE TO A GOOD HOME: OLD USGS 7.5” TOPO MAPS

The EAPS library staff is working towards the move to their new location in the Wilmeth Active Learning Center. As part of that move, duplicate topos that are older than the 1980s are being removed from the collection. Previously these maps were considered our “archive”. Now, these maps are all scanned by the USGS and publically available through the USGS topo store https://store.usgs.gov/b2c_usgs/b2c/display/(xc
m=r3standardpitrex_prd&layout=6_1_61_48&uiarea=1)/.do and can be printed on a plotter (which will be available in the new Wilmeth library).

Given these considerations, they are opening up the archive drawers to anyone who would like to select maps for their personal collections and use. Please see Terry Wade, at the EAPS library front desk, for assistance in retrieving the maps. The deadline for taking advantage of this offer is November 30, 2016. After that date, the duplicate maps will be removed from our collection.

Please contact Terry or Megan if you have any questions or concerns.

EAPS FACULTY AND STAFF RESOURCE FUND

The EAPS Faculty and Staff Resource Fund provides faculty and full-time, permanent staff with a simple, open, and transparent way to request resources they need to be productive in their work. This is not intended to replace other sources (e.g. grants, discretionary accounts, start-up, competitive programs on campus, and

http://www.eaps.purdue.edu/
usual supplies and expenses), rather it is to meet occasional needs that are important for individual productivity and advancement in cases where these other sources are not available to an individual. Examples include professional development course tuition, office needs, and professional conferences.

Procedure:
Applications to the fund should be sent via email (as a pdf) to the Assistant Department Head. Requests must include the following items and not exceed one page: applicants name, position title, email address, a detailed, one paragraph description of what is being requested, a short explanation of how this will help the individual be productive in their work, amount requested (this program will accept requests between $200 and $2,000), time constraints on what is being requested (e.g., a deadline for registration)

Request deadline is the 20th of each month. Decisions will be made by the 5th of the following month. All requests will be reviewed by a group including the Assistant Department Head, the Business Manager, and at least two members of the EAPS Executive Committee.

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EAPS GSA & PUGS FOOD DRIVE

This year EAPS GSA & PUGS are holding a food drive to help local families in need during the holiday season. Our student organizations will be working with the Tippecanoe County United Food Pantry which is a non-profit group estimated to help over 24,000 people this year.

Any non-perishable food items (canned goods, boxed food items) and/or monetary donations (checks payable to Tippecanoe County United Food Pantry) are accepted. All donations are tax-deductible.

Please bring in any items or donations to HAMP 3263 by December 12th - beginning of finals week. Items can also be picked up from your lab if you contact Tim via email. Their goal is collect >250 items this year. Please help in this endeavor where possible! Thank you for your time.

Tim Henderson
Graduate Student | EAPS GSA President
hende103@purdue.edu

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TRAVEL MONEY FOR UNDERGRADUATE RESEARCHERS

Dr. Sally Mason, former Purdue Provost and President of the University of Iowa, believes very strongly in developing the next generation of researchers through undergraduate internship practice. That practice includes presenting research at professional conferences and programs. Prior to leaving Purdue, she established the Sally Mason Undergraduate Travel Scholarship that assists in funding travel for undergraduate researchers to present their work.

We are having a call for applications for the Sally Mason Travel Scholarship. Students who have traveled or plan to travel anytime in the 2016-17 fiscal year are eligible to apply for this scholarship. The application materials can be found at www.purdue.edu/dp/duri, and are due by Friday, December 3, 2016, at 5:00 pm. If you know undergraduate researchers who may be interested please let them know about this opportunity. They are eligible for the scholarship.

If you have questions, please do not hesitate to contact me.

Regards,
Lisa

Lisa Kirkham, Ph.D.
Project Coordinator
Discovery Learning Research Center
Purdue University
765-494-2424
lkirkham@purdue.edu

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http://www.eaps.purdue.edu/
NASA EARTH AND SPACE SCIENCE FELLOWSHIP (NESSF) PROGRAM

NASA announces a call for graduate fellowship proposals to the NASA Earth and Space Science Fellowship (NESSF) program for the 2017-2018 academic year. This call for fellowship proposals solicits applications from accredited U.S. universities on behalf of individuals pursuing Master of Science (M.Sc.) or Doctoral (Ph.D.) degrees in Earth and space sciences, or related disciplines. The purpose of NESSF is to ensure continued training of a highly qualified workforce in disciplines needed to achieve NASA’s scientific goals. Awards resulting from this competitive selection will be made in the form of training grants to the respective universities.

The deadline for NEW applications is February 1, 2017, and the deadline for RENEWAL applications is March 15, 2017.

The NESSF call for proposals and submission instructions are located at the NESSF 17 solicitation index page at http://nspires.nasaprs.com/- click on “Solicitations” then click on “Open Solicitations” then select the “NESSF17” announcement. Also refer to “Program Specific Questions” and “Frequently Asked Questions” listed under “Other Documents” on the NESSF17 solicitation index page.

All proposals must be submitted in electronic format only through the NASA NSPIRES system. The faculty advisor has an active role in the submission of the fellowship proposal. To use the NSPIRES system, the faculty advisor, the student, and the university must all register. Extended instructions on how to submit an electronic proposal package are posted on the NESSF 17 solicitation index page listed above. You can register in NSPIRES at http://nspires.nasaprs.com/.

For further information contact Claire Macaulay, Program Administrator for NESSF Earth Science Research, Telephone: (202) 358-0151, E-mail: claire.i.macaulay@nasa.gov or Dolores Holland, Program Administrator for NESSF Heliophysics Research, Planetary Science Research, and Astrophysics Research, Telephone: (202) 358-0734, E-mail: hq-nessf-Space@nasa.gov.

WINTER BREAK 2016-2017 COURSE ANNOUNCEMENT

Approved Course: Caribbean Ecosystem Field Studies. They are accepting applications for their winter-break field course: Caribbean Ecosystem Field Studies

This course (ENST 391) is approved for 3 undergraduate semester credits through the Environmental Studies Program of the University of Montana at Missoula and is open to students in an ecosystem related department or major.

Please click here with any questions.

VII EARTH SCIENCES CONVENTION
(EXHIBITION OF PRODUCTS, NEW TECHNOLOGIES AND SERVICES)

The Cuban Geological Society (SCG) is inviting scientists, professionals, technicians, and university students of Geology, Geophysics, and Mining and related Geosciences, to participate in the VII Earth Sciences Convention, to be held at the International Conference Center in Havana, Cuba on April 3-7, 2017.

For further information, please contact: www.scg.cu; www.cubacienciasdelatierra.com geociencias@mnhnc.inf.cu Please see attached flier.
AT THE INTERSECTION OF LIBERAL ARTS + STEM

At the Intersection 2016-17

A Conversation with Bruce Cole, former Chairman of the National Endowment for the Humanities and Vint Cerf, “Father of the Internet” discussing the implications and opportunities of technology and the humanities.

Wednesday, November 30, 2016 | 5:30pm ET
Free and open to the public
https://goo.gl/Ldn0My

The College of Liberal Arts is essential to a Purdue education that prepares graduates for meaningful careers and inspired leadership. Positioned at the intersection of liberal arts and STEM, the College leverages Purdue’s STEM strengths to propel our graduates toward new advances in our disciplines and enhances Purdue’s renowned STEM education by pushing all Purdue students intellectually and challenging them to be independent thinkers who drive decision making as bold, visionary leaders.

What is Intersection?

The Intersection of Liberal Arts & STEM is a series of events to highlight how liberal arts and science, technology, engineering, and math (STEM) fields are enriched and have greater capacity for meaningful change when the disciplines intersect.

For information, contact Gabby Hlavek, Director of Marketing and Communication 49-67276 or ghlavek@purdue.edu.

REMINDER: SUBMIT TRAVEL EXPENSE REPORTS WITHIN 120 DAYS

Effective January 1, 2017, all expense reports submitted greater than 120 days from the end of the business trip will be reported to the tax department and added to the traveler’s taxable income.

Purdue University operates under the IRS accountable plan. This plan allows the University to reimburse employees for business travel expenses without reporting them as taxable income as long as the traveler adequately accounts for these expenses in a reasonable period of time. The reasonable period of time has been determined to be 120 days from the end of the trip. The application of this rule has been inconsistent in the past due to the manual effort of tracking these items. A new process has been put in place to identify these payments and tax them accordingly.

Per the University travel rules and guidelines regarding adequately accounting for travel expenses, an expense report must be submitted in Concur Travel and Expense within 120 days after the end of the trip.

Contact Information: Linda Ford, travel administrator, Procurement Services-Travel, 41699

WRITING LAB AT PURDUE

At-A-Glance for Instructors, Faculty, and Advisors
Fall 2016

Main Location
Heavilon Hall Room 226
Monday - Thursday 9:00 AM - 6:00 PM
Fridays 9:00 AM - 1:00 PM

Appointments: https://cla.purdue.edu/wlschedule

Satellite Locations:
Drop-in only—first come, first served
HSSE Library Collaborative Study Center
Mondays 6:00 – 9:00 PM
Latino Cultural Center
Tuesdays 6:00 – 9:00 PM
Mechanical Engineering (ME) 2nd Floor
Rooms 2138 & 2142
Wednesdays 6:00 – 9:00 PM

Please see attached informational sheet for more details.
STEM EDUCATION CONFERENCE AT PURDUE

1/12/17
9:00 AM - 4:30 PM

Purdue will be hosting the 2nd Annual Indiana STEM Education Conference at Purdue on 1/12/17 from 9:00 AM to 4:30 PM. Proposals are due by 10/15/16. Email to carlacjohnson@purdue.edu. You will be notified of the decision on your proposal by 11/4/16.

Presenters will need to register for the conference at: https://goo.gl/5KbfKP

BIRTHDAYS

Molly Gilbert    Nov. 28
Paul Shepson    Nov. 29
Chris Andronicos Dec. 2

IMPORTANT NOTICE ABOUT THIS NEWSLETTER

This newsletter is used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Individual email announcements will no longer be sent unless the content is time-sensitive. We will continue to include our publications, presentations and other recent news items as well.

Those using paper copies of the newsletter should go to our newsletter archive on the EAPS website at http://www.eaps.purdue.edu/news/newsletters.html and click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Fallon McQuem (fmcquem@purdue.edu) by 5:00pm on Thursday of each week for inclusion in the Monday issue.

If it is in the newsletter, we assume you know about it and no other reminders are needed. For answers to common technology questions and the latest updates from the EAPS Technology Support staff, please visit: http://www.eaps.purdue.edu/resources/information_technology/index.htm

Also, as an additional resource for information about departmental events, seminars, etc., see our departmental calendar at http://www.EAPS.purdue.edu/events-calendar.html
9th Annual PURDUE RECEPTION at the AGU Fall Meeting

Thursday, December 15
7:00 PM - 9:00 PM
ThirstyBear Restaurant, Billar Room
661 Howard Street, San Francisco

Complimentary heavy hors d’oeuvres

Co-sponsored by:
Department of Earth, Atmospheric, and Planetary Sciences (EAPS)
and
Purdue Climate Change Research Center (PCCRC)
Sept. 1  Joel Saylor, University of Houston
“Integrating Stable Isotopes and Basin Analysis for a Paleogene-Neogene Paleoelevation History of Southern Peru”
Host: Ridgway

Sept. 8  William McKinnon, Washington University in St. Louis
“Pluto Revealed! Results from NASA’s New Horizons Mission”
Host: Melosh

Sept. 13  Wanchen Wu, PhD Candidate
“The Effects of Continental Aerosols on the Eyewall of a Typhoon”
Advisor: Tung
Tuesday, 4:00PM, Room 2201/HAMP

Sept. 15  Peter Colarco, NASA Goddard Space Flight Center
“Aerosol Modeling Applications in the NASA GEOS-5 Earth System Model”
Host: Harshvardhan

Sept. 22  Oliver Boyd, U.S. Geological Survey
“Seismic Hazard and Geodesy in the New Madrid Seismic Zone”
Host: Gilbert/Freed

Sept. 27  Sarah Bischoff, PhD Candidate
“Breaking Down the Impact of Strength Heterogeneity on Deformation of the India-Eurasia Collision: A Numerical Modeling Approach”
Advisor: Flesch
Tuesday, 4:00PM, Room 2201/HAMP

Sept. 29  Kevin Reed, SUNY-StonyBrook
“High-resolution Global Simulations from Reduced Complexity to Future Projections”
Host: Chavas

Oct. 4  Wendell Walters, PhD Candidate
“Unraveling the “Fingerprints” of Nitrogen Oxides using Stable Isotopes: Implications for Source Partitioning and Evaluation of Atmospheric Oxidation Pathways”
Advisor: Flesch
Tuesday, 4:00PM, Room 2201/HAMP

Oct. 20  Fan-Chi Lin, University of Utah
“Imaging the Yellowstone Magmatic and Hydrothermal System Using Seismic Tomography”
Host: Nowack

Oct. 25  Logan Dawson, PhD Candidate
“Examination of Mesoscale Feedbacks on Convective Scale Predictability During MPEX”
Advisor: Baldwin
Tuesday, 4:00PM, Room 2201/HAMP

Oct. 27  Allison Wing, Lamont-Doherty Earth Observatory
“Clouds, Circulation, and Climate Sensitivity in Cloud Resolving Model Simulations of Self-Aggregation of Convection”
Host: Chavas

Nov. 1  Shaoqing Liu, PhD Candidate
“Quantifying Terrestrial Ecosystem Carbon Dynamics with Mechanistically-based Biogeochemistry Models and In Situ and Remotely Sensed Data”
Advisor: Zhuang
Tuesday, 4:00PM, Room 2201/HAMP
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<tr>
<th>Date</th>
<th>Speaker</th>
<th>Institution</th>
<th>Title</th>
<th>Host</th>
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<tr>
<td>Nov. 3</td>
<td>Kristin Morell, University of Victoria</td>
<td>Host: Elliott</td>
<td>“Lessons in the Landscape: Mountain Building and Seismic Hazards in Cascadia and the Himalaya”</td>
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<td>Nov. 15</td>
<td>Adam Stepanek, PhD Candidate</td>
<td>Advisor: Baldwin</td>
<td>“Predictions of Severe Weather Environments by the Climate Forecast System Version 2 Model Suite”</td>
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<td><strong>Tuesday, 4:00PM, Room 2201/HAMP</strong></td>
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<td>Nov. 17</td>
<td>Michael King, LASP</td>
<td>Host: Harshvardhan</td>
<td>“Spatial and Temporal Distribution of Tropospheric Clouds Observed by MODIS on Board the Terra and Aqua Satellites”</td>
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<td>Nov. 28</td>
<td>Tim Marshall, Haag Engineering</td>
<td>Host: Tanamachi</td>
<td>“El Reno Tornado and Damage Survey”</td>
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<td><strong>Monday, 3:30PM, Room 2108/HAMP</strong></td>
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<td>Dec. 1</td>
<td>Andy Davis, University of Chicago</td>
<td>Host: Caffee</td>
<td>“Stardust in the Laboratory with CHILI”</td>
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<td>Dec. 6</td>
<td>Christy Gibson, PhD Candidate</td>
<td>Advisor: Filley</td>
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Manika Prasad  
Colorado School of Mines  
Faculty Candidate

Shale Rock Physics, Geomechanics and Petrophysics: A Discussion about Nothing

Monday, November 28, 2016  
9:30 AM  
2201/HAMP  
Refreshments at 9:00 in HAMP 2201

Abstract: The first part of the talk will explore nothing and its measurement. I will then discuss the common links to nothing found in studying physics and mechanics of unconventional reservoir rocks. The discussion will include recent findings on elastic and petrophysical properties. Static and dynamic measures of rock stiffness will be compared and used to calculate horizontal stresses. And we will explore permanence and the indications of CO2 storage effects in reservoir and in seal rocks.
On 31 May 2013, a giant tornado meandered through rural areas near El Reno, OK killing 10 people including four storm chasers. The tornado changed course, direction, and speed during its life. It also was unusual as it contained various size vortices dubbed by Tim as “a tornado within a tornado”. Tim will talk about his harrowing chase that day and how he had to flee the tornado. After the tornado, Tim conducted aerial and ground surveys of the damage path along with the National Weather Service. The tornado created EF-3 damage on the Enhanced Fujita scale but Doppler on Wheels measurements indicated EF-5 winds. Tim will discuss this discrepancy along with his findings and discuss how the EF-scale was implemented.

El Reno Tornado and Damage Survey

Tim Marshall
Haag Engineering

Monday, November 28, 2016
3:30 p.m.
Room 2108 HAMP

Refreshments at 3:00 pm
Room 2201/ HAMP
One of the most remarkable discoveries in astrophysics took place nearly 30 years ago: the discovery that meteorites contain tiny grains of stardust: condensates from the ejecta of stars that lived and died before the solar system formed. After several years of development, CHILI (CHicago Instrument for Laser Ionization), a resonance ionization mass spectrometer capable of lateral resolution better than one micrometer, high sensitivity, and near-freedom from isobaric interferences, has been applied to the study of the isotopic compositions of presolar silicon carbide. After reviewing presolar grains, I will describe the latest results from CHILI and their implications for stellar nucleosynthesis and galactic chemical evolution.
We are still accepting applications for Winter-break 2016-17.

Approved Course: Caribbean Ecosystem Field Studies
Please Distribute This Winter-Break 2016-17 Session Flyer

Can you please help me by distributing this flyer or the below information to students who may be interested? Or, feel free to forward this on to anyone who may be interested.

We are accepting applications for our winter-break field course: [Caribbean Ecosystem Field Studies](https://www.caribbeanecosystemfieldstudies.com). This course (ENST 391) is approved for 3 undergraduate semester credits through the Environmental Studies Program of the [University of Montana at Missoula](https://www.um.edu) and is open to students in an ecosystem related department or major.

Thank you for considering to make this rewarding field opportunity available to your students. This is our [10th year of programming to over 450 satisfied students](https://www.caribbeanecosystemfieldstudies.com) and we hope to serve some of yours. Please [email me](mailto:prof.johnson@umontana.edu) with any questions.

Thank you!
- Prof. Steve Johnson
Copy/Paste Text Version Below:

WINTER-BREAK 3-CREDIT FIELD COURSE OPPORTUNITY!
Caribbean Ecosystem Field Studies - Full Details - http://www.ecofs.org

• Study, snorkel & SCUBA dive along the Caribbean coast of Mexico *
  December 28, 2016 - January 16, 2017

An opportunity to apply your classroom & textbook learning while immersed in an
incredible marine ecosystem setting!

• Gain valuable career skills in hands-on scientific field research *
• Earn 3 undergraduate transfer credits *
• SCUBA and snorkel daily to study the coral reef ecosystem *

Open to students from all universities & majors | Accredited by the University of Montana at Missoula's Environmental Studies | Program: ENST 391- for 3 undergraduate semester transfer credits.

Direct questions to Professor Steve Johnson, Course Director at steve@EcoFS.org

Ecosystem Field Studies
303-859-0173 | steve@ecoFS.org | Visit Our Site

Ecosystem Field Studies, PO Box 1967, Boulder, CO 80305
SafeUnsubscribe™ barbara@purdue.edu
Certificate in Environmental and Sustainability Studies Plan of Study
Draft 10.22.16

Draft of Mission Statement

The Certificate in Environmental and Sustainability Studies (CESS) will give students working in multiple disciplines across Purdue a broad exposure to how environmental and sustainability challenges and solutions are conceived, represented, and researched in the Humanities, Social Sciences, Agriculture, and STEM disciplines. The CESS program will introduce students to a wide range of environmental issues from diverse perspectives so that they may more thoroughly comprehend and critically evaluate today's environmental and sustainability challenges.

Draft of Learning Outcomes

Students acquiring the Certificate in Environmental and Sustainability Studies (CESS) will be expected to achieve the following learning outcomes:

1) KNOWLEDGE: Students will be able to identify, describe, and relate the diverse causes (social, cultural, political, economic, historical, scientific) and consequences of pressing environmental and sustainability challenges, such as climate change, resource scarcity, biodiversity, population growth).

2) COMPREHENSION: Students will be able to distinguish, paraphrase, and translate different disciplinary perspectives on these key environmental and sustainability challenges.

3) ANALYSIS: Students will familiarize themselves with the efficacies, and learn to push the boundaries, of different disciplinary approaches by comparing and contrasting solutions to environmental issues (scientific, technical, engineered, social, economic, historic, and ethical components).

4) SYNTHESIS: Students will learn to combine different disciplinary approaches by synthesizing, reorganizing, and reformulating diverse viewpoints.

5) APPLICATION: Students will demonstrate ability to communicate across disciplines on environmental and sustainability problems through the production of appropriate interdisciplinary instructional assignments. Students will illustrate their diversity of knowledge by applying their work in multi-disciplinary teams on sustainability challenges.

6) EVALUATION: Students will estimate the efficacy of different disciplinary approaches through assessing that efficacy in real-world applications.
**Preliminary Draft Plan of Study**

**Summary**

1) **Required 3-credit course: Core Concepts in Environmental and Sustainability Studies.** (New, team-taught interdisciplinary course introducing diverse perspectives on Environment and Sustainability problems, and skills in interdisciplinary communication and teamwork. This would be an annual course, offered every year starting in fall 2017).

2) **Required 9 additional credits: 3 additional courses required from selection of existing or new classes across departments in three categories:**

   - *Social, Economic, and Political Dimensions*
   
   - *Stewardship, Conservation, and Management Dimensions*
   
   - *Science, Engineering, and Technological Dimensions*

   One course required from each area. The plan is for these courses to be able to count for both the certificate and other existing academic requirements.

3) **Program to be administered by Discovery Park Center for the Environment, in consultation with sponsor college (CLA),** following administrative model of Burton Morgan Center Certificate in Entrepreneurship.

**Detailed Course Options**

Students participating in the Certificate in Environmental and Sustainability Studies are required to complete at least one course under each of the following three categories. By doing so, students will learn about the diversity of causes and consequences of environmental and sustainability challenges, and about the different disciplinary approaches to addressing these issues.

A preliminary list of courses that count towards each category is provided on the following page. Other courses may be counted, with the approval of the certificate administrator, provided that they meet the criteria defining one of the categories.

**Category 1: Social, Economic, and Political Dimensions**

This category emphasizes how knowledge of human behavior furthers our understanding of environmental and sustainability impacts. It includes courses that examine human interaction with the environment on a range of scales, from individual decision-making to regional, national, or global institutions. Courses relate to environmental outcomes and sustainability, focusing on economics; ethics and values;
individual and societal behaviors and interactions; and politics, policy analysis, or decision-making.

**Category 2: Stewardship, Conservation, and Management Dimensions**

This category focuses on the application of sustainability or environmental principles to planning and managing human interactions with the environment. This may include courses related to conservation biology; natural resource management; population and community ecology; restoration of ecosystem services; land use and urban planning; sustainable agriculture; and climate change adaptation or mitigation.

**Category 3: Science, Engineering, and Technological Dimensions**

This category focuses on the scientific and technological tools needed to understand and address environmental and sustainability challenges, particularly in the engineered and built environment. This may include coursework related directly to basic and applied ecology and environmental science, the development of emerging technologies for renewable energy, energy efficiency, or sustainable construction; it may also include instruction in systems analysis tools with applications to environmental or sustainability challenges, such as integrated assessment modeling or lifecycle assessment, or study of interactions between the environment and infrastructure.

Courses qualifying for each category:

**Category 1: Social, Economic, and Political Dimensions**

ABE 32500 Agriculture Soil and Water Resource Engineering  
AD 39700 Liberal Arts Sustainability in the Built Environment  
AGEC 20400 Agriculture Introduction to Resource Economics & Env Policy  
AGEC 25000 Agriculture Economic Geography of World Food and Resources  
AGEC 40600 Agriculture Natural Resource & Environmental Economics  
AGEC 52500 Agriculture Environmental Policy Analysis  
ANTH 23500 Liberal Arts Great Apes and Conservation  
ANTH 31300 Liberal Arts Archaeology of North America  
ANTH 32700 Liberal Arts Environment and Culture  
ANTH 33500 Liberal Arts Primate Behavior  
ANTH 37700 Liberal Arts Anthropology of Hunter-Gatherer Societies  
ANTH 37900 Liberal Arts Native American Cultures  
ANTH 59200 Liberal Arts GIS for Social Scientists  
CE 59700 Engineering Dynamics of Social-Ecological and Technological Systems  
EAPS 36000 Science Great Issues in Science and Society  
ENG 23400 Liberal Arts Ecological Literature  
ENG 34100 Liberal Arts Humans, the Environment, and the End(s) of Nature
ENG 41200 Liberal Arts  Literature, Science, and Climate Change
ENG 41400 Liberal Arts  The Aesthetics and Politics of Climate Change in Film
ENG 59600 Liberal Arts  Environmental Ethics: The Human in the Anthropocene
ENG 59600 Liberal Arts  Ecocriticism and Postcolonialism
FNR 36500 Agriculture  Natural Resources Issues, Policy, and Administration
FNR 48800 Agriculture  Global Environmental Issues
IE 59000 Engineering  Quantitative Analysis for Climate Change Policy
PHI 11400 Liberal Arts  Global Moral Issues
PHIL 29000 Liberal Arts  Environmental Ethics
POL 22300 Liberal Arts  Introduction to Environmental Policy
POL 32700 Liberal Arts  Global Green Politics
POL 52300 Liberal Arts  Environmental Politics & Public Policy
SOC 53300 Liberal Arts  Environmental Sociology

Category 2: Stewardship, Conservation, and Management Dimensions

AGRY 29000 Agriculture  Introduction to Environmental Science
BTNY 21100 Agriculture  Plants and the Environment
CE/EEE 35500 Engineering  Engineering Environmental Sustainability
EAPS 11300 Science  Introduction to Environmental Science
EAPS 32700 Science  Climate, Science and Society
FNR 10300 Agriculture  Introduction to Environmental Conservation
FNR 37500 Agriculture  Human Dimensions of Natural Resource Management
FNR 40800 Agriculture  Natural Resources Planning
FNR 47000 Agriculture  Fundamentals of Planning
HORT 42200 Agriculture  Vegetable and Herb Production
HORT 44200 Agriculture  Sustainability in the Managed Landscape
HTM 37000 HHS  Sustainable Tourism And Responsible Travel
MET 42400 Polytechnic  Green Processes and Sustainability
NRES 45000 Agriculture  Soil Conservation & Water Management
TECH 52200 Polytechnic  Sustainability Foundations

Category 3: Science, Engineering, and Technological Dimensions

ABE 32500 Agriculture  Soil and Water Resource Engineering
AGEC 59600 Agriculture  Global Change & the Challenge of Sustainably Feeding a Growing Planet
AGRY 28500 Agriculture  World Crop Adaptation and Distribution
ASM 33600 Agriculture  Environmental Systems Management
BCM 41900 Polytechnic  Sustainability Construction
BIOL 48300 Science  Environmental & Conservation Biology
BTNY 21100 Agriculture  Plants and the Environment
CE/EEE 35500 Engineering  Engineering Environmental Sustainability
CE 49700 Engineering  Community Resilience: From Urban to Rural
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<td>Sustainable Tourism And Responsible Travel</td>
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<td>Sustainable Critical Infrastructures</td>
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</table>
The Cuban Geological Society (SCG) is pleased to invite scientists, professionals, technicians and university students of Geology, Geophysics, Mining and related Geosciences, to participate in the VII Earth Sciences Convention, and Exhibition of Products, New Technologies and Services, to be held at the International Conference Center of Havana, Cuba on April 3-7, 2017.

The convention welcomes presentations about Cuba, the Caribbean and other regions or in general about the geology, geophysics and mining experiences in the search and management of natural resources, including minerals (metals, industrial), water, oil and gas, construction, earthquake research and other geohazards, education of geosciences; as well as any other related to the sustainable exploitation of natural resources.

We invite professional societies, institutions and non-government organizations to organize workshops, round tables and meetings during the Convention.

Dr. Manuel A. Iturralde Vinient
President of the Cuban Geological Society

www.scg.cu; www.cubacienciasdelatierrea.com
geociencias@mnhnc.inf.cu
Hello, we’d like to take this time to update you on Writing Lab news.

We now offer online appointments for clients, who can easily schedule one-to-one consultations at https://cla.purdue.edu/wlschedule. Clients can select convenient times and choose one of our highly trained consultants for face-to-face or online feedback.

In addition, we’ve been working with Purdue’s Institutional Research office to learn more about Writing Lab users. Our initial results indicate that when students have sessions with tutors in the Writing Lab, especially those who are enrolled in English 106, they have significantly higher semester GPAs than their peers who do not come to the Writing Lab.

We are always looking for ways to collaborate with faculty to support writers across disciplines. If you’d like to discuss how we can work with you and your students, please contact us.

Best wishes for a great semester.

Harry C. Denny, Ph.D. • hdenny@purdue.edu
Associate Professor of English and Writing Lab Director

Tammy Conard-Salvo • tcsalvo@purdue.edu
Associate Director

Main Location
Heavilon Hall Room 226
Monday – Thursday 9:00 AM – 6:00 PM
Fridays 9:00 AM – 1:00 PM
Appointments:
https://cla.purdue.edu/wlschedule

Satellite Locations
Drop-in only—first come, first served

HSSE Library Collaborative Study Center
Mondays 6:00 – 9:00 PM

Latino Cultural Center
Tuesdays 6:00 – 9:00 PM

Mechanical Engineering (ME) 2nd Floor
Rooms 2138 & 2142
Wednesdays 6:00 – 9:00 PM

Writing Lab services are FREE and available to all Purdue students, faculty, and staff.

Heavilon Hall Room 226 • (765) 494-3723 • https://owl.english.purdue.edu/writinglab
@PurdueWLab • /PurdueUniversityWritingLab
One-on-One Tutorials
We offer free tutorials on an appointment basis. Writers can bring any document to the Writing Lab, at any stage of the writing process. Sessions commonly help with the following:

- Clarification: understanding an assignment
- Invention: brainstorming, coming up with ideas, discovering a focus
- Organization: ordering ideas, building an argument
- Revision: revising for clarity and coherence

Our graduate tutors can assist students with a variety of writing tasks, including writing in the disciplines. Our business and professional writing consultants are specialists in employment writing, memos, personal statements, and reports. Our undergraduate teaching assistants help students taking first year composition courses (English 106 and 108). All of our tutors undergo rigorous training.

The student FAQs at https://owl.english.purdue.edu/writinglab/policies answer common questions about our tutorial sessions and offer tips on how best to prepare for sessions.

Students can now schedule appointments online. In addition, our satellite locations offer drop-in hours in the evenings at various locations. Please see https://owl.english.purdue.edu/writinglab for hours of operation and location information.

ESL Services
The Purdue Writing Lab offers a range of services to non-native speakers of English, covering writing and reading skills and conversational fluency:

- Tutorials for feedback on writing projects
- Self-study resources (books, CD-ROMs) for language skills practice
- Daily conversation groups (open to all non-native speakers enrolled at Purdue) for improving oral fluency

For more information on in-lab services for ESL learners, see https://owl.english.purdue.edu/writinglab/esl.

Course-specific Resources
The Writing Lab is committed to Writing Across the Curriculum at Purdue, and we welcome ideas for collaboration with other disciplines in the university. We encourage you to submit your course syllabus and assignment descriptions to the Writing Lab to help us better assist your students in their tutorials. We are also available to consult with instructors about assigning and responding to student papers, encouraging students’ use of the Writing Lab, and developing ideas for special projects connected with writing. To learn more or request a consultation, visit https://owl.english.purdue.edu/writinglab/consultation.

Experienced tutors are also available to provide your class with interactive presentations on the resources available to students at the Writing Lab. We also offer classroom workshops on writing topics that can be tailored to specific class projects on a limited basis. You can learn more and request a workshop for your class at https://owl.english.purdue.edu/writinglab/workshops/index.php.

Purdue’s Online Writing Lab (OWL)
The Purdue OWL (https://owl.english.purdue.edu) offers a wide variety of materials, presentations, and YouTube videos (https://www.youtube.com/OWLPurdue) to the Purdue University community and to users around the globe. The Purdue OWL also posts updates on Writing Lab events and produces the Purdue OWL News (https://owl.english.purdue.edu/purdueowlnews). Instructors and students use the OWL to:

- Access regularly-updated handouts on writing process, basic writing, and document design
- Find resources for English as a Second Language students
- Download classroom-ready PowerPoint presentations on a number of writing topics

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